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Continuing Professional Development through a Professional Learning Community in a Full-time Brazilian School

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Continuing Professional Development through a Professional Learning Community in a Full-time Brazilian School

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To my grandmother, Vó Nega (in memoriam). She taught me to be strong, subversive, and persistent; essential elements to my learning trajectory.

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It seems that I only began the doctoral trajectory just yesterday. Yet, today I am trying to understand the personal and professional changes that happened to me during these four years. In fact, I think that it will take a long time to comprehend so many transformations. Submerged in this "emotional whirlwind" caused by the (dis)connections that occurred in my life, I am sure that I have learned so much. I launched myself to the unknown: language, countries, concepts, and people. This learning brought two major understandings: first, the doctoral process is much bigger than what I would be able to explain here in few words; second, this process took of me all of my certainties and presented to me plenty of doubts. With this process, I have learned to question, reflect and act. This doctoral process created "a new Luiza".

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ABSTRACT

GONÇALVES, L.L. Continuing Professional Development through a Professional Learning Community in a Full-time Brazilian School. 2019. 287p. Dissertation (Doctor in Science) – School of Physical Education and Sport, University of Sao Paulo, Sao Paulo. 2019.

Professional Learning Communities (PLC), or specifically Communities of Practice (CoP), have been studied largely in education and physical education international research as a strategy to teachers' meaningful Continuing Professional Development (CPD). However, the context investigated in most studies originate in Anglo-North American culture and the studies that investigate PLC in Brazilian reality are still scarce. In Brazil specifically, teachers face a precarious reality related to their salaries, school infrastructure, and deplorable lack of public confidence. Furthermore, different forms of precarious conditions have been lived in developed countries as well. Thus, there are gaps that still challenge the CPD and PLCs research area: (a) to investigate how to create discursive spaces for collaborative professional development within the current CPD debates; (b) to describe the tensions and challenges in living the experience of nurturing a PLC; and (c) to experiment by cultivating a PLC with physical education teachers in a Brazilian context. This dissertation purposed to explore the CPD of physical education teachers in one full-time Brazilian school, addressing two research questions: How do physical education teachers develop as professionals in a full-time school in Brazil? How can a PLC or a CoP support physical education teachers' professional development in a full-time school? The investigation had two phases, the first, based on ethnographic methods and the second, an action research project. The participants included six physical education teachers, a facilitator, and a critical friend. It took place in a FTS in the countryside of Brazil from February 2018 to January 2019 (11 months). During this period, multiple data sources were collected, including: meetings with the teachers (21); researchers' meeting (facilitator and critical friend) (26); initial and final individual teachers' interviews (10) and informal interviews; field notes generated by the facilitator's observations (65); social media records (37); and the artifacts that the community produced (14). The results of this research demonstrated that the teachers experienced a managerial and top-down CPD during their routine as professionals in that context. However, a PLC could come to support teachers' CPD. During the project, the teachers' essential needs were addressed; the PLC held autonomous decisions and had its voice heard. The support offered to teachers' CPD by the PLC was originated (a) by the process of building their own practice, (b) being supported by their peers and (c) through their facilitator when they joined in a newly-developed CoP. These three elements, conducted through a dialogical process, might have created opportunities for a democratic CPD that sought teachers' situated learning and micro-social change simultaneously. It was understood that while teachers' learning regarding teaching knowledge was important, the fighting for better professional conditions was as, or even more, important as achieving the former aim. The teachers' CPD had to address both aspects.

Keywords: Community of Practice; Physical Education teachers; Teachers as learners; Action research; Facilitation process; Precarious conditions.

RESUMO

GONÇALVES, L.L. Desenvolvimento Profissional Docente por meio de uma Comunidade de Aprendizagem em uma Escola de Tempo Integral no Brasil. 2019. 287p. Tese (Doutorado em Ciências) – Escola de Educação Física e Esporte, Universidade de São Paulo, São Paulo. 2019.

Comunidades de aprendizagem (CA), ou especificamente Comunidades de Prática (CP), tem sido estudadas frequentemente em pesquisas na área de educação e educação física como uma estratégia para um significativo desenvolvimento profissional docente (DPD). Porém, a maior parte dos estudos investigou contextos Anglo-Norte-Americanos. Os estudos que investigam CA na realidade brasileira ainda são escassos, onde sabe-se que professores enfrentam uma realidade precária em relação aos seus salários, infraestrutura das escolas, e falta de valorização pública da profissão. Para além disso, diferentes formas de precariedade tem sido vivenciadas também em países em desenvolvimento. Então, foi percebido que ainda existem lacunas na literatura que desafiam esta área de pesquisa, tais quais: (a) investigar como criar espaços discursivos para um DPD colaborativo que atenda aos debates atuais na área; (b) descrever quais as tensões e desafios em viver a experiência de cultivar uma CA; (c) vivenciar uma CA com professores de educação física no contexto brasileiro. Assim, esta dissertação buscou explorar o desenvolvimento profissional de professores de educação física que trabalham em uma escola de tempo integral (ETI) no Brasil, respondendo a duas questões de pesquisa: Como professores de educação física se desenvolvem como profissionais em uma ETI no Brasil? Como uma CA ou uma CP pode dar suporte ao desenvolvimento de professores de educação física que atuam em uma ETI? A investigação teve duas fases, a primeira, baseada em métodos etnográficos, e a segunda, um projeto de pesquisa-ação. Os participantes incluíram seis professores de educação física, uma facilitadora e uma critical friend. A pesquisa foi conduzida de fevereiro de 2018 a Janeiro de 2019 (11 meses). Durante este período várias fontes de dados foram usadas: reuniões com os professores (21); reuniões entre as pesquisadoras (facilitadora e a critical friend) (26); entrevistas iniciais e finais com os professores (10) e entrevistas informais com os sujeitos da pesquisa; caderno de campo gerado pelas observações da facilitadora (65); arquivos de mídia social (37); e artefatos produzidos pela comunidade (14). Os resultados demonstraram que os professores viviam um DPD hierárquico e baseado em conceitos de administração privada durante a rotina de trabalho deles. Porém, a CA pôde dar suporte aos professores durante seu DPD. Durante o projeto, as necessidade essenciais dos professores foram atendidas; a CA teve decisões autônomas; e sua voz ouvida. O suporte oferecido aos professores pela CA foi originado (a) pelo processo de construção da própria prática dos professores, (b) sob o apoio de seus próprio pares e (c) da facilitadora enquanto eles se uniam em uma CP recém-desenvolvida. Estes três elementos, conduzidos por meio de um processo de facilitação dialógico, pode ter criado oportunidades para um DPD democrático que buscou simultaneamente a aprendizagem situada dos professores bem como uma micro mudança social. Foi entendido que, enquanto a aprendizagem dos professores em relação ao conhecimento de ensino era importante, a luta por melhores condições profissionais foi tão quanto, ou mais importante do que alcançar este primeiro objetivo. Assim, o DPD deve endereçar ambos aprendizados.

Palavras-chave: Comunidade de Prática; Professores de Educação Física; Professores como aprendizes; Pesquisa-ação; Processo de Facilitação; Precariedade.

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1 INTRODUCTION

This introduction presents not only the main concepts, purpose, research questions, and significance of this study, but also reveals how the literature about physical education teachers' continuing professional development (CPD) and professional learning communities (PLC) slowly became part of my researcher life. Because of this, the introduction interweaves my history as a physical education teacher in a public school, my doctoral trajectory, and the literature about CPD and PLC, specifically, communities of practice (CoP).

1.1 DISSERTATION JOURNEY

In 2009, the Municipal Education Office of Governador Valadares city initiated reform of its public schools. This reform included changing the structure and the purpose of the schools and inaugurating a full-time school (FTS) municipal project. This initiative was following a national intent to invest in FTS projects as one way to reduce the inequity of public education. The purposes of the national project were to extend the time of the schools from four hours to seven hours or more; expand the subjects offered in schools, including arts, sports, technology classes and others; and enlarge the debate about integral education (BRASIL, 2013).

It was the first time that I have noticed the intent to create a quality public school in my city. I always believed that having a good public school system, where all people could have opportunities to access the same educational content, would be one of the most important steps to change the precarious situation of Brazil. Thus, after being approved in the municipal education test in 2010, I engaged in this project, becoming a teacher in one public FTS in a socially vulnerable area in this city. However, since my first day, I heard from the older teachers how the public schools were deplorable, mainly because of the salary earned and the damaged infrastructure. I was advised to run away from that space.

Teacher's life in public school in Brazil

The impression of those teachers corresponded to the description of Brazilian public education found in the literature. Brazil is a South American country considered to be a developing country. The mean years of schooling among the population was 7.8 years in 2017, which influenced its Human Development Index (HDI) score - 0,759 (value), being classified as 79th HDI of the world (UN, 2018). Unfortunately, the Brazilian reality is that, despite the

investment in education by the government since the late 1990s, the problems regarding education are a grave issue for the country (GATTI, BARRETO, ANDRÉ, 2011; OECD, 2011; SILVEIRA, 2018).

Although I truly believed in the FTS project and its possibilities to build a good public education and to contribute to change the reality of Brazilian education, it did not offer a meaningful CPD for me, as a professional. As recent studies have demonstrated, even though the FTS offers more time to teachers' CPD because teachers would be full-time employers in one school, the CPD models offered to them are still based on the transmission of external knowledge to teachers (MELO, 2014; ALMEIDA, 2016; SILVA, 2016; WITHERS, 2011).

Looking back to my trajectory in this FTS project, I noticed that on one hand, I was lucky because the municipal education FTS project included transformation in CPD activities as well. Thus, I recognized the municipal education intention to promote democratic CPD, through school-based CPD that sought social emancipation in FTS in order to reduce exploitation and inequity in that city (DAY; SACHS, 2004; FREIRE, 2005a, GOVERNADOR VALADARES, 2009a). On the other hand, I understood that my colleagues and I lived vestiges of a managerial CPD, where teachers were overburdened to respond to external standards, increasing their accountability regarding education (DAY, 1999; HARGREAVES, 1994; SACHS, 2016). We felt pressured to respond to an external imposition – initiating an FTS, and struggling to improve students' outcomes without support.

During the CPD meetings in my school, I just listened to my colleagues complaining and the Pedagogical Coordinator trying to convince us about the FTS benefits. Nothing in that time fulfilled my CPD expectations. Scholars have reported that a managerial perspective might influence teachers to act individually and competitively (KENNEDY, 2014b; SACHS, 2001, 2016). Likewise, I decided to act by myself to change my reality and I blamed my colleagues for just complaining and doing nothing. In this way, I was initiating a lonely CPD trajectory.

I asked the Pedagogical Coordinator to arrange my timetable in a way that I would accomplish my CPD on Mondays. Then, fortnightly, I participated in a research group in a university in Sao Paulo, another state in Brazil. I travelled about 17 hours to arrive there, participated in the meeting and came back. Once I returned to my city, I split my time into this FTS and one private school during the day, and one private university in the evenings. I taught from Tuesday to Friday, from 7a.m to 11p.m. On the Mondays in which I did not travel, I spent the CPD time alone, studying or accomplishing my extra class work, such as students' assessments and attendance. I was living the same situation as most teachers in Brazil. On average, teachers work 56 hours per week in two or three different schools to earn enough to

have the dignity to live. In general, Brazilian teachers receive less than other professionals with the same degree. The minimum teachers' salary is about US\$ 679 monthly, per 40 hours worked¹. Unfortunately, teachers are in a group of professionals who receive the lowest salary in the country (GATTI, BARRETO, ANDRÉ, 2011).

After one year in this work routine, I was completely exhausted, and then I asked the Municipal Education Office for a sabbatical year to accomplish my Master's degree. The answer was negative and, sadly, my choice was to leave the public school to dedicate my time to my career. I have to admit that my motivation to do a Master was twofold. Although I was curious about the problems in public education and wanted to investigate my own practice, I also envisioned better work conditions. I wished to be a lecturer and contribute to my profession from the university environment, increasing at the same time my earning and accessing better professional settings. As Fiorentini (2013) reported, frequently, public schools in Brazil do not support teachers in their professional development, and they leave this environment looking for other opportunities.

Doctoral trajectory

Leaving the public school and perceiving myself as not a teacher in a FTS anymore was not an easy process for me. I liked the FTS project and I truly believed in quality public education through it. Therefore, the intention to keep contributing to this project has never abandoned me. During my Master's degree, I dedicated myself to study the FTS trajectory in Brazil, describing specifically the corporeality² issues in the same school where I had worked previously. In some sense, I felt that I was still working there, but acting as a lonely practitioner researcher. After finishing my Master's degree research, other doubts about FTS appeared, and then I decided to keep studying FTS.

When I began the Ph.D., my intention was to continue describing this environment and the problems that surrounded the FTS structure. I collected data about physical education teachers and sport coaches who worked in FTS in Mato Grosso do Sul state, where recently I had initiated my new job as lecturer in a public university. I applied questionaries and

¹ Information collected from Ministry of Education (MEC) website in 2019. http://portal.mec.gov.br/component/content/article/211-noticias/218175739/72571-piso-salarial-domagisterio-sobe-4-17-a-partir-de-janeiro-valor-sera-de-r-2-557-74?Itemid=164

² Corporeality is based on the idea that the human body is not a sum of its parts. Avoiding a dichotomized view of the subjects between body and mind, there is advocacy to understand the body in its plenitude. To read more about this discussion and integral education in Brazil, access Gonçalves et al. (2016).

interviewed those workers. However, I did not feel fulfilled by what I was doing. That data did not make sense for me. I kept questioning myself: Through this research I would describe the problems found in that context and, so what? Would it be the end point of this project? It was not enough for me; I still missed something. However, even though I had the will to change, I did not have the way to do it. I wanted to give back to my community, contributing to the Brazilian reality through action with people, but I did not know about methodologies that could create opportunities to do this. In the middle of my Ph.D. study, I was completely lost and feeling unsatisfied with the research I was developing.

Then, one lecturer in the University of Sao Paulo presented me with the action research method and I noticed that something could be done with the teachers, side-by-side (CARR; KEMMIS, 2004; FREIRE, 2005a). Luckily, she not only introduced me to this method, but also a person who could help me, Dr. Melissa Parker, dear Missy. From that moment, I had the will and the way, but I still did not have the knowledge to accomplish the investigation. Then, I left Brazil to study for one month at the University of Limerick (UL), Ireland, where Missy was a lecturer. I was looking forward to understanding about physical education teachers' CPD and CoP studies.

In the time spent in Limerick, I learned that teachers' CPD does not refer to the "retooling of teachers" (SACHS, 2011). In other words, short-courses or individual activities that teachers accomplish to update themselves or respond to external impositions. The group of researchers from Limerick presented me with a new understanding about teachers' CPD. With them, I was introduced to literature that supports physical education teachers as long-life learners. I understood that we could be "reimaging" the teachers' CPD (SACHS, 2011). Through this, people would be engaged in individual and collective actions contributing to the school and their own development with a continuing process of inquiry about their own reality (DAY, 1999; DAY; SACHS, 2004). I remembered being delighted with the care and attention paid to teachers' reality by people from UL. It was the first time that I have felt that teachers were seen as subjects of their own development, instead of consumers of an imposed CPD.

In meetings with Missy in Limerick, the kind of research that the UL research group was developing was presented. And I noticed that PLC, or specifically CoP, have been studied largely in education and physical education international research as a strategy to meaningful teachers' CPD (PARKER; PATTON, 2017; VESCIO; ROSS; ADAMS, 2008; WHITCOMB; BORKO; LISTON, 2009). Thus, it became clear to me that if initially the action research got my attention to what could be done with teachers, the internship in Limerick showed me the possibility of working collectively with teachers, something I always believed in. I was

convinced and satisfied with my understanding that change is micro, school-based, and through collective work, all features found in studies with teachers' PLCs.

PLC is described as a group of people reflecting through inquiry and solving common problems (BOLAM et al., 2005). In education, it is widely argued that knowledge is situated in daily experiences and teachers could learn better if together, they reflect collaboratively and critically about their reality (TOOLE; LOUIS, 2002; VESCIO; ROSS; ADAMS, 2008). Although a CoP is a kind of learning community, its focus of discussion is specifically the practice of the members, hence the name, community of practice (WENGER, 1998b). Supported by Situated Learning theory (LAVE; WENGER, 1991), a CoP is a group of people who are interested in learning and developing their own practice, producing and reproducing it continually. It requires people mutually engaged around a joint enterprise, sharing the repertoire of their practice (WENGER, 1998b; WENGER-TRAYNER; WENGER-TRAYNER, 2015).

In Limerick, I also talked with Mary O'Sullivan, who helped me to draft the research design. One of the most important things that I learned from Mary was the respect for the teachers' learning pace and their reality. However, while completely fulfilled and satisfied about the research pathway that she had suggested to me, I realized that to follow that pathway I had to learn the English language. If it was not for the voice recording of my meeting with Mary that I made, which I listened to several times, I could barely have understood what she had explained to me. Additionally, if the internship intention was to ask for Missy's help, I had to communicate well with her.

Even with all adversities, we accepted the challenge. I mean "we" because while I had to learn English to communicate with Missy and access the CoP literature, Missy had to open herself to the mission of guiding me in the CoP facilitation process. We did not know each other very well, but in an act of love and solidarity, as lighted by Freire (1998, 2005a, 2005b), Missy agreed to act by my side, respecting my limitations, and understanding my reality. It brought the strength and bravery that I needed to start again. I abandoned all data already collected and dedicated myself to explore the CPD with teachers from my city, who share the same history as me in FTS. Similarly, as Missy, in an act of love and solidarity (FREIRE, 1998, 2005a, 2005b), I decided to come back to the place where everything had begun for me, and act with my people side-by-side, to understand them and to propose micro change.

From that November 2017 on, Missy and I engaged in weekly meetings by *Skype*, when I reported to her the critical incidents experienced with the teachers in the school each week. In this process, Missy was my *critical friend* (CARR; KEMMIS, 2004). She supported me during my work with the teachers and she taught me to be a skilled facilitator in a newly-developed

CoP. However, she was learning as well. The Brazilian teachers' context was new to her, and with this, her willingness and openness to contribute to the teachers' micro reality increased over time.

I, kept struggling with learning the English language, but my willingness to learn also increased because I noticed that learning English and writing this dissertation in English could create opportunities not only to access international literature, but also to expose what is produced and also the realities physical education teachers faced in Brazil. This exchange could reflect my belief about the power of collective work where developing and developed countries may learn together and help each other in an exchange experience about physical education. I always thought that the world needed to know the Brazilian people and their willingness to develop into a better country. The English language would help me to transport the micro reality investigated to the international context.

The teachers in their turn, also acted with love and solidarity. They opened their reality to me, being patient with my mistakes that occurred during the process of learning to be a facilitator. They agreed to collaborate with the project because they also desired to change their reality. Immersed in the school with them, I could recognize their persistence and resistance in facing the precarious context of a public FTS in a socially vulnerable area in Governador Valadares city. I also could feel their passion for teaching physical education and their concerns about the students' lives. We shared trust and respect, creating a horizontal relationship, learning together, and acting side-by-side (FREIRE, 2005b).

However, in this process, I had to face my own misconceptions. For example, at the beginning of the project, I saw in the teachers' CPD a way of changing the FTS problems. Although I believed in the collective work through CoP, I arrived in the school to impose a collective work process and to tell the teachers what they should do, what authors have called, "contrived collegiality" (HARGREAVES, O'CONNOR, 2017, 2018; SMYTH, 1995). In some sense, I was still blaming my colleagues from FTS for doing nothing. Yet, I was learning that perceiving the CPD in this way might increase the culpability and accountability of the teachers regarding education problems (BOLAM; MCMAHON, 2004).

Through sharing the public education reality with the teachers in the school, with the support of Missy, and connecting with the literature I have understood that the micro transformation of education is daily, collaborative and collective. It should be based on teachers' reality, without external imposition, rooted in the teachers' practice and in the knowledge that they produce from their praxis (ARMOUR et al. 2017; DAY; SACHS, 2004; HARGREAVES; O'CONNOR, 2017, 2018; SACHS, 2001, 2016). I have discovered that we

have to build networks and partnerships because everybody who is engaged with this intention of change needs to be supported by their peers (CORDINGLEY et al., 2015; TIMPERLEY, et al., 2007; HUNUK, 2017), and then, PLC could be a meaningful strategy for teachers' CPD.

Literature gaps

Even though the CPD literature was more evident for me after going to Limerick, I could understand that there remain doubts that need to be investigated. For example, most of the contexts studied were originated in Anglo-North American culture and the studies that investigated PLC in the Brazilian reality are still scarce. Although, since the 1990s researchers in universities have initiated investigations using, for example, collaborative action research (PIMENTA, 2005), the few examples of studies that specifically investigated PLC are recent and mainly in the mathematics area (FIORENTINI, 2013; RODRIGUES; CYRINO, 2017).

Moreover, the Brazilian education reality does not lend itself to a collaborative CPD experience. Workshops, conferences, seminars, short-courses (20 - 180 hours) in public and private universities, in distance (online) or not, are the central experiences with CPD in Brazil (GATTI, BARRETO, ANDRÉ, 2011). Additionally, since the pre-service teacher education degree has significant weaknesses, CPD experiences typically focus on compensating for the debts in teachers' basic knowledge (GATTI, 2008, 2016).

Brazilian teachers' CPD is struggling within a challenging context. The education policies have burdened teachers with high workloads, low salaries and the intensification of responsibility about students' outcomes (GATTI, BARRETO, ANDRÉ, 2011; NUNES; OLIVEIRA, 2017). Physical education teachers face even worse scenarios. Many times, they are not included in pedagogic discussions in schools and act in isolation in their gyms (MACHADO et al., 2010). They still participate in passive CPD experiences (FERREIRA; SANTOS; COSTA, 2015), that many times do not attend to the necessity of specific content knowledge discussion (RICHI; MARIN; SOUZA, 2012).

These literature gaps got my attention because I understood that learning is context-specific when social-political issues might influence (LAVE; WENGER, 1991). Thus, despite all the positive results that I have noticed about international contexts (GOODYEAR; CASEY, 2015; PARKER; PATTON; TANNEHILL, 2012; PARKER et al., 2010), I questioned myself: Could these results be transferred to my reality? Echoing Rossi and Sirna (2008), I kept wondering: Might such research results be simply transferred from international to national contexts? After reading the context descriptions of studies in developed countries, I was

convinced that Brazil faces different social-cultural conditions. This Brazilian context deserved to be investigated and the tensions and challenges that are faced in doing this investigation should be described in details.

Furthermore, I understood that if a transformation is intended to overcome the precarious situation of people, seeking social justice (COCHRAN-SMITH, 2009) and people's emancipation from injustice, alienation and suffering (KEMMIS, 2006), democratic spaces have to be created in schools. I also comprehended that the precarious situation was not only related to the Brazilian context, since different forms of precarity have been lived in developed countries as well (KIRK, 2019). Thus, as Sachs (2016) claimed, there is still a challenge in how to create the spaces for a collaborative CPD that addresses the current teachers' CPD necessities.

To summarize, I understood that there are gaps that still challenge the CPD and PLCs research area: (a) to investigate how to create discursive spaces for collaborative professional development within the current CPD debates; (b) to describe the tensions and challenges in living the experience of nurturing a PLC; and (c) to experiment by cultivating a PLC with physical education teachers in a Brazilian context.

1.2 PURPOSE AND RESEARCH QUESTIONS

The literature gaps presented, lead us to the purpose of this dissertation, which is to explore the CPD of physical education teachers in one full-time Brazilian school. Specifically, this dissertation responds to two research questions:

- a) How do physical education teachers develop as professionals in a full-time school in Brazil?
- b) How can a PLC or a CoP support physical education teachers' professional development in a full-time school?

1.3 SIGNIFICANCE OF STUDY

In conclusion, we perceive that there is a large body of research that investigates physical education teachers' CPD and PLC. Scholars indicate the benefits of PLCs as a strategy for teachers' CPD that seeks to be collaborative and meaningful for teachers' development (PARKER; PATTON, 2017). These studies originate from around the world, and are defended by governments and school institutions (CORDINGLEY et al., 2015). However, we understand

that even with the growth of this research area, this present investigation is significant because while the positive achievements of PLCs are recognized internationally, especially in developed countries, there remains the necessity to understand how physical education teachers' PLCs could be nurtured and developed in developing countries. Moreover, there is a lack of studies that describe in detail tensions and challenges from inside the PLC.

1.4 DISSERTATION ORGANIZATION

According to Patton (2002, p. 54) "a qualitative study is like a documentary film, [which] offers a fluid sense of development, movement, change". This dissertation will describe the trajectory of the creation of a collaborative space with six physical education teachers in one FTS in a socially vulnerable area in Brazil. In the second chapter, the literature that supported this dissertation is presented and the main research gaps are detailed. The third chapter demonstrates the methodology, and how the project was divided into two phases, the ethnographic and the action research phase. The fourth chapter answers the two research questions, and is separated into two sections: 4.1, which addresses the first phase, and section 4.2, which describes the second phase. The discussion is the fifth chapter and it provides meaning to the results, interpreting what was found regarding the extant literature and what could be added. The conclusion demonstrates the limitations of the study and suggestions for future investigations in this area.

At the end of this introduction, it is important to explain to the reader some preferences adopted in this dissertation, which I believed would help the reader in following the research trajectory. First, my intention is to bring the context as near as possible to the reader, thus, in some situations I wrote the exactly Portuguese expressions used by the teachers. Second, I am conscious that one thing is the text that we write and another is the text that is read. Thus, this is one possibility amongst several others that might exist and the text is open to these interpretations. Third, this text is not a production of an isolated person. I was contextualizing the facts, adding ideas, organizing the final dissertation, but the reflections, insights, results, and analyses are fruit of a collective construction. Joined with me were the teachers in the school, my family and friends, my supervisor, the Lecturers at the university where I attended some classes, and mainly Missy, who helped me to reflect about and understand this project. They created these ideas with me. Thus, this dissertation is written in the first person singular when it is related to particular impressions. Yet, in its wide overview, it collects in first person plural the "we" in which this research was elaborated.

2 REVIEW OF LITERATURE

This literature review demonstrates the theoretical framework that supports this dissertation. It is based on the theoretical concepts of continuing professional development (CPD) and the theoretical understanding about learning. Moreover, it identifies the main gaps in the research literature that inform this dissertation.

The first section (2.1) of this chapter presents the managerial and democratic CPD definitions, the current collaborative CPD concepts, and the body of research related to its effectiveness. In addition, the first section introduces CPD in the Brazilian setting, and highlights the precarious situation that teachers experience as professionals in that context. This section also explores the CPD experiences of physical education teachers in international and national contexts.

The second section (2.2) discusses the Situated Learning theory as a theoretical framework to understand teachers' learning and the process of cultivating communities of practice (CoP) as a strategy for teachers' CPD. The section defines this theory, describes the body of research in the area of physical education, and presents the main gaps discovered by the literature review.

2.1 CONTINUING PROFESSIONAL DEVELOPMENT

Even though the CPD field has its roots in the 19th century (DUNCOMBE; ARMOUR, 2004), only in the last thirty years there has been a measured investment in understanding the area (HARGREAVES; O'CONNOR, 2017). Despite this investment, its history is known as confusing and fragmented (KENNEDY, 2014b). The following part describes some of this history and the main concepts adopted.

2.1.1 Defining Continuing Professional Development (CPD)

Bolam and McMahon (2004, p. 33) affirmed that the CPD area has been known by different names, including teacher development, in-service education and training (INSET), staff development, career development, human resource(s) development, professional development, continuing education and lifelong learning. They also pointed out that these terms have not always been well defined, which could have produced meaning overlap. Kennedy (2014b) argued that even though some countries use the expressions "teacher professional learning" or "career-long professional learning", which emphasize teachers as learners, CPD is

more commonly used globally. In Brazil, the expressions "formação inicial" (initial formation) and "formação continuada" (continuing formation) have been commonly used. However, currently, the concept of "Desenvolvimento Profissional Docente" (teachers' professional development) has been defended to emphasize the process of teachers' learning and development instead of their acquisition of knowledge through courses and degrees (FIORENTINI; CRECCI, 2013).

After reviewing twenty years of CPD literature, Bolam and McMahon (2004), concluded that this research field is extensive, sometimes contradictory, and different theoretical perspectives support findings and conclusions. They suggested a conceptual map divided into four categories: (a) knowledge for understanding, which includes theoretical and critical policy research; (b) knowledge for action, which includes literature about CPD experiences of evaluations; (c) policy makers – research about policy statements; (d) practitioners – interpretations of practice and methods in an instrumentalist or in a reflexive way. Kennedy (2014b) contributed to the work of Bolam and McMahon (2004) by adding the literature about specific contexts in various countries and cultures.

It is essential to understand contemporary CPD, as well as the definitions that have been developed for this area. According to Evans (2002), this understanding could construct validity for the research area, establish its parameters, and identify the CPD process. Evans (2002) affirmed that despite research findings contributing to better understand of teachers' working lives, the lack of CPD definition remains. For Evans (2002), Day (1999) was one of the scholars who defined CPD, called professional development, in a clear and inclusive way:

Professional development consists of all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute, through these, to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching; and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives. (DAY, 1999, p.4).

Later, in order to complement and update this definition, Day and Sachs (2004, p. 3) affirmed that "continuing professional development is a term used to describe all the activities in which teachers engage during the course of a career which are designed to enhance their work". In addition, they emphasized the importance of understanding CPD in the context of the individual teacher's life and culture. It is important to comprehend that teachers' "biographies, social

histories and working contexts, peer groups, teaching preferences, identities, phase of development and broader socio-political cultures" (DAY; SACHS, 2004, p. 3) influence the way they engage in and perform CPD demands during their professional careers.

It is important to highlight that each CPD conception carries a way of understanding the world (DAY; SACHS, 2004; KENNEDY, 2014b; SACHS, 2016). According to Day and Sachs (2004), different theoretical views support different purposes and actions developed in the education field. Moreover, they might reveal how teachers' work is perceived, and what is implied, as a consequence, in the concept of professionalism that is behind the CPD definition (DAY; SACHS, 2004). Subsequently, the next section points out the managerial and democratic CPD views and the support of Paulo Freire' ideas for democratic CPD toward social change (FREIRE, 2005a, 2005b).

2.1.2 Theoretical conceptions: managerial vs democratic CPD

Although the professionalism of teaching has long been debated (BOLAM, MCMAHON, 2004; SACHS, 2016), it is important to highlight in what theoretical framework this dissertation is sustained. Sachs (2016) revealed that teaching is a "mature profession" that represents trust, and it is "valued and respected. Its members share a common set of values, are guided by ethical practice and have a knowledge base that is robust and can be defended" (SACHS, 2016, p. 421).

The collective identity and the autonomy of the workers also contribute to identify them as professionals (DAY, 1999). However, achieving professional autonomy has been a difficult task for teachers; teachers have struggled for autonomy, and their autonomy has been disputed between governments, teachers' unions and teachers themselves (DAY; SACHS, 2004; SACHS, 2001).

On the one hand, during the 1990s and the beginning of the 2000s, teachers' professionalism suffered a big impact. There has been pressure on teachers to respond to demands of the 21st century. The Organization for Economic Cooperation and Development (OECD) claimed that "all countries are seeking to improve their schools and to respond better to higher social and economic expectations" (OECD, 2005, p.1). As a consequence, there has been an intensification of teachers' work aimed at increasing assessment results; national curricula have been imposed in a top-down way; and many teachers have been feeling pressured and unable to perform due the lack of public confidence in their work (BOLAM; MCMAHON, 2004; DAY; SACHS, 2004; SACHS, 2001). On the other hand, positive analysis reveals that

this crisis in teacher identity, mainly caused by the extraction of teachers' autonomy, might have generated a call for revisioning the teacher professional condition (DAY; SACHS, 2004).

While policy documents have argued for managerial professionalism, unions and teachers groups have advocated for democratic professionalism. Authors have examined the managerial and democratic perspectives of teachers' professionalism (BOLAM; MCMAHON, 2004; DAY, 1999; HARGREAVES, 1994; HARGREAVES; O'CONNOR, 2018; SACHS, 2001, 2016). The terms "managerial professionalism" and "democratic professionalism" became popular in the 1990s because they could elucidate the main theoretical foundations of CPD worldwide (DAY; SACHS, 2004; HARGREAVES, 1994; SACHS 2001). Although this discussion happened almost twenty years ago, these themes are still on-going (SACHS, 2016). In the earlier 1990s, Hargreaves (1994) and others requested a new teacher professionalism. Currently, Sachs (2016, p. 414) reinforced and defended teachers' autonomy, learning and empowerment:

Now, it is clear that different times require different responses and current thinking and debates now circulate around professional learning. A new approach requires that teachers collectively and individually address those in power to make it clear that a top-down approach [to CPD] is simply not working, nor, in principle, is it likely to work. The international evidence is that in the most successful educational systems around the world there is an acceptance that a different kind of professionalism is needed.

Even though sometimes the boundaries that separate these two terms - managerial and democratic - have not been evident, Hargreaves (1994) for example, polarized these conceptions by dividing them between one side as the judgmental and hierarchical approach, and on the other side the participative and cooperative approach.

Bolam and McMahon (2004) summarized that the managerial view is based on the New Public Management (NPM) framework that includes concepts adapted from the private sector and applied to public contexts. They found:

In education, the main features of NPM include increased centralization of strategic decision making to the national level, reduced collegial involvement in national policy-making, decentralization of operational decision making to the site level, an increased emphasis on line management and managerial control of teachers' work in the interests of efficiency, the weakening of teacher autonomy, the creation of new managerial roles, skills and responsibilities and the emergence of more distinct managerial layers in schools. In addition, it is often associated with various forms of market-oriented mechanisms together with an increased emphasis on target setting, 'rational' management and accountability. (BOLAM; MCMAHON, 2004, p.39).

Additionally, for Sachs (2001, p. 151), the managerial discourse is based on the premise that, "management is inherently good, managers are the heroes, managers should be given the room and autonomy to manage and other groups should accept their authority". This idea has been applied in the education field by authorities through their education policies that questioned teachers' autonomy and competence in preparing students to meet the economic world's demands (DAY; SACHS, 2004). The managerial view emphasizes the teachers' accountability and effectiveness. As Day (1999) protests, "critics have argued that the new managerialist structures serve to deprofessionalize rather than empower, and that by no means all of teachers' development needs are able to be located in or arise from institutional contexts" (DAY, 1999, p. 9).

The NPM concept has been used in developed countries and it has been reinforced by international agencies such as the OECD³. In developing countries, even though this NPM movement has been more eclectic, it still increased teacher accountability due to low results in international rankings. In addition, bank loans (World Bank and International Development Bank) and donors from developed countries funded the 1990s education reforms and actions in Latin American education (AVALOS, 2004).

This funding and the pressure to improve education rankings generated higher teacher accountability, and resulted in teachers who worked without infrastructural conditions and received low salaries. In Brazil specifically, teachers faced a harsh reality related to their salaries, precarious conditions in schools, and a deplorable lack of public confidence (MACHADO et al, 2010; NUNES; OLIVEIRA, 2017). Additionally, the influence of the managerial movement caused even more challenges to teachers' work, such as increasing demands for accountability about students' results and lack of improvement in public education (CUNHA, 2013; GATTI; BARRETTO; ANDRÉ, 2011; LEITE; FONTOURA, 2018).

The global culture of performance values students outcomes that can be measured by systematic evaluations. Thus, using the discourse of transparency and accountability, managerial policies continue to challenge teachers' performance. Policy standards are tools that can be easily imposed and measured, increasing teachers' accountability, whereby as

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³ In developing countries such as Brazil, the NPM movement showed itself eclectic and linked with other factors such as corruption and poor administrative capacity. It might indicate that the results and consequences of the implementation of this reform could have been different in other developing countries (POLIDANO, 1999). See examples of this analysis in Ramos, Lira and Soares (2012).

consequence, teachers can be blamed for decreasing students' outcomes or be the target of changes in CPD policies (KENNEDY, 2014b; SACHS, 2016).

When CPD is linked to a managerial view of teachers' professionalism, teachers are seen as workers without opportunity for reflection, sometimes consumers of their own CPD. In this view, teachers are workers who accomplish students learning standards imposed by governments. They participate in individualistic, competitive, controlling and regulative CPD programs that are short-courses, or INSET initiatives, decontextualized with the school culture, with experts who are from universities or from government agencies. It was known as traditional, training, or management perspectives of CPD (BOLAM; MCMAHON, 2004; COCHRAN-SMITH; LYTLE, 2001; DAY, 1999; HARGREAVES; O'CONNOR, 2017; SACHS, 2001, 2016). As a result of this kind of CPD, teachers are targets of political interests who respond to different demands depending on the government in charge (SACHS, 2016). Moreover, teachers' learning is covered by an instrumental learning approach which focuses on the acquisition of an imposed knowledge (KENNEDY, 2014b).

Alternatively, the democratic view of teachers' professionalism emphasizes the culture of collaboration, cooperation, and action in schools (DAY; SACHS, 2004). It claims emancipatory intentions in education, and the reduction or elimination of exploitation, inequality, and oppression (FREIRE, 2005a). Teachers are agents of change, who work collaboratively with other partners such as universities or local community members to build strong school communities. Thus, CPD is not intended only for the acquisition of knowledge. Instead, it is focused on giving an epistemological base for educational practice, aligned with socio-political contexts (SACHS, 2001). According to Kennedy (2014b), democratic CPD aspires to be collaborative, school-based, and life-long. It supports teachers as proactive agents of social justice. In this approach, teachers collectively contribute to policy development and learn by acknowledging and articulating their beliefs and values.

In contrast to two transmission-oriented initiatives that serve managerial CPD, knowledge-for-practice and knowledge-in-practice, democratic CPD focuses on collaboration and teachers as inquirers, knowledge-of-practice (COCHRAN-SMITH; LYTLE, 1999, 2001). The knowledge-for-practice approach, whereby a theoretical knowledge produced by university-based researchers is delivered to teachers to improve their practice. The knowledge-in-practice approach is about the belief that teachers need practical knowledge produced by experienced teachers or from their practice reflection. Alternatively, the knowledge-of-practice approach advocates in favour of teachers learning from relationships among inquiry, knowledge and practice - inquiry as stance. Teachers learn when, in communities, they produce knowledge

through the investigation of their classroom practice using the theory produced by others as initial points of interrogation and interpretation, by connecting their knowledge into social, cultural, and political situations.

Teachers' CPD is not only about acquisition of knowledge and student achievement of high learning standards, but also social change and social justice (COCHRAN-SMITH; LYTLE, 2001). A theory of social justice in teacher education should involve multiple perspectives of analysis, "combining critical and democratic perspectives with commitments to anti-oppressive policies and practices" (COCHRAN-SMITH, 2009, p. 449). Additionally, teachers' preparation that seeks social justice is transformative and collaborative, but it also conveys the idea of teachers "working within and against the accountability system" (COCHRAN-SMITH, 2009, p. 458). Teachers' preparation and action for social justice would pursue "challenging inequities and respecting cultural knowledge and differences" (COCHRAN-SMITH, 2009, p. 460), towards students' learning and enhancing their life chances in the world (COCHRAN-SMITH, 2009).

To summarize, although the body of research has argued for a shift from an individual and instrumental CPD to a collaborative and life-long learning CPD approach since the 1990s, three views of CPD currently remain. Sachs (2011) referred to "retooling", which only inserts new skills on teachers seeking to manage student learning; "remodelling", which is also concerned with transmission and trying to modify existing practices to secure teachers' compliance with government agendas; and "revitalizing", which focuses on teachers learning to transform and become reflective practitioners. However, Sachs added the fourth metaphor to describe contemporary CPD, the "reimagining" metaphor.

"Reimagining" teachers' CPD is about transformation and it intends to "equip teachers individually and collectively to act as shapers, promoters, and well-informed critics of reforms" (SACHS, 2011, p. 160). It brings out strong political work achieved through diverse partnerships. Teachers do not only understand the practice, but they also improve and transform it through their collective research of this practice. While retooling and remodelling are worried about control and acquisition of knowledge, revitalizing and reimagining aim for teachers' transformation and change.

Freire (1998, 2005a, 2005b) contributes to the idea of teachers' transformation and change through democratic CPD. For him, a democratic education would be through a dialogical process, where people reflect and act together to change their micro context. The next section describes the main Freire's ideas that help to support the conception of democratic CPD where teachers can learn and develop toward social change.

2.1.2.1 Democratic CPD: Freirean' ideas for social change

In his book "Teachers as Cultural Workers", with the Portuguese title *Professora sim, tia não* (Teacher yes; aunt no!), Freire (2005b) criticized the Brazilian context where teachers were seen as coddling mothers. According to Freire (2005b), treating teaching as a vocation is in fact a way to keep teaching far from a professional status. As professionals, teachers should have rights and requirements addressed. For example, the Brazilian society would find it strange that mothers go on strike to fight for their rights. As *Tias* (aunts) - as they named teachers in Brazil - teachers would not be able to fight or demand their rights; they should remain "well behaved" (FREIRE, 2005b). Instead, it would be easier for the governments that *Tias* would be seen only as good people who donate their own lives for a divine cause. Freire (2005b, p. 27) explains:

The attempt to reduce teachers to the status of coddling parents represents an "innocent" ideological trap in that, under the illusion of softening teachers' lives, what is in fact being attempted is to soften the teachers' capacity to struggle or to keep them occupied in the implementation of their day-to-day tasks.

In this sense, *Tias'* CPD would be just one place where teachers would go while they did not have anything else to do: "waiting out a rainstorm under an awning requires no preparation or training" (FREIRE, 2005, p. 62). Freire criticized Brazilian teacher trainings that became only "slot machines" - where teachers are inserted like coins, which resulted in incompetence, poor preparation and irresponsibility within the profession. For the author, "teacher preparation should never be reduced to a form of training. Rather, teacher preparation should go beyond the technical preparation of teachers and be rooted in the ethical formation both of selves and of history" (FREIRE, 1998, p. 23).

Moreover, through this professional development, teachers were themselves victims of banking education as well as reproducing this form of education in their teaching (FREIRE, 2005b). Banking education was a kind of education where teachers deposited into students the knowledge that they received from other experts. In association with the international analyses presented above, banking education would correspond with knowledge-for-practice (COCHRAN-SMITH; LYTLE, 2001) or the act of "retooling" teachers (SACHS, 2011). As Freire (2005a, p. 72) concludes:

Education thus becomes an act of depositing, in which the students are the depositories and the teacher is the depositor. Instead of communicating, the teacher issues communiques and makes deposits which the students patiently receive, memorize, and repeat. This is the "banking" concept of education, in which the scope of action allowed to the students extends only as far as receiving, filing, and storing the deposits.

Thus, instead of being a gift received from others who owned it, as in the traditional knowledge-transmission CPD conception, knowledge should be a process of inquiry. "Knowledge emerges only through invention and re-invention, through the restless, impatient, continuing, hopeful inquiry human beings pursue in the world, with the world, and with each other" (FREIRE, 2005a, p. 72). In this sense, both teaching and teachers' CPD are not aimed at transferring knowledge. Indeed, they should create possibilities to construct knowledge with students/teachers by their inquiry (FREIRE, 1998).

Yet, as students themselves, the more teachers were immersed in banking education, the less they developed critical consciousness (FREIRE, 2005b). They became even more passive about their role in society. They only adapted to their reality and struggled less to change it. The banking form of education decreased the students and teachers' creative power. As a result, they could be dominated easily. They lost their own voice and they could not fight for the transformation and change of their micro context (FREIRE, 2005a). Freire (2005b, 1998) contributes to understanding the purpose of teachers' transformation and change during CPD when he affirms that teachers' development must be a critical analysis of their practice. When teachers are immersed in their daily routines, they are not able to perceive their own reality. The critical reflection about their situation gives them comprehension about it. "To study is to uncover; it is to gain a more exact comprehension of an object; it is to realize its relationships to other objects" (FREIRE, 2005b, p. 40).

Thinking about their practice allows teachers to take a step backwards and observe this as an object to be analyzed. Stimulating the epistemological curiosity⁴ of the learner (in this case, teachers as learners) is an act of respect regarding their critical consciousness (FREIRE, 1998). Through this process, teachers can connect social-political issues with their practice. Additionally, they can contrast the outside knowledge produced, with their knowledge, which Cochran-Smith and Lytle (1999, 2001) referred to as the knowledge-of-practice. The process

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⁴ Epistemological curiosity enables teachers to leave "common sense" knowledge, exclusively produced by practice, and, immerse in a methodological rigorous cycle where they can search, question, intervene, re-search (FREIRE, 1998).

of reflecting and acting to produce new knowledge would give teachers direction for their work. Teachers will know what they want and how to achieve their best practice (FREIRE, 2005b).

In addition to being a competent professional, regarding both the subject matter and pedagogical issues, the teacher is also a learner. It has to be emphasized that teaching involves people who engage in very important work, which demands respect and adequate remuneration. The teaching process involves the "seriousness, scientific, physical, emotional, affective preparation" (FREIRE, 2005b, p. 6) of teachers. With intellectual rigor, stimulation of epistemological curiosity, capacity of love - for others and the profession - creativity, and scientific competence, teachers should fight for freedom. Without this, teaching becomes meaningless (FREIRE, 2005b).

Teaching includes a specific task (teaching/learning), militancy (advocating for students) and requirements for its implementation. Recognizing the importance of their task, teachers should fight for social justice, not in isolation but collectively. They also must fight for their ongoing professional development as their right, a professional development that gives opportunities for living the experiences and tensions of their praxis, and the possibilities to transform it (FREIRE, 2005b). Freire (2005b, p. 63) explained:

Our need to be able to fight ever more effectively for our rights, our need to feel competent and to be convinced of the social and political importance of our task, rests in the fact that, for example, the meagerness of our pay does not depend only on the economic and financial condition of the state or of private companies. These needs are also very much linked to a colonial comprehension of administration, of how to deal with public spending, of the hierarchy and priority of expenditures.

During the process of development that involves scientific preparation and fighting to overcome social injustice, teachers learn through a dialogical process of reflecting on their practice and acting politically. Dialogue is a social praxis where people share their experiences. It is the encounter of people who, by reflecting and acting, transform their world. It is not only problem-solving, it aims to express the voice of the oppressed as a fundamental condition for human emancipation (FREIRE, 2005a; MACEDO; FREIRE, 2005).

According to Freire (2005a), the oppressed are those who suffer with the domestication process. This is an act of violence where the oppressors benefit from the strength of the oppressed. The oppressed are seen as the oppressor's possessions. Then, the process of domestication is, at the same time, the process of dehumanization. It is a distortion of the true essence of humankind. It alienates the oppressed and treats them more as objects than Subjects.

Often, teachers are oppressed people who are not aware of their reality and then reproduce the social condition in which they are immersed. Though, as an oppressed people, they have the task of fighting for authentic liberation. This liberation only comes through the process of reflection and action, through their praxis, in order to transform their reality. "Those truly committed to the cause of liberation can accept neither the mechanistic concept of consciousness as an empty vessel to be filled, nor the use of banking methods of domination (propaganda, slogans-deposits) in the name of liberation" (FREIRE, 2005a, p. 79).

Instead of being a domination practice - governments upon district leaders, those upon teachers and teachers on students - education is a practice of freedom. Education should be the space where people dialogue. People contribute to social change when conscious about their world and acting with and in their world. "It is true that education is not the ultimate lever for social transformation, but without it transformation cannot occur" (FREIRE, 2005b, p. 69, emphasis added). Freire (2005b, p.112) highlighted that:

[...] *education is a political act*. Its nonneutrality demands from educators that they take it on as a political act and that they consistently live their progressive and democratic or authoritarian and reactionary past or also their spontaneous, uncritical choice, that they define themselves by being democratic or authoritarian. (emphasis added).

According to Freire (2005b), progressive teachers should act as political militants. They should dedicate their profession to overcome social injustice. The practice of progressive teachers should be transformative and conscious. Then, the purpose of their knowing and developing process is the conscious practice in the world. When human beings grow and know, they are learning while practicing in the world. Freire (2005b) explained that by the simply act of moving in the world human beings are practicing in the world and they are learning about practice as well. However, it is not a practice without intention, practice has to be a conscious moving in the world.

Freire (2005b) led us to understand that while being a progressive teacher is urgent in the educational context, it also presents challenges and conflicts. Progressive teachers cannot deny conflicts that are inherent to their profession, they will not escape it. Freire stated that Brazilian teachers have much more to teach besides content knowledge. They have to teach their students through their example of fighting for fundamental changes in the education system, against authoritarianism, and in favor of democracy. For Cochran-Smith (2009), teaching practice is associated with teachers' interpretations about what is going on in their schools, "how they understand competing agendas, pose questions, and make decisions; how

they form relationships with students; and how they work with colleagues, families, communities and social groups" (COCHRAN-SMITH, 2009, p. 454). Thus, in the same sense as in Brazilian context, in the international context, education that seeks social change and justice cannot be associated with only what, when and how teachers teach. Freire (2005b, p. 83-84) summarized:

Thus I can see no alternative for educators to unity within the diversity of their interests in defending their rights. Such rights include the right to freedom in teaching, the right to speak, the right to better conditions for pedagogical work, the right to paid sabbaticals for continuing education, the right to be coherent, the right to criticize the authorities without fear of retaliation (which entails the duty to criticize truthfully), the right to the duty to be serious and coherent and to not have to lie to survive.

A progressive teacher is one who will invest in their practice and will always seek justice (FREIRE, 2005b). Progressive and democratic education conveys the idea of teachers' development and learning through a dialogical process of CPD for social change. The dialogical process implies critical thinking about the world, love for the world and for the people, faith in humankind, hope in the changing, and trust in the oppressed as people who are able to accomplish this changing. Dialogue cannot be the privilege of some people; it is a right of everyone and it requires a leader who fights for the rights of the people's voice (FREIRE, 2005a).

In this sense, teachers' CPD, which Freire (2005b, p. 150) called "training groups", will not reach its goals if there is not "a democratic, alert, curious, humble, and scientifically competent leadership". Thus, facilitators in the case of training groups, or others in charge of education, should be revolutionary leaders. In opposition of a managerial perspective of CPD, the revolutionary leader should establish permanent dialogue with the oppressed, in this case teachers, using this dialogue as a humanization pedagogy (FREIRE, 2005a).

Therefore, teachers should engage in critical thinking with their students in pursuit of common humanization, and facilitators should act as revolutionary leaders. "It is not our role to speak to the people about our own view of the world, nor to attempt to impose that view on them, but rather to dialogue with the people about their view and ours" (FREIRE, 2005a, p. 96). The revolutionary leader does not go *to* the people to bring the knowledge to them, but through dialogue unveils the situation *with* the people. Yet, more than discussing the situation with the people, the revolutionary leader proposes action with them.

The present situation, the reality that people face, and their culture, must be the starting point for organizing an educational program. The concrete situation reflects the objectives of the people. Therefore, the leader coordinates, or at times, directs the group, but cannot impose their thoughts and words. The leader helps the people help themselves to critically perceive the reality which oppresses them, which is the first action to surmount oppression. After this, the second action is to transform reality and to create a new situation (FREIRE, 2005a).

During these actions, the leader and the people are equal Subjects. Both are actors in revolutionary praxis. It is not someone liberating the other, it is mutual liberation through communication. There is spontaneous dialogue, empathy, and mutual commitment between leader and people. And even though the leader has scientific knowledge in a different capacity than the people (FREIRE, 2005b), together they build a horizontal relationship. Facilitator and teachers, leader and people, act with solidarity, which means that they struggle with the other Subjects. Solidarity is an act of love that involves humility, hope, trust, and courage. It is where the leader enters into the situation of *Others*, fighting at their side, understanding and sharing the oppressing situation of those who had their voice silenced (FREIRE, 2005a). Freire (2005a) pointed out that words without action is verbalism, and action without reflection is empty activism. Thus, it is through dialogue - which conveys reflection and action - that this horizontal relationship is possible.

Dialogical action is also cultural action that approaches an entire community. Participating in the society's transformation should be an invitation to action for all people. It is a *conscientização* (awareness) process where people leave the status of objects and become Subjects of their history and their culture. In opposition of several forms of domination such as conquest, manipulation, cultural invasion, division of groups and imposed rules, dialogical cultural action should build cooperation, unity, organization and cultural synthesis (FREIRE, 2005a). In *cooperation*, leader and people encounter themselves, focus their attention on the reality that mediates them and the challenges that this reality presents. They cooperate in order to act in that problematic reality. Furthermore, it implies that the leader trusts in the capacity of people to act in the face of their challenges. Through trust and communication, they can act together to transform their world.

The leader should *unite* the people for liberation. Unity involves solidarity between themselves and it requires the oppressed people to discover themselves as persons. Persons who have the capacity to, collectively, perceive the reality of their domination and to act for their liberation. After united in the process of a common task, leader and people have to organize themselves. *Organization* is a natural progression from unity. The humble and courageous to

fight emerges when the people cooperate for a shared effort. Leaders have to organize the group *with* the people and not *for* them. Organization requires leadership, discipline, determination, clear objectives and common tasks. And it is just possible if the leader learns *with* the people how to interpret their world.

The dialogical cultural action aims at surmounting the contradictions of the society and achieving the liberation of human beings. It is not possible if in a cultural invasion, leaders intend to manipulate, dominate, and use the people, imposing on them their own culture. In a *cultural synthesis*, the actors "who come from 'another world' to the world of the people do so not as invaders. They do not come to teach or to transmit or to give anything, but rather to learn, with the people, about the people world" (FREIRE, 2005a, p. 180).

In conclusion, the dialogical action involves leader and people, facilitator and teachers, together to critically analyze the reality and act on that reality as Subjects of their own history. Then, acting with teachers in order to create spaces might encourage teachers to become progressive teachers in democratic education, which is political and pedagogical action. It seeks to learn throughout praxis for social change. It intends to act with them toward transforming their micro world, and to help them help themselves to become independent and truly empowered (FREIRE, 2005a).

Teachers as political militants, who are dedicated to overcoming social injustice, are those who empower themselves with their daily fight. They critically reject their domesticating role and act as a community in schools. They do not internalize the dominator's shadow and the authoritarian ideology of the administration. They understand that education is a form of intervention in their world (FREIRE, 1998). Then, they treat schools as nonneutral spaces, not political bases, but instead, schools become places for teachers' empowerment through dialogue (FREIRE, 2005b). As Freire (2005b, p. 14-15) explained:

We must scream loudly that, in addition to the activism of unions, the scientific preparation of teachers, a preparation informed by political clarity, by the capacity of teachers, by the teachers' desire to learn, and by their constant and open curiosity, represents the best political tool in the defense of their interests and their rights. These ingredients represent, in truth, real teacher empowerment.

Therefore, teachers' CPD cannot be only about acquisition of knowledge as in banking education, working at "retooling" teachers (SACHS, 2011), and delivering "knowledge-for-practice" (COCHRAN-SMITH; LYTLE, 2001).

In precarious situations such as those lived in Brazil (MILLAR, 2014) or those recently faced in global north countries (KIRK, 2018, 2019), democratic teachers' CPD must urgently involve fighting for social change and justice (COCHRAN-SMITH, 2009). "It is obvious that the problems associated with education are not just pedagogical problems. They may also be political, ethical, and financial problems" (FREIRE, 2005b, p. 67). The struggle for the dignity of teaching practice is an integral part of the teaching profession (FREIRE, 1998). Conscious about this reality, teachers should prepare themselves to teach toward acting politically to change their social conditions.

In conclusion, teachers' CPD for social change conveys teachers as critically conscious learners. Seeing themselves in this way, teachers are able to connect their practice with social-political issues and both re-create this practice continually and fight for social justice. In this sense, teachers' learning and development should be based on dialogical processes and guided by a revolutionary leader, someone who would act with solidarity and fight with the teachers for social change.

It is important to affirm that this dissertation is supported by a democratic view of teachers' CPD (DAY; SACHS, 2004; FREIRE, 2005a, 2005b; SACHS, 2016). It understands teachers as long-life learners, but at the same time, scientific and competent professionals (FREIRE, 2005b) who pursue expertise in relation to education. Thus, this dissertation defends a transformative CPD (COCHRAN-SMITH; LYTLE, 2001; COCHRAN-SMITH, 2009), and understands that CPD is more than extension, growth and renewal of knowledge and teaching practices. CPD is about "reimagining" teachers' development (SACHS, 2011) through collective and collaborative daily work rethinking, analyzing, acting for teaching-learning and social-political conditions that surround teachers' lives (COCHRAN-SMITH, 2009; FREIRE, 1998, 2005b).

The following sections describe the findings in the research literature regarding the effectiveness of CPD models that could contribute to democratic CPD. It demonstrates that collaborative CPD, mainly through professional learning community (PLC), might provide opportunities to develop a dialogical process toward a democratic CPD, where cooperation, unity, organization and cultural synthesis (FREIRE, 2005a) can be cultivated. The first section (2.1.3.1) defines PLC, the second (2.1.3.2) summarizes the literature about effective CPD in education, and the third (2.1.3.3) describes the findings about CPD in the field of physical education.

2.1.3 Effectiveness of CPD through professional leaning communities

Scholars have described different models or strategies for CPD that have evolved globally (AVALOS, 2011; BOLAM; MCMAHON, 2004; DAY, 1999; WHITCOMB, BORKO; LISTON, 2009). Kennedy (2014b) summarized these CPD models and categorized them as having three main purposes: (a) transmissive models (training, deficit and cascade); (b) malleable models (award-bearing, standards-based, coaching/mentoring and community of practice); and (c) transformative models (collaborative professional inquiry)⁵. The transformative models have been debated emphatically in the research field and particularly about experiences related to, "collaborative problems-identification and subsequent activity" (KENNEDY, 2014b, p. 695)⁶. These models present experiences that unit teachers' action research and PLC (KENNEDY, 2014b).

Although transformative models could contribute to and inform democratic CPD, nevertheless, it is important to highlight that CPD should not be decontextualized or simplified and forced on teachers. In this sense, a "collaborative culture may not indicate democracy" (DAY, 1999, p. 80), while a "contrived collegiality" is harmful to CPD. The "contrived collegiality" might occur when teachers are forced to participate in PLC that are top-down, with limited decision-making, not spontaneous, and those which not prioritize teachers' development. As a consequence, such collaboration would not be meaningful for teachers, would reduce their motivation to participate in CPD and would serve externally imposed interests within teachers' CPD (HARGREAVES, O'CONNOR, 2017, 2018; KENNEDY, 2014b; SMYTH, 1995).

Additionally, the support of collaborative CPD through PLC is not a naive choice. It is known that collegiality will not appear spontaneously if it is not given opportunity and structure for teachers' development (TIMPERLEY et al., 2007). Furthermore, public policies in education have to guarantee effective physical structure in schools, teachers' salaries correlated with their professional education, and opportunity to enrol in CPD experiences (NUNES, OLIVEIRA, 2017). Additionally, "empowered schools display a variety of political structures, but they are places where teachers enjoy being, where they feel fully stretched as professionals, where they share common purposes but are respected for their individuality and valued for their

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⁵ For better understanding of the categories and models see Kennedy (2014a), who produced another classification in 2005, thus she highlighted the importance of updating names and models.

⁶ Kennedy explained that action research has been commonly called "professional inquiry" and Community of Practice (CoP) has been named "learning communities" or "teachers' learning communities" (KENNEDY, 2014b, p. 695).

unique contribution" (HARGREAVES, 1994, p. 435). In this way, teachers need to be empowered to reflect on their development and to fight for better work conditions (FREIRE, 2005b) and the schools need to be empowered to support this growth.

2.1.3.1 What are professional learning communities?

According scholars (GROSSMAN; WINEBURG; WOOLWORTH, 2001; TOOLE; LOUIS, 2002), PLC has been referred to using different names such as community of learners, school community, teacher community, and community of practice. However, sometimes the terms are misunderstood. Bolam et al. (2005) argued that the concept of PLC is not new and different authors such as John Dewey, Donald Schön and Lawrence Stenhouse contributed to the development of this concept. PLC values teachers reflecting through inquiry and solving common problems together. Learning is a key element of this concept, while "community" is the heart of the expression. People who learn in community is the foundation of understanding the definition of PLC. The two other points that constitute the foundation of the PLC concept are: (a) the assumption that knowledge is situated in daily experiences and teachers learn it better when they reflect critically about it; and (b) PLC enhances teachers and pupils' learning (VESCIO; ROSS; ADAMS, 2008).

PLC indicates a, "school-wide culture that makes collaboration expected, inclusive, genuine, ongoing, and focused on critically examining practice to improve student outcomes" (TOOLE; LOUIS, 2002, p. 247). There is no universal conception of PLC, yet it seems to be widely accepted that PLC refers to a collective enterprise of "people sharing and critically interrogating their practice in an ongoing, reflective, collaborative, inclusive, learning-oriented, growth-promoting way" (BOLAM et al., 2005, p. 5). However, PLC is not an inherently virtuous concept. Diverse characteristics might contribute to weakening the collaboration inside communities (TOOLE; LOUIS, 2002), and might reinforce callous habits rather than enabling transformative learning. For example, when practice focuses on only telling histories or sharing ideas without creating a tension among old beliefs and innovative thoughts, teachers' opportunities for development are hampered (TIMPERLEY et al., 2007; TOOLE; LOUIS, 2002).

Therefore, to achieve such opportunities, it is necessary that teachers have a place of trust and risk-taking. PLC should be a place where teachers might unit their work, question their beliefs, and adventure themselves in solving daily problems (TOOLE; LOUIS, 2002). In that sense, the main characteristics of a PLC that seeks positive transformation are: (a) shared values

and vision; (b) collective responsibility; (c) reflective professional inquiry; (d) collaboration; and (e) group and individual learning (STOLL et al., 2006). Additionally, other important characteristics are "inclusive membership; mutual trust, respect and support; openness, networks and partnerships" (BOLAM et al, 2005, p. iii).

PLC might change over time. It might present three main stages of development - starter, developer and mature (BOLAM et al., 2005) or as Grossman, Wineburg and Woolworth (2001) described: beginning, evolving and mature. Although PLCs present similar structure, their stages of development depend on their context and settings. In addition, their development depends on teachers' beliefs, expectations, interests, knowledge and commitments (BOLAM et al., 2005; TOOLE; LOUIS, 2002); and differs according to grade level, subject matter, and student population (GROSSMAN; WINEBURG; WOOLWORTH, 2001).

Toole and Louis (2002) reported that to cultivate PLCs important conditions include both social and structural investment. An environment of trust, respect, mutual support and group socialization is fundamental for the growth of strong interpersonal relationships. Time, space, teacher empowerment and school autonomy form the basis for building a structure for PLC development. Furthermore, these conditions are frequently interconnected. Time or space, without collaboration or trust among participants, are not sufficient to build a PLC (TOOLE; LOUIS, 2002). Evidently, developing a PLC is a complex process, and depends on a combination of factors such as teachers' learning, human and social resources, structure, and relations with external agents (STOLL et al., 2006). Thus, PLCs convey a wide-range scope that might influence teachers' work lives, teachers' learning, and organizational improvement (STOLL et al., 2006; TOOLE; LOUIS, 2002; VESCIO; ROSS; ADAMS, 2008).

Even though the culture of individualism and teachers' CPD based on instrumental acquisition of knowledge have never abandoned government documents and school routines (GATTI; BARRETO; ANDRÉ, 2011; SACHS, 2011; TIMPERLEY et al., 2007), there has been advocacy in favour of collaboration in CPD. Due to the improvements reported in global studies that investigated learning communities, the PLC has become one of the most used strategies to enhance successful and collaborative CPD (KENNEDY, 2014b; VESCIO; ROSS; ADAMS, 2008; WHITCOMB; BORKO; LISTON, 2009). However, there is also a concern about the effectiveness of collaborative CPD (CORDINGLEY et al. 2003, 2005a; STOLL et al., 2006; TIMPERLEY et al., 2007; VESCIO; ROSS; ADAMS, 2008). The next section describes the effectiveness of collaborative CPD and PLC as a way to enhance teachers' CPD.

2.1.3.2 Effectiveness of collaborative CPD and professional learning communities

The body of research about CPD points out the effectiveness of collaborative CPD, even though effectiveness seems to be defined in many different ways. Mostly, it was linked to teachers' teaching and learning, and students' changes, as will be demonstrated below. To investigate effective CPD, this section describes findings that were generated by wide-ranging reviews and coordinated by research institutes (e.g. CORDINGLEY et al., 2003, 2005a, 2005b, 2007; CORDINGLEY et al., 2015; CORDINGLEY, 2015) or governments reports (e.g. TIMPERLEY et al. 2007). Others independent reviews used in this section were led by authors from different countries around the world since the 1990s (e.g. GORE et al., 2017; STOLL et al., 2006; VESCIO; ROSS; ADAMS, 2008). It is important to highlight that the intention here is not to translate all reviews already developed. Instead, the intention is to give a broad view about this research field.

The current collaborative CPD definition that was adopted, refers to programs where more than two teachers engage to be encouraged toward sharing their learning and supporting each other mutually. Moreover, these programs have to be sustained, which means that the programs should continue for three months or more (CORDINGLEY et al., 2003, 2005a). More than PLCs, other CPD models that represent collaborative CPD might have been included in these reviews, for example, mentoring or coaching. Yet, most experiences refer to different designs of PLCs.

From the review analysis, it was observed that teachers who participated in collaborative CPD initiatives presented changes in their attitudes. They were more confident, motivated and committed to their profession (CORDINGLEY et al. 2003, 2005b; DARLING-HAMMOND, 1996; STOLL et al., 2006). Moreover, they improved their teaching and learning strategies and, their ability to locate students' learning needs; they learned more about learning theories, the use of technologies, educational policy and specific subject knowledge (CORDINGLEY et al. 2003, 2005b, 2007; VESCIO; ROSS; ADAMS, 2008). Yet, teachers need to continue learning about their own subject and general teaching knowledge (CORDINGLEY et al., 2015).

Although a small corpus of research relates students' learning to CPD initiatives, some reviews identified that there were perceived impacts on pupils learning, motivation and outcomes (VESCIO, ROSS; ADAMS, 2007; CORDINGLEY et al. 2003; STOLL et al., 2006). The reviews also demonstrated impacts on the students' affective development and self-esteem (CORDINGLEY et al. 2007). In addition, the results of CPD that was research-informed and research-related showed benefits to students' development (CORDINGLEY, 2015).

The inquiry-oriented collaborative CPD has demonstrated being effective for teachers' change. These experiences should give opportunities for teachers to observe, reflect on, and experiment with new practices, to test the theories learned and discussed collectively in their current practice. The process of discovering their problems, reflecting about them and testing different solutions should be developed under different kinds of networks, primarily peer support and PLC (CORDINGLEY et al., 2015; CORDINGLEY, 2015; DARLING-HAMMOND; RICHARSON, 2009; DESIMONE et al., 2002, DESIMONE, 2011; TIMPERLEY et al, 2007). In these research-rich CPD programs, teachers improved their knowledge related to teaching, and also their attitudes to continue their learning (CORDINGLEY, 2015). The same could be noticed when CPD programs used specific pedagogy-based collaborative models of CPD such as 'Quality Teaching Rounds'. Using this model, Gore et al. (2017) investigated quality of teaching with 192 teachers from 24 Australian schools that participated in intervention and control groups. Teachers improved the quality of their teaching in this study, even in different types of schools located in either the urban or rural areas.

Different reviews produced consensus about several factors that might affect the effectiveness of collaborative CPD (CORDINGLEY et al., 2005a, 2005b; CORDINGLEY et al., 2015; DESIMONE et al., 2002; HARGREAVES; O'CONNOR, 2018; STOLL et al., 2006; TIMPERLEY et al., 2007). They demonstrated that CPD programs need to be contextualized, school-based, meaningful and relevant to classroom practices. These initiatives should consider external expertise that might bring different understandings about practice. Teachers should reflect about practice and join efforts to analyze and solve problems related to their daily routines.

Time is an important factor of CPD programs. Although teachers should be given enough time to experience a variety of CPD activities, time is not the only determinant of the effectiveness of CPD. The quality of the time is more important than the quantity of time spent on these activities (TIMPERLEY et al., 2007). Yet, experiences revealed that ongoing and sustained CPD for one year or more effectively change teachers' and students' learning (CORDINGLEY et al., 2015; DESIMONE, 2011). During this time, these experiences should have a leader that accesses experts and opportunities for the learning and who is also a learner together with the teachers (TIMPERLEY et al., 2007). In addition, teachers' participation can be compulsory or voluntary since they engage deeply in the CPD experience and they incorporate new understandings that create dissonance with their current positions about teaching and learning (CORDINGLEY et al., 2015).

Although the literature has demonstrated advocacy for transition from individual teachers' development to collaborative CPD mainly through PLCs, research still has developed and defended CPD programs that promote individual and short-course activities (TIMPERLEY et al., 2007), or a contrived collegiality (HARGREAVES, O'CONNOR, 2017) in CPD with top-down practices (ROSSI; SIRNA, 2008). Alternatively, reviews have reported that cultivating a collaborative CPD, principally through PLC, presents tensions and requires a combination of financial, infrastructural and theoretical factors (SCHAAP et al. 2018; STOLL et al., 2006). However, Sachs (2001) advocates that PLC, and specifically communities of practice, can create possibilities to foster a democratic and transformative CPD because they encourage collegial work, engagement, negotiation, form and reform of specific issues related to teachers' practice.

Despite these findings, few studies linked collaborative CPD with social justice and social change in a democratic and transformative CPD (COCHRAN-SMITH; LYTLE, 2001; COCHRAN-SMITH, 2009) as Gore et al. (2017) reported in their study. Specifically, the studies did not describe a process of teachers' CPD that has led teachers to both learn specific teaching knowledge and fight for social change. Deep descriptions about teachers' change and learning, as well as their interactions during collaborative CPD, also are missing in the literature (DARLING-HAMMOND, RICHARDSON, 2009; TIMPERLEY et al., 2007; VESCIO; ROSS; ADAMS, 2008). As Sachs (2016, p. 424) pointed out, "the challenge then is how to create discursive spaces whereby a more collaborative or research-engaged teaching profession could develop and thrive".

2.1.3.3 Collaborative CPD and Physical Education

The research literature produced by the physical education field about CPD seems to echo previous CPD research presented in the field of education. However, physical education scholars have added specific information from their experiences with CPD in physical education. For example, Armour and Duncombe (2004) emphasized that physical education teachers' CPD was always fragmented, and teachers faced several challenges to progressing in their careers (ARMOUR; MAKOPOULOU; CHAMBERS, 2012). According to Armour and Yelling (2007), teachers felt isolated and marginalized in their schools, and because of this, school-based CPD might be more difficult to them. They argued that professional learning networks and/or communities could be the best way for teachers to compensate for the decontextualized official CPD that they were obligated to attend.

Armour and Yelling (2004) highlighted the importance of the structure of collaborative CPD. In contrast to the individual conception of CPD, which often blamed teachers for their problems in school, they reinforced that schools should support teacher's development (ARMOUR; YELLING, 2007). In this same way, Duncombe and Armour (2004) affirmed that teachers would value further opportunities to engage in collaborative professional learning experiences, where they could explore and solve their problems. However, according to the authors, schools would need to radically alter their structures, processes and priorities to enable effective professional learning experiences.

The majority of contemporary studies about physical education teachers and effective CPD identify PLC as the best strategy to develop teachers' learning. As discussed previously, these PLCs might have different formats, yet the main design adopted by the physical education field refers to CoP based on Situated Learning theory from Lave and Wenger (1991)⁷ (PARKER; PATTON, 2017).

O'Sullivan and Deglau (2006, p. 442) pointed out some lessons learned for the design and delivery of CPD: (a) "do not try to do too much", professional development is not only about content; (b) make time for teachers to share their ideas; (c) CPD should be part of the teachers' workload; and (d) the tension experienced in the discussion of teachers' disagreements is important to meaningful learning. They also set some principles for physical education CPD, among them, there is the importance of seeing teachers as professionals who actively learn. Their learning should be continual and contextualized with classroom knowledge and authentic issues (O'SULLIVAN; DEGLAU, 2006). Moreover, Duncombe and Armour (2004) added that effective CPD is active, reflective, collaborative, ongoing, school-based, planned and focus on teachers' and pupils' needs.

Regarding the process of CPD facilitation, Patton, Parker, Neutzling (2012) researched the beliefs of experienced facilitators and reported their meaningful CPD strategies, such as: (a) understanding teachers' context; (b) listening to teachers' voice; (c) enhancing their self-esteem; (d) observing and being observed during their practice while offering and receiving feedback; and (e) building a community of teachers to support teachers in a collaborative way. Reinforcing these results, Patton and Parker (2014) pointed out that successful CPD is associated with: (a) the notion of teachers as learners, who acquire more than knowledge in their CPD; (b) teachers' empowerment; and (c) student learning.

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⁷The next section of this chapter describes in detail these studies and their main findings.

Summarizing the findings from CPD research, Patton, Parker and Tannehill (2015) listed eight core features to support professional development in physical education. Professional development: (a) should be based on teachers' needs and interests; (b) involves the notion that learning is a social process; (c) includes collaborative opportunities within learning communities; (d) is ongoing and sustained; (e) understands teachers as active learners; (f) improves pedagogical skills and content knowledge; (g) is facilitated with care; and (h) focuses on improving students' outcomes. In order to achieve these aspects of CPD, critical dialogue, public sharing of teachers' work and fostering learning communities were designated as practices for physical education teachers' CPD (PARKER; PATTON; O'SULLIVAN, 2016). In addition, the CPD should be based on inquiry and reflection through action research, observation and feedback on teaching, observing expert teachers and being observed while teaching, and through curriculum development (PARKER; PATTON, 2017).

Makopoulou (2018) investigated the perceptions and practices of tutors (facilitators) while facilitating one CPD initiative in England. Her results echoed the previous findings, yet, even though these themes reported by Patton, Parker and Tannehill (2015) had appeared in the tutors' discussions during their facilitation of short courses, most of the tutors did not accomplish the eight core features. This may demonstrate that the theoretical discussion about CPD provided strong resources for CPD, but little has changed in practice.

Although in the education field, the effectiveness of CPD was linked mostly with students' outcomes, importantly, Parker and Patton (2017) observed that the meaning of effectiveness depends on the CPD's purpose, context and school culture. Furthermore, several views about CPD effectiveness might be addressed by the literature. For the authors, teacher engagement, teaching practice and students' outcomes are the foundation for analyzing the effectiveness of CPD. Armour et al. (2017) also discussed the effectiveness of CPD, and they developed interesting issues about effective CPD. First, although a body of research has indicated the CPD models that are more effective, understanding of CPD effectiveness is still vague, and the research literature shows that sometimes the CPD models fail to act. Second, the literature presents a shift from individual and fragmented training perspectives to the notion of learning as a continuum, however, education systems do not seem prepared to offer CPD. Instead, sometimes, the perspective of "effective" CPD is linked with the idea of better informing teachers, which maintains the notion of transmissive CPD. Third, Armour et al. (2017) argued about what could indicate effective CPD in contemporary physical education. Thus, new requirements are made for contemporary physical education teachers, and their CPD should attend to these requirements. Fourth, physical education CPD for contemporary teachers

should approach the complexity of learning. Embodied, individual experiences, culture and power are present in the physical education environment and teachers do not have many opportunities to discuss and analyze it in their CPD. As a consequence of these four factors, effective CPD should support teachers' learning based on their practice, dynamic learning and its ongoing trajectory (ARMOUR et al., 2017).

Thus, it can be noticed that, although the features of effective CPD has been identified by several studies, as Armour et al. (2017) indicated, confusion remains about what is the meaning of "effectiveness" in physical education teachers' CPD. Moreover, there remains a lack of research evidence about the effectiveness of CPD in physical education (GOODYEAR, 2017). In addition, even though the CPD research literature has identified best practices to facilitate and promote physical education teachers' CPD (PARKER; PATTON; O'SULLIVAN, 2016), current CPD activities did not change overall (MAKOPOULOU, 2018).

These findings encourage further investigation of physical education teachers' CPD. The lack of evidence and misunderstandings about the effectiveness of CPD models largely used in physical education, such as PLC, lead this dissertation to interrogate what means effective CPD related to precarious contexts, such as those in Brazil. How could PLC inform physical education teachers' CPD in that Brazilian context? In addition, it is important to seek deep understanding about the challenges of cultivating PLC and envisioning democratic CPD in that context.

Toward better understanding of the context investigated, the next section present the CPD's Brazilian context, including the main laws and programs that constitute the scenario for teachers' CPD in the country. Additionally, it presents the initial experiences with collaborative CPD and PLC in its different models, mainly community of practice.

2.1.4 CPD in the Brazilian scenario

The Brazilian education system is organized by the *Lei de Diretrizes e Bases da Educação Nacional* (LDB) (Law of Directives and Bases of Education) nº 9394 published in 1996 (BRASIL, 1996). This law orients the curriculum of the basic and higher education in the country. In addition, it regulates the financial support for education, the policies about professional development, and the responsibility of states and municipal offices regarding the functioning of the educational system. Since 1996, this law has been changed by every government in charge of the country. Additional laws that represent different education policies

have been created, continued, or interrupted during the current years, which demonstrates the inconsistency of the Brazilian education system.

In spite of this variability, Brazil has been investing in education. Different policies and actions have increased the funding of education, such as with the *Fundo de Manutenção e Desenvolvimento do Ensino Fundamental e de Valorização do Magistério* (FUNDEF) (Fund for Maintenance and Development of Primary and Secondary Education and Valorisation of Teaching) in 1997, and its expansion to achieve basic education country-wide in 2006, with the *Fundo de Manutenção e Desenvolvimento da Educação Básica e de Valorização dos Profissionais da Educação* (FUNDEB) (Fund for the Maintenance and Development of Basic Education and Valuing Education Professionals). Moreover, the Ministry of Education (MEC) has been developing a national professional development policy towards establishing a national education system. This system recognizes the teacher's professional career as a governmental (federal, state and municipal) responsibility and it understands professional development as an ongoing process leading to the qualification of teachers' practice, the constitution of teachers' identity and their professionalism (GATTI; BARRETO; ANDRÉ, 2011).

In 2009, the *Política Nacional de Formação de Profissionais do Magistério de Educação Básica* (National Policy for the Professional Training of the Magisterium of Basic Education) was published through law nº 6755 (BRASIL, 2009). It presented twelve points to follow by diverse institutions in promoting teachers' professional development. Regarding the CPD (reserved for teachers in-service), it focused on the interaction between theory and practice, and pre-service teachers and teachers in-service. It recognized the school as the place of professional development and learning (GATTI; BARRETO; ANDRÉ, 2011).

The *Plano Nacional de Educação* (PNE) (National Education Plan) aimed to point the main outcomes for education over the 10 year period from 2014 to 2024. Outcomes 15 and 16 are related to professional development. These points intend to have all teachers with a teaching licence in higher education and 50% of the teachers earning honours degrees, Masters or Doctors by 2024. Outcomes 17 and 18 refer to the valorisation of teachers. They aim to equalize teachers' salaries with other professionals with similar degrees until 2020, and they project having 90% of teachers in permanent positions in schools (BRASIL, 2014).

The last action that directed to create the national education system was in 2015, when the, *Diretrizes Curriculares Nacionais para a Formação Inicial e Continuada em Nível Superior de Profissionais do Magistério para a Educação Básica* (National Curricular Guidelines for Initial and Continuing Higher Education Professionals of the Magisterium for Basic Education) was published by Resolution nº 2 of 2015. After intense debates within the

educational community, it defined the purposes, frameworks, strategies and procedures for teachers' professional development process. Moreover, it presented planning about assessment and regulation of the institutions that could offer pre-service teacher education to student teachers, or other kinds of CPD activities to teachers in-service, as short-courses (20 - 180 hours) and honours degrees (360 hours) (BRASIL, 2015).

However, Brazil is a huge country that retains a historical debit regarding education. The assessment of national education in 2016 revealed that the education system has 186,081 schools and 2,196,397 teachers working in these schools. About 27% (n= 589,508) of these teachers did not have a teaching licence from higher education (6,043 have middle school education, 488,067 have only high school education, and 95,401 have degrees in other areas but work in schools as teachers) (BRASIL, 2016). As a consequence of these findings, the focus of the federal government in the last few years was on the pre-service teacher education degrees. These degrees were developed through partnerships with public universities that offered distance programs (online) until 2009. After this, the priority was given to regular pre-service teachers' education degrees and distance education was intended for CPD activities (GATTI; BARRETO; ANDRÉ, 2011).

The *Universidade Aberta do Brasil* (UAB) (Open University of Brazil) was another important contributor to the improvement of the debit of teachers in schools. For example, in 2008 the data were even worse, about 35.5% (n= 707,625) of the teachers did not have a teaching licence degree (BRASIL, 2009). The UAB was a federal initiative that created local centers for professional development. There were 584 institutions around the country that offered both pre-service teacher education and CPD activities (GATTI; BARRETO; ANDRÉ, 2011).

Despite all the investments that federal, state, and municipal governments have made in education, and the improvements in the Brazilian educational system (OECD, 2011), those census data (BRASIL, 2016) reveal the size of the Brazilian problem regarding teachers and their professional development. In Brazil, unfortunately, educational programs are built by a specific government, in other words, there are not public policies for the whole country. Indeed, the insufficient and inconsistent education of teachers, might contribute to the instability of educational system (NUNES; OLIVEIRA, 2017).

Furthermore, since the last two years of President Dilma's government and then more so after her impeachment process in 2015, Brazil has been experiencing worth instability in education. Many laws have been changed, interrupted or not respected⁸. The battles between government and the teachers' union, in higher or basic education, have created tensions in education and have increased the inconstancy of the programs already established⁹. Moreover, with first President Temer's and currently President Bolsonaro's governments, the educational system has been suffering with cuts in its funding in school and higher education¹⁰.

With an overview of public policies for professional development from 1996 until 2010, Gatti, Barreto and André (2011) summarized the main professional development programs and their effects in Brazil. They collected data from 178 cities - Brazil has 5563 cities, yet these 178 each have at least 150,000 inhabitants. They also studied 15 cases of state education offices and investigated documents from higher education institutions. In this present dissertation, it is necessary to limit data to only the data that refers to teachers' professional development, its challenges in relation to salary, workload, and also the CPD models that have often been adopted.

It is reported that, in general, teachers are black or indigenous women who come from Brazil's lowest economic levels. Although there is a law to determine teachers' salaries (law nº 11738/2008) (BRASIL, 2008), it is not applied in most cities. The minimum teachers' salary refers to a 40-hour weekly workload and in 2019¹¹ was about US\$ 678 per month (17/07/2019 currency exchange R\$ 2.557,74). Teachers receive less than other professionals with the same degree level and they are in a group of professionals who receives the lowest salary in the country. In addition, on average they work 56 hours per week, and they attend two or three schools during this time. Regarding teaching contracts, 23% do not have a formal work contract

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⁸ See the example of the National Curriculum building process: https://g1.globo.com/educacao/noticia/entidades-pedem-suspensao-da-votacao-da-base-nacional-comum-curricular-em-conselho.ghtml

⁹ See for example the public letter of educational academics' unions, "Manifestação das entidades educacionais sobre a política de formação de professores anunciada pelo MEC 2017": http://www.anped.org.br/news/manifestacao-das-entidades-educacionais-sobre-politica-de-formacao-de-professores-anunciada. And the public announcement of educational workers, union, "Confederação nacional dos trabalhadores em educação": https://www.cnte.org.br/index.php/documentos/notas-publicas/19239-politica-nacional-de-formacao-de-professores-mec.html

¹⁰ See the law number 9741/2019:

https://presrepublica.jusbrasil.com.br/legislacao/691865496/decreto-9741-29-marco-2019. See the news on *O Globo* newspaper: https://oglobo.globo.com/sociedade/cortes-no-mec-afetam-educacao-basica-anunciada-como-prioridade-por-bolsonaro-

<u>23646433?fbclid=IwAR1VzP6FTY31Lq8h8dWF7eI0OZdo4cKAZKCDa0JeVxepBrIT9ScheWxeFH</u> E

¹¹ Information collected from Ministry of Education (MEC) website: http://portal.mec.gov.br/component/content/article/211-noticias/218175739/72571-piso-salarial-domagisterio-sobe-4-17-a-partir-de-janeiro-valor-sera-de-r-2-557-74?Itemid=164

and 23.2% are contractual teachers, therefore, almost half of the teachers in Brazil are not permanent teachers, which further limits their work rights, salaries and stability.

In spite of, on average that 20% of teachers' workload required extra class work, Gatti, Barreto and André (2011) affirmed that it is not specified what kind of CPD activity should be developed and if it should be at school or not. However, they found that official documents advocated in favor of CPD initiatives that relate theory and practice during these extra hours. After undertaking deep analysis in 15 states and diverse cities in Brazil, the authors advised that even though some good CPD initiatives have been developed, in general, CPD in Brazil is still transmissive. Frequently, CPD offered workshops, conferences, seminars, short-courses (20 - 180 hours) in public and private universities, and sometimes as distance (online) CPD. These initiatives are individualized and there is no assessment about their results at the classroom level. Generally, the focus is the curriculum and the improvement of teachers' practice to increase students' outcomes. Yet, the main CPD experiences are only in teaching the Portuguese language and mathematics. Moreover, as the pre-service teacher education degree has weaknesses, CPD experiences typically focused on addressing omissions in basic teaching knowledge (GATTI, 2008, 2016).

The CPD facilitators are often people from outside of the school. Pedagogy coordinators from the Municipal Education Offices, lecturers from the university, or other diverse kinds of professionals that perform the role of CPD facilitators. Moreover, other challenges are imposed on CPD in Brazil. Time is one of the biggest issues because teachers have to attend CPD outside of their regular workload, generally during evenings or Saturdays, which generates teacher resistance to CPD participation. Other problems for CPD include the fragile teacher licence degree; the constant change of teachers in the school; the difficulty of finding good facilitators; and the struggle of teachers to implement innovative practices.

In full-time schools (FTS)¹², this scenario is not different. Even though FTS gives more time to CPD, which occurs inside the school with teachers who are dedicated to that school 40 hours per week, the CPD models offered to them are still based on transmission of knowledge. Teacher participation in their own CPD, increasing action research with teachers and discussion

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¹² In Brazil, schools commonly operate only in one block of time (Morning, 7a.m. to 11.30 a.m., Afternoon, 1p.m. to 5.30 p.m., or Evening, 6 p.m. to 10.30 p.m.). The full-time school project intended to extend school time to seven hours or more (BRASIL, 2010). Moreover, it aimed to enlarge the subjects offered in schools, including arts, sports, technology classes and others. This dissertation was developed in one FTS in Minas Gerais. The context description (Chapter 3) details the features of this project and the laws that support its functioning. It is worth highlighting that the national education law intended to increase the number of FTS in the country, from the understanding that this school organization model might improve the quality of education (BRASIL, 1996).

about school-based problems is widely promoted through the literature, yet what has been performed in FTS schools is the same type of activities that can be seen in regular schools (MELO, 2014; ALMEIDA, 2016; SILVA, 2016; WITHERS, 2011).

Despite this situation, good initiatives that showed some results in teachers' change have been developed in some cities and states in the country. Gatti, Barreto and André (2011) revealed that the socialization of teachers' practices in events; awards or money as incentives; and scholarships or sabbatical periods to increase qualifications have presented positive outcomes. However, collaborative CPD was not cited as a good initiative widely used in Brazil, or even as a project in the most part of states and Municipal Education Offices (GATTI; BARRETO; ANDRÉ, 2011). Concerned with this scenario of insufficient CPD and looking for good current CPD practices, the next section describes what initial experiences with collaborative CPD have discovered in Brazil. Moreover, it cites some gaps in the literature, mainly about the field of physical education and teachers' CPD.

2.1.4.1 Collaborative CPD and initial experiences in Brazil

In Brazil, the academy has been concerned with investigations about teachers' CPD and their collective autonomy since the later 1980s, mainly through action research and collaborative research (ANDRÉ, 2010; CUNHA, 2013; PIMENTA, 2005). Additionally, since the 2000s terms including "professional learning community" and "Community of Practice", or others related to collaborative CPD, were identified in Brazil's CPD literature (e.g. IMBERNÓN, 2009). However, the country had not changed CPD practices in schools yet (GATTI; BARRETO; ANDRÉ, 2011).

Over the last 10 years, few studies have been published about collaborative CPD experiences that involved the community concept. In a search using the terms *Comunidade de Prática*, *Comunidade de aprendizagem*, *Comunidade Colaborativa*, *Comunidade investigativa*, and *Comunidade Profissional*¹³ in national or Latin American research databases such as *SCIELO*, *REDALYC* and, *Periódico CAPES*, 13 articles were found that described experiences with collaborative teachers' CPD through PLCs in Brazil.

The field of Mathematics has been producing most of the studies about community of practice (CoP) and teachers' CPD (RODRIGUES; CYRINO, 2017), which are the results of

¹³ Community of practice (CoP), learning community, collaborative community, inquiry community, professional community.

research groups that have been formed by pre-service teachers, in-service teachers, graduate students and university lecturers. This hybrid community was known as borderline communities (CRECCI; FIORENTINI, 2018; FIORENTINI, 2013). Some of these studies discuss the actions of the facilitator in a CoP (CYRINO; BALDINI, 2017), the process of teachers learning in communities (FIORENTINI, 2013), and teachers' identity (CYRINO, 2016; SILVA; OLIVEIRA, 2018).

Studies from other areas that involved partnership between university and schools built CoP that focused on school placement of pre-service teachers (LEITE; FONTOURA, 2018; RINCON; FIORENTINI, 2016), or understanding the communities as a strategy for professional development (ABREU; MOURA, 2013; RAMOS; MANRIQUE, 2015). Others yet debated meaningful teachers' participation in CoP and how this participation enables the teachers' voice (KERSCH; CARNIN, 2017).

In response to the Brazilian necessity of having teachers with teaching licences in higher education working in faraway cities and villages such as in the Amazon region, Teles and Coutinho (2011) revealed the challenges of online CoP in pre-service teacher education. A science community was also formed online in Bahia state. It aimed to reduce the gap between theory and practice in teachers' and pre-service teachers' learning (EL-HANI; GRECA, 2012). The only community formed merely by teachers was a PLC of history teachers in Minas Gerais. There, teachers from the school created one online PLC to support each other and to learn together (FERREIRA; SILVA, 2014).

In 2018, Ximenes-Rocha and Fiorentini (2018) shared their experience in building a borderline PLC with teachers in the Amazon region. Their paper showed how a group of people changed during the years of being a PLC. It showed the strength of the borderline communities (CRECCI; FIORENTINI, 2018; FIORENTINI, 2013) in socially vulnerable areas. Moreover, it indicated the potential for teachers' emancipation and autonomy that this model presents. However, it also affirmed that, despite having the theory about the effectiveness and benefits of communities in CPD, the Brazilian scenario is still challenging and difficult.

In spite of this challenging context, in general, these studies confirmed what was published in other countries. Starting the teachers' professional development and learning through the establishment of PLC is a fertile soil for the improvement of knowledge and the learning of teaching strategies; enhancing the participation of teachers in their own professional development; giving opportunity to teachers' voice; increasing the interaction between preservice teachers and teachers in schools; and enabling the sharing of contextualized experiences. The Brazilian investigations presented here also pointed that, even though the

reality in Brazil is difficult and it might result in a complex participation of teachers involving several factors, the CPD through a different kinds of PLC could change the teachers' identities and the culture in schools.

Nevertheless, the lack of discussion about the conditions for teachers' participation or PLC building is a big concern. As it was demonstrated earlier, the teachers in Brazil struggle with public policies that force them to respond to national or international assessments, even when they experience poor work conditions. The corpus of research discussed here demonstrated that teachers are not stimulated to participate in these PLCs by the municipal or state governments. The PLCs are mainly initiatives from universities that invited teachers to participate. Moreover, although one study has identified the extra class work time in school as a great possibility to develop PLCs (ABREU; MOURA, 2014), others did not describe the structure or the conditions in which teachers enrolled with these communities.

The discussion about teachers' conditions to enrol in PLC also emphasized another issue. Once more in the Brazilian CPD trajectory, teachers have to look for their development in an individualistic way. Without appropriated resources to do it, they split themselves into online discussions in their leisure time, or research groups outside of their workloads. Therefore, it is important to discuss the teachers' CPD in school-based PLC. More than emancipatory and autonomous, as brilliantly pointed out in the Ximenes-Rocha and Fiorentini (2013) research, teachers need to act collectively in important directions: improving their teaching and learning, analysing the socio-political conditions, and fighting for their proper CPD as a right in their career.

In relation to the physical education field, the scenario is even worse. According to Machado et al. (2010) it is known that physical education teachers are seen in a different way. Many times they are not included in pedagogic discussions in schools and are isolated in the gym or other spaces that are exclusive to physical education classes. Alone, they struggle with all the problems that the other teachers have, moreover, they face abandonment by their own school. During their CPD, physical education teachers continue to participate in experiences based on the acquisition of knowledge or those which do not value teachers' expertise, as short-courses, workshops, and seminars (FERREIRA; SANTOS; COSTA, 2015).

Even the CPD experiences that occur in school are imposed and do not offer structure or support for physical education teachers' development. Physical Education teachers participate in CPD activities that do not attend to the necessity of specific knowledge of their field, and instead focusing on general issues that typically are linked with other subjects in school (RICHI; MARIN; SOUZA, 2012). Additionally, although some attempts to work with

physical education professional development through communities have been found in projects at universities (e.g. LUGUETTI et al., 2018), or in the sport coaching area (e.g. BRASIL et al., 2015), research of communities and physical education teachers' CPD were not found in the research database examined.

Analysis in the *Biblioteca Digital Brasileira de Dissertações e Teses* (National Digital Library of Dissertations and Thesis) with the term Comunidade de Prática found 286 studies. When a combination of the terms Comunidade de Prática and Formação de professores (community of practice and professional development) was used, only nine studies investigated this theme, yet none about physical education. Furthermore, the combination of the terms Comunidade and Educação Física (community and physical education) resulted in one study that investigated physical education teachers who worked in schools and participated in a CoP in Sao Paulo (SANCHES NETO, 2014). Although CoP was not the focus of this study, it discovered that, among other findings, participation in a CoP supported teachers who wanted to investigate their own practice and to organize their own knowledge. In this research, the teachers developed their own knowledge based on their daily practice. They were researchers who contrasted educational theories with their own school-based theory. They shared their discoverings with their colleagues and discussed their own pedagogic experiences. The author defended that collaborative teachers' work, whether online or not, presents concrete opportunity for other studies that intend to investigate teachers' professional development and their sharing of practice and learning (SANCHES NETO, 2014).

In conclusion, even though the Brazilian academic field has increased research about CPD, it is still necessary to investigate this development. More than the entire precarious situation that teachers have faced in Brazil, with the increase of national assessments and curriculum implementation, teachers' CPD constantly results in teachers' accountability for the problems in the Brazilian education system. On the one hand, the government has "given" autonomy to teachers through the decentralization of some local decision-making (BRASIL, 1996). On the other hand, education policies have over-loaded teachers with high workloads, low salaries and the intensification of accountability about students' outcomes coupled with an uncritical view about competences and skills to be achieved by students (GATTI, 2008, 2016; GATTI; BARRETO; ANDRÉ, 2011; NUNES; OLIVEIRA, 2017). In addition, this review showed that some good CPD initiatives have been developing in the country regarding PLC, mostly CoP, however, the physical education area is still struggling with research related to teachers' CPD and CoP, and other kinds of PLC.

Analysis in this first part of the literature review chapter, resulted in understanding that there is a body of research that supports the potency of PLC to inform teachers' CPD. However, few studies related PLC with opportunities for a dialogical process that conveys teachers' learning for social change. Additionally, there are different models of PLC, thus, the next section demonstrates the theoretical framework that supports the dissertation's conception of learning, and the CoP as one possibility for PLC that could be a democratic strategy for teachers' CPD.

2.2 SITUATED LEARNING THEORY AND COMMUNITIES OF PRACTICE

Learning is the central idea to discuss the human being development. Many theories about learning were created and followed in the education field (SFARD, 1998) or in physical education (QUENNERSTEDT; MAIVORSDOTTER, 2017; ROVEGNO; DOLLY, 2006). Duncumbe and Armour (2004) explained that these theories also inform teachers' CPD since CPD is clearly based on the notion of how individuals learn. The three paradigms that encompassed the learning process in education research were (a) the behaviorist, (b) the cognitivist and (c) the constructivist.

The first, the behaviorist, is supported by the notion of learning as a result of trial and error experiences. The behaviour of the individual is shaped by external and successive experiences (DUNCUMBE; ARMOUR, 2004; MACDONALD, 2004). It can be done by stimulus that will produce a conditioned reaction or by rewarding and reinforcing the expected response. The conception of learning based on behaviorist ideas has led to directive instructions during physical education teaching or its teachers' CPD experiences (DUNCUMBE; ARMOUR, 2004). The second, the cognitivist view, is concerned with the mind and how individuals assimilate what is presented to them. The process of knowledge and concept acquisition is the focus of this approach (DUNCUMBE; ARMOUR, 2004; MACDONALD, 2004).

The third, the constructivism paradigm, is a theory of learning that has the general principle that comprehension of learning as an active process, whereby learners develop their own knowledge as an ongoing and social process. The concept of constructivism, can be confusing and it seems to cover a wide range of theoretical discussions and empirical research in whole education and in physical education specifically. However, even though this paradigm might support the creation of curriculum or diverse instructional strategies, it should not be seen as equal to a pedagogical theory (ROVEGNO; DOLLY, 2006).

Together, Piaget and Vygotsky are cited as the primary authors to support constructivist ideas. Yet, among other differences, Vygotsky diverges from Piaget due mainly, to the social and cultural characteristics of Vygotsky's learning comprehension (KIRK; MACDONALD, 1998; ROVEGNO; DOLLY, 2006). The work of Piaget is associated with cognitive constructivism and Vygotsky's theory is related to social constructivism, and both do not see the learner as a pure recipient of information. For the former, individuals learn from their daily experiences, yet for the latter, individuals learn from their experiences with other people. Then, Vygotsky considers the interaction between people and with the environment (DUNCOMBE; ARMOUR, 2004).

Although the term constructivism might be seen from either Piaget's or Vygotsky's theories, the body of research that discusses and purposes new learning theories since, have increased (JONASSEN; LAND, 2000; ROVEGNO; DOLLY, 2006). To help education researchers, especially in the mathematics field, to understand this wide range of theories, Sfard (1998) proposed a learning metaphor. She referred to learning as acquisition and learning as participation. Learning as acquisition entails those theories that understand the individual as a container to be filled with entities such as knowledge, concepts, ideas, and contents produced by others (SFARD, 1998). Based on Sfard's study and using the same metaphor in the physical education field, Quennerstedt and Maivorsdotter (2017) pointed out that motor learning theories and cognitive learning theories, even though they have basic differences, present some similarity when understanding learning as acquisition. Furthermore, in the present individual-environment dualism, these theories privilege the individual. In addition, they understand learning as external, an entity to be gained. The student is the recipient or re-constructor of the knowledge and teachers are providers or mediators of the knowing process.

Alternatively, the participation metaphor suggests that learning is ongoing in the context that it occurs. This context is the practice or activity of individuals included in their own culture. "The learner should be viewed as a person interested in participation in certain kinds of activities rather than in accumulating private possessions" and the learning should be understood "as a process of becoming a member of a certain community" (SFARD, 1998, p.6). According to Quennerstedt and Maivorsdotter (2017), different theories are supported by the idea of learning as participation. They see student as a participant, or apprentice of aspects of the practice, discourse or activity. The teacher is the expert participant, one guide in the building of the community. In physical education, some theories can be understood as those which perceive learning as participation: the didactic tradition in France; the sociocultural perspectives found in the research of Bourdieu, Bernstein or post-Vygotskian theories; the pragmatist

framework supported by Dewey's and Schön's ideas; the studies based on complex learning theory; and vastly, the Situated Learning theory (LAVE; WENGER, 1991).

The review of different authors (DUNCUMBE; ARMOUR, 2004; KIRK; MACDONALD, 1998; LAVE, 1988; ROVEGNO; KIRK, 1995; ROVEGNO, 2006), has led this dissertation to Situated Learning theory as the theoretical framework of teachers' learning. First, against the idea of persistent individual dichotomy, this dissertation considers that knowledge is not located in the mind of the individual, being instead, incorporated in the human being as a whole. Second, contrary to the idea of learning as an individual process, this dissertation defends the concept that individuals learn better when they are supported by their peers who constantly challenge their previous knowledge. And third, in opposition of learning acquisition and transmission paradigms, this dissertation is supported by the idea that the nature of the knowing process is to participate in the local, which is situated in and connected with the global social-political issues that surround the local situation. The individual learns better while participating in meaningful practices, developed by the community where this practice takes place. The following sections describe the main characteristics of Situated Learning theory, as well as the features of CoP concepts and the body of research developed in physical education within CoP.

2.2.1 Situated Learning theory

In her primary study, Lave (1988) exposed the weaknesses of cognitive psychologist and anthropologist theories in explaining the daily learning requirements in mathematics projects. Attesting to the functionalist¹⁴ view of these theories, she proposed a shift in understanding about cognition. For Lave (1988), "cognition' observed in everyday practice is distributed - stretched over, not divided among - mind, body, activity and culturally organized settings (which include other actors)" (LAVE, 1988, p. 1). The author understood cognition not as a psychological phenomenon, but instead as a social one, which should be analyzed by social anthropological theories. In addition, she emphasized the importance of understanding the "activity (to propose a term for a distributed form of cognition)" as a different phenomenon in each situation that it takes place (LAVE, 1988, p. 1). Due to this, she supported this initial

¹⁴ She defined the functionalist position, when "society is characterized as a set of macrostructures in place, a *fait accompli* to be internalized by individuals born into it. [...] Cultural transmission, or socialization, is clearly central to achieving such consensus, and is the crucial relation between society and the individual. A duality of the person is inherent in this view" (LAVE, 1988, p. 6, author's emphasis).

discussion about everyday activity in a social anthropological perspective of cognition as a theory of practice. For her "Social practice proponents argue that knowledge-in-practice, constituted in the settings of practice, is the locus of the most powerful knowledgeability of people lived-in world" (LAVE, 1988, p.14).

Later, with Etienne Wenger (LAVE; WENGER, 1991), she deepened the discussion about learning. They did not analyze learning as an isolated process; their intention was to discuss the situated learning process that might occur inside communities of practice. With this work, they highlighted the recent body of research that is against the notion of cognitive, (located in the mind) individual acquisition of knowledge (ROVEGNO, 2006). Situativity theories - as Barab and Duff (2000) called them - supported by anthropological perspectives, view learning as situated in a real context that the person is immersed. These theories focus on the concept of what it means to learn in communities. In addition, these theories are sustained by the belief that the situation might modify the learning behavior, processes or requirements, being against the idea of learning transfer (LAVE, 1988).

Lave and Wenger (1991) were concerned about the conventional notions of "situatedness" that led to understanding that learning is only located in situ or, learning by doing. They explained that situated learning is more than this. To clarify the confusion about the "situatedness" of learning, they showed that there have been naive views about situated learning conditions. These views perceived the situated approach either as a way to be in space and time, or as a social practice only because it involves other people. Otherwise, they confirmed that every activity is situated in and with the world. In other words, situated learning involves the whole person acting in the world. Individual, activity, and social environment are related and mutually constitute themselves (LAVE, 1988; LAVE; WENGER, 1991). Before understanding each one of the terms that composed their theory, it is important to demonstrate the theory's roots where it was generated. The authors explained that Situated Learning theory was originated as a historical-cultural theory that brings together the premises of the situated activity theory, as demonstrated above, and the theories of production and reproduction of the social order. Thus, their discussion about learning is based on Vygotsky's theory, which was explicitly concerned with social issues connected with the learning process (LAVE; WENGER, 1991).

Against the narrow functionalist view about the process of knowledge internalization, Lave and Wenger (1991) exposed different interpretations about Vygotsky's theories, mainly those that address pedagogical issues and the schooling process. For them, the scaffolding or cultural interpretation about Vygotsky's concept of the zone of proximal development

perceived internalization as an individual acquisition process of the given culture. Instead, the authors supported a collectivist or societal interpretation based on contemporary Soviet psychology theories. This interpretation is concerned with social transformation. In this view, the zone of proximal development is neither the distance between the individual's ability to solve a problem alone and when assisted by others (scaffolding interpretation), nor the distance between everyday experiences and scientific knowledge (cultural interpretation). Indeed, based on ideas from Engeström¹⁵ (1987, *apud* LAVE; WENGER, 1991), they pointed out that the zone of proximal development is the distance between individuals' actions and the social activity produced historically and collectively, and generated while solving everyday problems. This learning interpretation takes social practice to the center of the discussion, and it focuses on the sociocultural transformation through daily relations between people who share the same practice. Therefore:

Briefly, a theory of social practice emphasizes the relational interdependency of the agent, and world, activity, meaning, cognition, learning and knowing. [...]. This view also claims that learning, thinking, and knowing are relations among people in activity in, with, and arising from the socially and culturally structure world. (LAVE; WENGER, 1991, p.50-51).

Based on the critical view of social practice, learning is discussed as a situated process of social historical, production, transformation, and people changing. Instead of just situated in practice, learning became an integral part of social practice in the lived world. They used the expression *legitimate peripheral participation* to join all these concepts and to indicate their comprehension about the situated learning that occurs in *community of practice*. The three terms that define learning in this theory are not conceived in isolation, rather, they constitute each other. Legitimate participation is a way of belonging in the community. In its turn, the concept of legitimacy is connected with the notion of peripherality. The latter is a way of being, located in a social world. Thus, peripheral participation does not refer to locations outside the community's border, but refers instead to being in a constant movement of engagement. It is an inclusion movement towards full participation.

As an alternative to such concepts as complete or central participation, the authors adopted full participation because it considers different kinds of relations and movements that occur in a CoP. There should be a constant centripetal movement of the participants, but there is no end-point to reach, nor complete knowledge to achieve. The relations inside the

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¹⁵ ENGESTRÖM, Y. Learning by expanding. Helsinki: Orienta-Konsultit Oy, 1987.

community are complex. Over time, newcomers become old-timers, other old-timers leave the community, some newcomers give up participation and so on. It is not linear; the spiral transformation of the community implies that the participants should be constantly and fully engaged in their actions.

The peripheral position might either empower the participants or disempower them, depending on this participation. This movement, then, involves relations of power, because "when it is enabled, suggests an opening, a way of gaining access to sources for understanding through growing involvement" (LAVE; WENGER, 1991, p. 37). In addition, the peripheral position can be the connection with other communities. Due to the peripherality might occur renovation, questioning, transformation, and (re)production of the community; and it should be seen as legitimate and vital to community life (LAVE; WENGER, 1991).

The person who participates in the community is not seen as an isolated individual, indeed the subject is a person-in-the-world, member of a sociocultural community. Instead, the individual is perceived as a whole, overcoming traditional dichotomies that divide mind and body, abstract and concrete. Therefore, the process of participation also dissolves the dichotomy of acting and thinking; there is an interaction between understanding and experience that is implicated in the process of participation.

Learning is to participate in social communities, to transform this community and to change participants' own identities at the same time. Legitimate peripheral participation involves the knowledgeable skilled person as well as the (re)production of the community. Constantly, the whole person negotiates and renegotiates the meaning of the world. It "implies becoming able to be involved in new activities, to perform new tasks and functions, to master new understandings" (LAVE; WENGER, 1991, p. 53).

In centripetal movement towards full participation, newcomers are included in CoP in the peripheral position and, while engaging they may move to an old-timer status. However, as it has been said, this is not a linear process of learning and development. For example, newcomers can be old-timers in relation to fresh newcomers. In this way, newcomers can also learn from their near-peers in complex relations, where learning traverses in cycles. "These cycles emerge in the contradictions and struggles inherent in social practice and the formation of identities" (LAVE; WENGER, 1991, p. 57). There are conflicts between newcomers - who arrive in the CoP with different perceptions about the world, and the old-timers - who have ways of doing that they have preserved over time. Negotiation between the two generates both the (re)production of the social order and the identity transformation of the people who are immersed in the community, as well as the changing of the community's practice.

As a consequence, newcomers might learn better with their peers and while participate in their tasks. Due to this, the more important role of the old-timer is not to teach the practice of the community. In fact, organizing opportunities to learn and giving access to newcomers to participate in the community is what might increase the learning through a curriculum created by daily practice. Because of this, it is important to develop a decentered view of the master as the person who only teaches, and turn it into structuring of the community as central to the learning process.

Lave and Wenger (1991) used examples of different cases of apprenticeship around the world (midwives in Mexico, tailors in Liberia, quartermasters, butchers and alcoholics in the U.S) to show how learning can be successful or can fail when analyzed with the legitimate peripheral participation concept. These examples revealed that people learn from their participation in daily practice that, slowly, they will consider as theirs. However, their learning is not an informal, work-driven learning. Furthermore, the structure of the learning community is drawn according to the *learning* instead of the *teaching*. The learning curriculum is one of the characteristics of the CoPs. "It is not something that can be considered in isolation, manipulated in arbitrary didactics terms, or analysed apart from the social relations" of the community, otherwise, it is situated in the everyday practice and "viewed from the perspective of learners" (LAVE; WENGER, 1991, p. 97, authors' emphasis).

The learners are practitioners, members of communities that share the same practice, the understanding about this practice, and the meaning of that community. They can contribute to the community in many ways and levels. The communities in their turn, have long trajectories of how to develop the practice that joins these practitioners – newcomers and old-timers. The people learn when they participate in this cultural practice and receive support from their peers and their masters. Their legitimate participation, the constant power relations involved in the negotiation of meanings and the structure of this practice define the possibilities for learning.

It is important to emphasize that, "in contrast with research that stresses the uniform effects of schooling regardless of its location" (LAVE, WENGER, 1991, p. 63), each community has its own trajectory defined by its history, cultural traditions, or social issues that might surround that group. Seen in this way, one community in Brazil for example, cannot be analyzed as the same as in other parts of the world, nor even as in different parts of the same country. Communities can be connected and face similar features, but each one is unique concerning its reality. Thus:

Any given attempt to analyse a form of learning through legitimate peripheral participation must involve analysis of the political and social organization of that form, its historical development, and the effects of both of these on sustained possibilities for learning. The need for such analysis motivates our focus on communities of practice and our insistence that learners must be legitimate peripheral participants in ongoing practice in order for learning identities to be engaged and develop into full participation. (LAVE; WENGER, 1991, p. 64).

CoP, understood as a group of people who are engaged in the daily practice towards learning this practice and (re)produce it, present cycles of reproduction. These cycles depend on each community and its members' trajectories of learning. A midwife can spend most of her childhood and adolescence learning how to be and behave as a midwife. Other communities, especially those linked to some kind of schooling process, could be shorter. Lave and Wenger (1991) gave an example of quartermasters in the U.S. They might spend five or six years in the learning process of entering as a novice, becoming a newcomer quartermaster, and then being ready to work with fresh newcomers.

The CoP is a complex social phenomenon that entails several processes in its developmental cycle. The members' trajectory of learning in CoP involves not only learning the skills of the practice - how to produce and use the artifacts, understanding their meanings and functions - but also talking and behaving as a practitioner in that community. Because of this process, the CoP is a place where people can change their identities while learning to be knowledgeable skilled people (LAVE; WENGER, 1991). Furthermore, the authors suggest that a CoP is "a set of relations among persons, activity, and world, over time and in relation with other tangential and overlapping communities of practice" (LAVE; WENGER, 1991, p. 98). However, as they then explained, this concept would need to be explored more. Looking forward to understanding this idea better, the next section describes the features of the CoP developed by Etienne Wenger in what was known as the second phase of his research (OMIDVAR; KISLOV, 2013).

Before presenting these CoP features, it is also important to highlight that the support of a Situated Learning theory that occurs in CoP is not a naive option. As Wenger (1998, p. 85) affirmed, "[...] asserting as I have that these kinds of communities produce their own practices is not asserting that communities of practice are in any essential way an emancipatory force". CoP might exist for good or for bad reasons. The community might be a place where participants, in a functionalist view, only reproduce the social world conditions instead of questioning and transforming it (LAVE; WENGER, 1991). Even though these communities can hold the key to real transformation by being "a locus of engagement in action, interpersonal

relations, shared knowledge, and negotiation of enterprises" (WENGER, 1998b, p. 85) for achieving an effective contribution to micro change in school, the CoP needs to be supported by CPD theoretical framework that converge with this aim for transformation. Therefore, this present dissertation is supported by the idea of teachers' learning based on Situated Learning theory through CoP concept (LAVE; WENGER, 1991; WENGER, 1998b) as a strategy to seek democratic CPD for micro-social change (COCHRAN-SMITH; LYTLE, 2001; COCHRAN-SMITH, 2009; DAY; SACHS, 2004; FREIRE, 2005a, 2005b; SACHS, 2011, 2016).

2.2.1.1 Community of Practice

After publishing the book with Lave, Wenger expanded the concept of CoP (WENGER, 1998b). He continued to defend learning as social participation where participants are active in their practices and, at the same time, develop their identities while immersed in social communities. Later, Wenger kept working in other CoP studies (WENGER; MCDERMOTT; SNYDER, 2002), yet, even though this present dissertation might use some of these later academic productions to delimitate some core CoP terms, it is important to emphasize that the former concept of legitimate peripheral participation that occurs in CoP (LAVE; WENGER, 1991; WENGER, 1998b) is the theoretical framework that supports this current text.

As Wenger (1998b) pointed out, learning is not a distinct activity in our lives. People are learning all the time; it is part of our lives. Learning is an integral part of our participation in the communities and organizations that we are engaged, such as: family, work, religion, neighborhood and others. What the systematic analysis about CoP brings is the vocabulary to talk about learning in specific communities. Unlike the earlier text, where Lave and Wenger (1991) highlighted that they were not discussing the process of learning that occurs in schools or formal instruction institutions, in this book (WENGER, 1998b), Wenger expanded his focus. He stated that the debate about CoP informs "our daily actions, our policies, and the technical, organizational, and the education systems we design" (WENGER, 1998b, p. 11). Thus, in this present dissertation, CoP is understood as a strategy for teachers' CPD. It is a way to propose and understand how things change and why they change regarding teachers' learning and practice.

Conceiving of CoP in this way does not lead this present text to neglect the importance of the CoP concept. Instead, the CoP concept realizes a range of meanings that need to be explained. In addition, that are linked with the notions of learning as participation that are defended in this current text.

Practice was the first term that Wenger worried to define. For him, over the trajectory of our lifetimes, we learn collectively through interactions with each other and with the world. Through these interactions, we develop our practices. "These practices are thus the property of a kind of community created over time by the sustained pursuit of a shared enterprise. It makes sense, therefore, to call these kinds of communities, *communities of practice*" (WENGER, 1998b, p. 45). The concept of practice is not based on the dichotomized idea of theory far distant from practice, thinking far from doing. Understanding about the human being as a whole person lived-in world (LAVE, 1988; LAVE, WENGER, 1991) leads to understanding of practice as a process of reflection-production, doing-thinking, altogether and embodied. The practice is social as well. We learn with others, producing meanings over historical and social contexts (WENGER, 1998b). What is produced by people can be explicit or tacit, seen as well as not, the said and unsaid, the represented and what is assumed. Ways of doing, artifacts produced, technologies developed, and also, relations, rules, perceptions, ways of understanding the world might be examples of practice in one community. Furthermore:

Even when it produces theory, practice is practice. Things have to be done, relations worked out, processes invented, situations interpreted, artifacts produced, conflicts resolved. We may have different enterprises, which give our practices different characters. Nevertheless, pursuing them always involves the same kind of embodied, delicate, active, social, negotiated, complex process of participation. (WENGER, 1998b, p. 49).

Practice involves what is meaningful for individuals and it is built by the negotiation of meaning through people's lives. Negotiation is not about reaching an agreement exclusively through language. In fact, it is to interact with others as a gradual achievement. The meaning that individuals produce in their communities are products of historical and dynamic negotiation processes. Throughout their lives, individuals experiment with participation in different communities and produce different artifacts inside them. Immersed in the process of living and experimenting, people are negotiating and defining at the same time, what is meaningful for them or not (WENGER, 1998b).

Learning a practice is to participate and to participate is, in its turn, to live in the world by being a member of a social community engaging with it. It is a complex process of being part of something. It involves the person "doing, talking, thinking, feeling and belonging" (WENGER, 1998b, p. 56). In addition, learning a practice also involves reifying this practice, whereby our experiences produce "things". It gives form to our experiences, shaping it. It can be both product and process, such as "making, designing, representing, naming, encoding, and

describing, as well as perceiving, interpreting, using, reusing, decoding and recasting" (WENGER, 1998b, p. 59). Participation and reification act as a pair; they are distinct and complementary at the same time. Furthermore, the practice of one community encompasses people who are engaged in a common enterprise, contribute to the production of this practice, and negotiate the meaning contained within it.

Teachers are professionals who have been developing their practice in schools, universities, or informal environments. Teachers have a recognized knowledge base, an ethical practice, and they share common values built along the history of the profession (DAY, 1999; SACHS, 2016). On the one hand, like teachers in other fields, physical education teachers are included in this group of practitioners - thus they share the same features; but, on the other hand, they differ from it because of the specific characteristics of their practice.

In Brazilian schools specifically, physical education teachers develop a body of knowledge and face challenges regarding its practice. By being regularly overlooked as subjects, physical education teachers act in isolation, such as in the school gym. They work under the dichotomous notion of human beings (Mind/Body), and without pedagogic support to improve their practice (ARMOUR; YELLING, 2007; MACHADO et al., 2010). They might not be organized themselves in a CoP, but they are people who develop their practice as professionals.

From the notion of practice developed here, it is easier to define a community of practice by understanding what might be changed to develop a group of physical education teachers into a community of practice. What are the features that identify and differentiate a CoP from a group of people who work together? Wenger affirmed that he would not discuss any just kind of community, nor practice as training for something. Different from culture or activity in general, a community of practice is a specific kind of a community where a group of people mutual engages in a joint enterprise, sharing a common repertoire.

The first dimension of practice that defines a CoP is mutual engagement. CoP only exists because each of the members are engaged in their practice. Engagement is what defines a participant who belongs to a CoP. Dedication to belonging in a CoP requires participants to be engaged in whatever is meaningful for them. Maintaining the CoP requires engagement by the members, and each one of them might contribute in different ways. People can have different purposes in participating in the community, but they all are engaged in building that practice. This mutual engagement among the members builds relationships that are not always peaceful. Indeed, even if conflicting, these relationships give support to members; they learn to help each other while building their community.

The second dimension of practice that constitutes the CoP is joint enterprise. The enterprise is what the participants decide to commit in their community. They discover it by negotiating what is meaningful for them during their daily practice. It is not an agreement, moreover, it is communally and constantly negotiated. However, people "must find a way to do that together [...]. Their understanding of their enterprise and its effects in their lives need not be uniform for it to be a collective product" (WENGER, 1998b, p. 79). The members produce a practice to deal with what they decide is their enterprise. Even though external demands, for example work structures or obligations, might shape the conditions of a community, what will make the group a real CoP is what and how the participants negotiate their common enterprise, their domain of interest.

A shared repertoire is the third feature of practice as a community. The repertoire is everything that the community produces, from both members' participation and reification processes. Discourse, membership, and identities are the repertoire of the CoP. As Lave and Wenger (1991) demonstrated, people learn how to be members of a CoP while they participate in it, while producing and transforming their practice. Participants negotiate this repertoire along the trajectory of their community and they share this repertoire. They know what the CoP is about, and they create ways of doing and behaving specifically for that community. They share the notion of in what they are engaged.

There may be different forms of CoP; they can be big or small, long- or short-lived, homogenous or heterogeneous and so on. However, Wenger, McDermott and Snyder (2002, p. 27, authors' emphasis) defined three principles that are the basic structure of their CoP model: "[...] a *domain* of knowledge, which defines a set of issues; a *community* of people who care about this domain; and the shared *practice*". The domain refers to what the community is about, the community in its turn is how people interact, and the practice is the knowledge that the community develops, shares and maintains. The domain also defines the identity of the community. It is the expertise of the community. It is what brings the members together and guide their learning, being a body of knowledge that constitutes the practice of the community. Members of the community have to recognize the domain as their own mandate, instead of a top-down mandate. It is something that people are willing to engage, becoming a joint enterprise of the CoP (WENGER; MCDERMOTT; SNYDER, 2002; WENGER-TRAINER; WENGER-TRAINER, 2015).

The community is not the same as a neighborhood. The community concept, included in the idea of CoP, is "a group of people who interact, learn together, build relationships, and in the process develop a sense of belonging and mutual commitment" (WENGER;

MCDERMOTT; SNYDER, 2002, p. 34). In the community, people interact, share an understanding about the community's domain, develop mutual respect and trust, and share histories of learning of that community. The community can be encouraged or stimulated, but participation in this community cannot be forced. People should develop mutual engagement to build their community (WENGER; MCDERMOTT; SNYDER, 2002; WENGERTRAINER; WENGER-TRAINER, 2015).

Regarding the practice, the authors (WENGER; MCDERMOTT; SNYDER, 2002) affirmed what Wenger (1998b) already had discussed in his previous work. Practice is a repertoire of resources produced and shared by the community. It entails the historical production of that community. It involves the past as well as the future built by the transformation that the negotiation between newcomers and old-timers yields. It can be tacit or explicit, but always denotes routines, ways of doing things in a specific domain (WENGER, MCDERMOTT; SNYDER, 2002).

The practice can also define the boundaries of and connections to the community. The boundary of the community might be reified by explicit markers of membership. For example, teachers' degrees or other titles could identity who is part of that community and who is not included. Furthermore, completion of a physical education degree is not enough to be part of the community, there is the necessity of participation, being engaged in that practice. People might participate in several communities at the same time, and frequently what is learned through participation in one community influences others. Therefore, practice is also a connection. Members from one community, for example physical education teachers from one school, could maintain relationships with other physical education teachers in the city, or be part of other teachers' communities (WENGER, 1998b).

The boundaries are the discontinuities of the community, which define who is outside and, at the same time, maintain participants inside their CoP. However, the CoP might generate a risk to the members, they may be isolated in their practice. Alternatively, the peripheries of the COPs are their continuities. They are windows to open the community to new members as well as to build connections with other communities. The periphery is a way to engage in the local and to participate in the global (WENGER, 1998b).

During this trajectory of learning-participation, communities evolve over time. Lave and Wenger (1991), through their first anthropological studies, noticed that CoP have developmental cycles. Following this, Wenger (1998a) initiated the idea of stages of community development. He called these stages potential, coalescing, active, dispersed and memorable as it is outlined in figure 1. According to him, the CoP might move through these various stages.

These stages differ from each other depending on members' interaction and how these members value the community.

Stages of Development Dispersed Active Members no longer Members engage engage very Coalescing in developing a intensely, but the Members come practice community is still together and alive as a force and a recognize their Memorable Potential center of knowledge People face potential The community is similar no longer central, but people still situations remember it as a without the **Typical Activites** significant part of benefit of a shared practice Engaging in joint their identities activites, creating **Exploring** artifacts, adapting to changing connectedness, Telling stories, preserving defining joint circumstances. Staying in touch, Finding each artifacts. renewing interest, communicating, other, enterprise. discovering negotiating commitment, and holding reunions, collecting memorabilia commonalities community relationships calling for advice time

Figure 1 - Stages of development adapted from Wenger (1998a).

Source: Wenger (1998a).

Later, observing CoPs, Wenger, Mcdermott and Snyder (2002) summarized and developed the five stages that, in general, might be seen in community development. Since CoPs are different depending on their historical and social lives the stages of development are not fixed and standardized. Instead, they can be different in each community. In addition, the time and energy spent in each stage can vary as well. Thus, the stages outlined in figure 2, are only an idea of how CoP could develop over time.

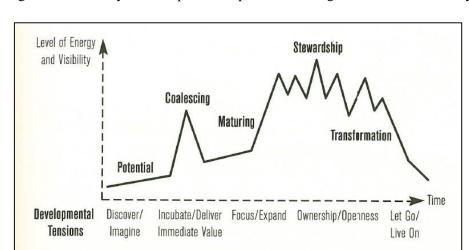


Figure 2 - Stages of community's development adapted from Wenger, McDermott and Snyder (2002).

Source: Wenger, McDermott and Snyder (2002).

The first stage occurs when people, who are already part of an extant social network, match similarities between their practices. The potential participants begin to feel connected by the common ground discovered among them. In this phase, in general, the energy of the community leads participants to discover, "that other people face similar problems, share a passion for the same topics, have data, tools, and approaches they can contribute, and have valuable insights they can learn from each other" (WENGER, MCDERMOTT; SNYDER, 2002, p. 71). In the potential stage, will be found the scope of the community's domain, as well as people who are willing to engage and interested in attending to their practice needs. It is not important to find a final format, rather, it is essential to find a catalyst that might unit these people around a domain of interest. In its turn, this domain can also change along with the community's development. The participants might redefine the domain towards finding what is meaningful for them.

Identifying a leader for this potential community is an important feature of this stage, however, members' roles can vary from community to community. The CoP that already has a long existing trajectory, such as those studied by Lave and Wenger (1991), present well-defined roles of old-timers and newcomers. Alternatively, the CoP that is in the potential stage, has to find its leader. The leader is a member of the community who has relations with a wide range of the members and who is interested in developing that community (WENGER; MCDERMOTT; SNYDER, 2002).

The coalescing phase occurs when people come together, trust in each other, and find value in participating in that community. Coalescing takes time because strong relationships, where people can support and share personal interests, are difficult to build. Thus, the coalescing stage has a large expenditure of energy, but later it might fall off. Afterwards, recognizing their common ground and being excited in developing their practice, participants need to decide if it is meaningful for them and if they really value this CoP. Therefore:

Building trust, exploring the domain, and discovering the kind of ideas, methods, and mutual support that are genuinely helpful take time. Most of all, community members need to develop the habit of consulting each other for help. [...]. But usually they need to first understand each other's work, dilemmas, and way of thinking or approaching a problem before they can provide really useful advice. Getting to this stage involves sharing, thinking about, and applying small hints and tips as they get to know and understand each other. (WENGER; MCDERMOTT; SNYDER, 2002, p. 84).

The end of the coalescing stage initiates an active, rich and complex new phase in the community that is divided into three stages: maturing, stewardship and transformation. Different challenges, the arrival of new people, the shift of community direction, and other struggles in the daily routines of the community make this new phase develop in cycles of "ups and downs". The first stage of this new phase is the maturing stage. It is where the community might better define its focus, role and boundaries. People develop an intimacy between each other that leads them to know themselves and the community. The community develops as a whole, the participants find a domain, and the true members of the community structure its practice (WENGER; MCDERMOTT; SNYDER, 2002).

The stewardship stage presents the challenge of sustaining the community. The participants have to maintain their energy and focus on the community's domain, keep their practice and stimulate engagement by the community. However, this phase presents contradictions to community members. They have to keep developing and reinforcing their practice, while they are open to new ideas and members. Thus, they have to manage this tension to evolve (WENGER; MCDERMOTT; SNYDER, 2002).

As Lave and Wenger (1991) pointed out, the tensions between old-timers and newcomers will never be totally solved, and these tensions are important to the community's transformation. During the negotiation of meaning, the community can both reproduce and change its practice. The last stage in the community's development is transformation. However, Wenger, Mcdermott and Snyder (2002) present a different view about the end and possible restart of the CoP. For them, the transformation phase might weaken the community, losing members and energy. Alternatively, it might cause the complete death of the community, where members lose their sense of shared practice. Other consequences yet occur when the transformation phase might lead communities to divide themselves, join other communities or become institutionalized. The possibility of the community's death can also remind members that they need to engage in their practice again. It might alert them to the importance of their participation to maintaining the community. "Indeed, deciding whether the community is truly dying or is simply in need of rejuvenation is always a judgment call" that should be made by the participants (WENGER; MCDERMOTT; SNYDER, 2002, p. 111).

As the first part of this chapter affirmed, it is known that other kinds of professional learning communities have been used to inform teachers' CPD (e.g. BOLAM et al. 2005; GORE et al. 2017; GROSSMAN; WINEBURG; WOOLWORTH, 2001). However, there has been a strong body of research in the international physical education field that is dedicated to investigating teachers' CPD through Situated Learning theory and CoP concepts, as well as its

stages of development, or others issues related to teachers' CPD. The next section demonstrates the main results of these studies and the gaps that might inform this current dissertation.

2.2.1.2 Community of Practice and Physical Education

The CoP research started to appear in the physical education field by the early 2000s. These studies might have been stimulated firstly, by research investment in learning as participation, through several new learning theories (SFARD, 1998). Secondly, the education field had discovered the value of working with PLC as a strategy for teachers' CPD in place of individual teachers' training (BOLAM; MCMAHON, 2004; HARGREAVES; O'CONNOR, 2017; TOOLE; LOUIS, 2002).

In former studies of physical education CPD, researchers identified that teachers placed more value in informal collegial learning during their daily routine. PLC or networks seemed to overcome barriers that always exist in teachers' professional development, such as time, location, and cost (ARMOUR; YELLING, 2007). Moreover, the collaborative professional learning through CoP based on Situated Learning theory began to appear as a possibility in physical education CPD by addressing different kinds of knowledge in physical education generated through school-based inquiry practice (ARMOUR; YELLING, 2004).

In one of the primary reviews about this issue, O'Sullivan (2007) discussed the benefits of working with CoP as strategy to teachers' CPD. For her, these communities are not easily created, but once up and running, they can improve teachers' willingness to reconsider their practice and reflect about students' experience. Additionally, CoP could develop teachers' commitment with the profession and refine the teaching role. In the same report, she adapted Wenger's (1998a) stages of community development to physical education teachers' CoP (Table 1). She pointed out that the life-cycle of the community is linked to the value that the teachers recognize in it. "Teachers cannot do this work alone but, once created, teachers must have increased ownership and leadership of these structures as their own leadership capacities develop and as their image of themselves as participants of such a community develops" (O'SULLIVAN, 2007, p. 11).

Although these stages have already been described in detail by Wenger and his colleagues (WENGER, 1998a; WENGER; MCDERMOTT; SNYDER, 2002) O'Sullivan (2007) applied these stages to physical education CoPs, and added that the challenge for CoP is to understand how to facilitate teachers' learning within each stage. There are tensions in doing that, but she elected some strategies that could help, such as: encouraging legitimate

participation by the members; negotiating strategic context by respecting and valuing teachers' knowledge; counting on organization support; and providing guidance and resources needed for teachers' support (O'SULLIVAN, 2007).

Table 1 - Phases of Physical Education teachers' CoP development adapted from O'Sullivan (2007).

PHASES	FEATURES
Potential	Assist physical education teachers to find each other and discover their commonalities.
Coalescing	Explore connectedness, defining joint enterprise and negotiating how they will proceed with action.
Active	Engaging activities, creating resources or other artefacts, developing commitment to task.
Dispersed	Staying in touch, calling for advice, communicating.
Memorable	No longer central but remembered as a significant part of their identities.

Source: O'Sullivan (2007).

Following that, several studies have been investigating these tensions in physical education teachers' CoPs. Upon review of these studies through the EBSCO Host database, 17 studies were found that discussed physical education CoP as a strategy for teachers' CPD. To reach this result, the search of full papers available online and published in peer review journals, combined the terms "Physical Education", "Teachers" and "Community(ies) of Practice". Firstly, 133 investigations were found, then duplicates papers were removed from the results. Secondly, the remaining 48 abstracts were read and studies were excluded that: developed CoP with physical education students; pre-service physical education teachers; physical education teacher educators (PETE) and those that developed CoP off-site the school or investigated CoP concomitantly with other kinds of CPD activities.

It is not the intention here to extensively discuss every study, but to give a broad overview about the CoP findings in the physical education field. In Table 2, these studies were organized chronologically within three categories: facilitation process, participants, and structure of the community. This is a didactic classification and it does not mean that one study could not examine more than one issue. However, it highlights the main results that help to support the present dissertation and indicate some gaps in the literature.

The studies that investigated the facilitation process in physical education CoP underlined the importance of building strong relationships among the participants. Yet, to achieve this, prior issues should be addressed, such as trust, power, and teachers' vulnerability (PATTON et al., 2005). These studies also pointed out the importance of understanding teachers as active learners in the center of their professional development. CoP gave opportunities to

lead a facilitation process where the teachers' needs were addressed. Instead of a top-down relation between facilitators or mentors and teachers, the members experienced a balanced relationship. Every member was learning during their legitimate participation in communities (HUNUK, 2017; PATTON et al., 2005).

Table 2 - Physical education and Community of Practice studies.

FACILITATION PROCESS					
PATTON et al.	2005	Navigating the Mentoring Process in a Research-Based			
DATE OF THE PARTY OF THE	2012	Teacher Development Project: A Situated Learning Perspective			
PATTON; PARKER; PRATT	2013				
		Without Telling. Tweet Me, Message Me, Like Me: Using Social Media to			
GOODYEAR; CASEY; KIRK	2014	Facilitate Pedagogical Change within an Emerging Community			
GOOD TEAM, CABLA, KIKK	2014	of Practice			
HUNUK	2017				
		Coordinator to Facilitator			
GARCÍA-MONGE; GONZÁLEZ-	2018	1 1			
CALVO; BORES-GARCÍA		Community of Practice for Analysing Physical Education			
GOODYEAR; PARKER; CASEY	2019	Social Media and Teacher Professional Learning Communities			
		PARTICIPANTS			
DEGLAU; O'SULLIVAN	2006	The Effects of a Long-Term Professional Development			
		Program on the Beliefs and Practices of Experienced Teachers			
DICHARDS TEMPLIN	2011	The Influence of a State Mandated Induction Assistance			
RICHARDS; TEMPLIN	2011	Program on the Socialization of a Beginning Physical Education Teacher			
HUNUK; INCE; TANNEHILL	2013				
HONOR, INCE, TANNEHILL	2013	through a Community of Practice: Impact on Student Learning			
		'I took this picture because': Accessing Teachers' Depictions			
PARKER; PATTON; SINCLAIR	2015				
		Mapping physical education teachers' professional learning			
YOON; ARMOUR	2017				
		South Korea.			
HUNUK; TANNEHILL; INCE	2019	,			
		Professional Learning Community			
		oP's STRUCTURE			
PARKER et al.	2010	From Committee to Community: The Development and			
		Maintenance of a Community of Practice. "It Is a Case of Changing Your Thought Processes, the Way			
ATENCIO; JESS; DEWAR	2012	You Actually Teach": Implementing a Complex Professional			
ATLIVEIO, JESS, DEWAK	2012	Learning Agenda in Scottish Physical Education			
PARKER; PATTON; TANNEHILL	2012				
,		Professional Development in Irish Physical Education			
		Innovation with Change: Developing a Community of Practice			
GOODYEAR; CASEY	2015	to Help Teachers Move Beyond the "Honeymoon" of			
		Pedagogical Renovation			
TANNELIII I . MACDUATI	2017	Teacher Empowerment through Engagement in a Learning			
TANNEHILL; MACPHAIL	2017	Community in Ireland: Working across Disadvantaged Schools.			
C A (1 2		SCHOOLS.			

Source: Author's source.

There are some recognized strategies in the facilitation process. Patton, Parker and Pratt (2013) summarized this as, learning as doing, learning as trying and learning as sharing. These

categories emphasized the importance of (a) providing structure for the CoP, creating spaces for active and social learning; (b) giving opportunity for teachers' discussion and critical reflection, interjecting when opportune; and (c) encouraging teachers to take risks with new ideas and share their work. The facilitators, as teachers, are life-long learners, thus they should be supported while learning facilitation strategies (HUNUK, 2017).

Social media have appeared as a way to support teachers in their CoP. It can act as a "location" external to the CoP, offering possibilities for the facilitator to be "close" to teachers during their learning (GOODYEAR; CASEY; KIRK, 2014). The investigations also highlighted that even though social media could act as a medium for CPD, there are tensions in participating in a virtual CoP, involving personal and relational factors (GARCÍA-MONGE; GONZÁLEZ-CALVO; BORES-GARCÍA, 2018). More studies are needed to understand how to support teachers' learning and to address their needs in a digital space (GOODYEAR; PARKER; CASEY, 2019).

The second group of studies investigated the CoP and its influence on participants. It was discovered that participating in CoP can meaningfully support early career teachers, as opposed to formal inductions programs (RICHARDS; TEMPLIN, 2011). In CoP, teachers changed their identity while they learned about physical education. More than improving their practice, they changed their beliefs about their profession responsibilities as physical education teachers (DEGLAU; O'SULLIVAN, 2006). Similarly, using participatory visual methods to assess teachers' depiction of their own changing in CoP, Parker, Patton and Sinclair (2015) discovered that teachers change their identity and teaching practice. More than that, through the process of reflecting based on visual methods, they were able to identify their change, the nature of this change and its reflection on students' learning.

Teachers also changed their teaching pedagogies, behaviours (YOON; ARMOUR, 2017), and physical education content knowledge (HUNUK; INCE; TANNEHILL, 2013). Although the results are still in the early stages, studies observed that this learning could impact pupils' learning and behavior (YOON; ARMOUR, 2017; HUNUK; INCE; TANNEHILL, 2013). However, it also highlighted that pupils' learning is related to other factors that include the school context and education culture of the country (YOON; ARMOUR, 2017), which makes the direct relation between teachers' learning and pupils' learning still weak. Hunuk, Tannehill and Ince (2019) examined teachers' interaction while they transformed from a group of people to a newly-developed community. They noticed that in this transition the teachers' engagement was an important factor in the community's development. They were, "willing to share their knowledge and experiences for the benefit of the entire community" (HUNUK;

TANNEHILL; INCE, 2019, p. 314). The facilitator, who in the beginning talked more and gave directions, later balanced his participation with that of the other teachers.

The third category included studies that investigated the structure of CoPs, the main features, their purposes, and how they could work. Parker et al. (2010) suggested that to create and maintain a physical education CoP, it is necessary to have a catalyst to start, a goal to achieve, somebody to support the teachers, to build strong relationships among the participants, and realization of empowerment. Additionally, Parker, Patton and Tannehill (2012) confirmed some features of a group of people in contrast with an established CoP. In general, CoPs facilitate sharing ideas, empowering teachers, and improving students' learning. Some factors can be barriers to an established CoP. Some examples are: time, an ineffective learning environment, the policy adopted by the district, the low status of physical education, and the context of schools and teaching (PARKER; PATTON; TANNEHILL, 2012).

Atencion, Jess and Dewar (2012) discovered that in "turbulent" situations, such as the learning of pedagogical innovations, the CoP can emerge and be sustainable. Similarly, Goodyear and Casey (2015) pointed out that a CoP can be fostered to sustain the pedagogical innovations that lead to change. These authors determined that a CoP can be a strategy for teachers' CPD. The presence of a facilitator that proposes dialogues and analyzes the situation with the community, and the negotiation inside the community are important factors for the beginning of a CoP.

Additionally, Tannehill and MacPhail (2017) demonstrated that a CoP can provide support to teachers that work in disadvantage schools. This support came from the relation of trust built between the participants, from the increasing of their capacity-building, and when the teachers' needs were addressed. In addition, the teachers' development was strengthened when the teachers felt that they have been heard, and ultimately, when the teachers arise in their ownership in the CoP.

The teachers' empowerment was one of the most interesting findings of this study. This study highlighted that teachers achieved recognition and respect, which gave status to their profession. The concept of empowerment was linked with teachers' competency and responsibility for their own growth. Teachers increased their autonomy in teaching and learning, self-efficacy, their focus on students and they improved their capacity of examining their own teaching practice (TANNEHILL; MACPHAIL, 2017). Other studies also connected teachers' CPD through CoP and teachers' empowerment. Teachers felt empowered when they perceived that their work was influencing the context (ATENCIO; JESS; DEWAR, 2012), when there was peer acknowledgement and teachers' confidence to pursue capacity building

(PARKER et al. 2010), and finally when they were able to identity their learning needs and solve their own problems (PARKER; PATTON; TANNEHILL, 2012).

Even though "Community of Practice" has been a current theme in the physical education research area, the studies that deeply investigate the fostering of the CoP as a strategy to teachers' CPD are still deficient, when it is compared with the enormous tensions and challenges involved. Generally, the studies investigated what occurred in the emergent CoPs and how they might have supported teachers' development. Within this body of research, a small number of studies focus on the process of fostering a CoP, the tensions involved within it, and the influence of the school and district environment in CoP development.

The information identified in this literature review opened an avenue to investigate the fostering of a CoP in a socially vulnerable area from within, recording a "documentary film" instead of taking a final "picture" (PATTON, 2002). In addition, it is important to look at the Brazilian context that still has been struggling with CPD at a decontextualized, off-site school, realized by short-courses and delivered in a top-down manner (GATTI, 2008, 2016; GATTI,; BARRETO; ANDRÉ, 2011). Studies about physical education teachers and their CPD through the CoP development in the Brazilian context are still missing.

In conclusion, this literature review demonstrated that the CoP concept tied to a Situated Learning theory (LAVE; WENGER; WENGER, 1998b) of learning might be a strategy to inform physical education teachers' CPD (PARKER et al., 2010.; PARKER; PATTON; TANNEHILL, 2012; TANNEHILL; MACPHAIL, 2017) that intends to be democratic toward social change (COCHRAN-SMITH; LYTLE, 2001; COCHRAN-SMITH, 2009; DAY; SACHS, 2004; FREIRE, 2005a, 2005b; SACHS, 2011, 2016). However, several doubts still remain about: How to create these spaces for professional development in order to teachers' intervention on their micro context as a possibility for social change?; What is the role of the facilitator who seeks to create these democratic spaces?; and What are the tensions and challenges in fostering a CoP to micro-social transformation? In addition, there is still doubt about how the professional development of physical education teachers could be developed through a CoP in the Brazilian socially vulnerable context.

In spite of all challenges identified - themes for possible futures studies - and, far from wishing to respond to all these gaps completely, this dissertation intends to explore the CPD of physical education teachers in one full-time Brazilian school. Two research questions guided the present dissertation: (a) How do physical education teachers develop as professionals in a full-time school in Brazil?; (b) How can a PLC, or a CoP, support physical education teacher's CPD in a full-time school in Brazil? The next chapter addresses the research path used to

investigate these research questions, especially the research context, participants, and methods adopted during this trajectory.

3 METHODOLOGY

In order to respond the research questions proposed, this study adopted qualitative methodologies. In general, qualitative research assumes the complexity and multiple perspectives that human and social phenomenon present. It uses different methodological traditions to understand in depth the phenomenon selected for the investigation (CRESWELL, 1998). Commonly, the studies dedicate themselves in researching things in their natural settings, describing the routines, problematic moments, and its meaning in the participants' lives (DENZIN; LINCOLN, 2000). According to Denzin and Lincoln (2000, p. 3):

Qualitative research is a situated activity that locates the observer in the world. It consists of a set of interpretative, material practices that make the world visible. These practices transform the world. They turn the world into a series of representations, including field notes, interviews, conversations, photographs, recordings, and memos to the self.

The methods included in qualitative research are those that study in depth and detail, issues found in fieldwork (DENZIN; LINCOLN, 2000; PATTON, 2002). Patton (2002) added that fieldwork is the main activity of qualitative inquiry. By going into the field, the researcher has direct contact with the people in their environment to "personally understand[s] the realities and minutiae of daily life" (PATTON, 2002, p. 48).

Thus, in qualitative studies, the understandings and theories come mainly from fieldwork. The researchers try to understand what people in that context think, how they act, and what they feel (PATTON, 2002). Patton (2002) emphasized that "one of the strengths of qualitative methods is the inductive, naturalistic inquiry strategy of approaching a setting without predetermined hypotheses" (PATTON, 2002, p. 129). The inductive and naturalistic inquiry is based on the idea that the research would be discovery-oriented, taking place in a real world. This kind of research is open to what could emerge from the fieldwork, and is flexible in its design. In addition, studies that intend to be an inductive and naturalist inquiry select a purposeful sampling that, instead of offering a generalization of the results, emphasizes the indepth understanding of information-rich cases (PATTON, 2002).

3.1 RESEARCH METHODS

By doing this research, the qualitative research aspects presented before were pursued through two different phases of the project. The first, an ethnographic phase, when the

fieldwork was investigated, studying in-depth what was happening in the context of the teachers' CPD. The second, an action research phase, when some interventions were proposed with the teachers.

3.1.1 Ethnographic phase

When I began this project, there was an intention of studying the CPD of physical education teachers with the focus on professional learning communities (PLC). However, it was understood that I could not arrive at the school and impose teachers' participation in this project. It was necessary to understand the context investigated, the people immersed in that context and their practice. Because of this, I conducted a first research phase based on ethnographic methods.

Ethnography is a method that has a long trajectory in qualitative studies. It conveys a wide range of perspectives based on different theoretical framework traditions (ATKINSON, 2016; LECOMPTE; PREISSLE, 1993; O'REILLY, 2012). These different perspectives have developed since the beginning of the 1900s with the work of Bronislaw Malinowski (O'REILLY, 2012), Franz Boas and, later with Clifford Geertz (PATTON, 2002). Currently, new ethnography conceptions have been used in qualitative research, such as institutional ethnographies, autoethnographies, visual ethnographies and others (ATKINSON, 2016).

In the educational field, ethnography has been used with several focuses, scopes, and methods. Commonly, ethnography studies describe educational settings and context, providing rich descriptions about this, along with the beliefs of the participants in those settings (LECOMPTE; PREISSLE, 1993). Furthermore, ethnographies study "problems and processes in education; substantively, it represents an emergent interdisciplinary fusion because it has been practiced by researchers from different traditions" (LECOMPTE; PREISSLE, 1993, p. 9). This present research was based on the ethnography concept as described by O'Reilly (2012, p. 11):

Ethnography is a practice that: evolves in design as the study progresses; involves direct and sustained contact with human beings, in the context of their daily lives, over a prolonged period of time; draws on a family of methods, usually including participant observation and conversation; respects the complexity of the social world; and therefore tells rich, sensitive and credible stories.

Understanding ethnography as a practice opens an opportunity to understand the social lives of people immersed in a group or a community while they develop their daily lives. It involves recognizing people as knowledgeable individuals, who deserve to have their perspectives, thoughts, and feelings empirically researched, as well as their 'ways of doing' closely understood (O'REILLY, 2012). O'Reilly (2012) emphasized that it is important to study people's practice without, "relying solely on the views of agents. Ethnography that pays attention to both wider structures and the thoughts and feelings of agents, within the context of action, is thus an ideal approach to research practice (O'REILLY, 2012, p.10).

"Ethnography involves researching something closely, over time, in its natural setting, drawing on participation and observation, as well as other data collection techniques" (O'REILLY, 2012, p. 23). Atkinson (2016) contributed that interviews, informal conversations, description of interactions, and artifacts can be recorded. Everything that the researcher feels, hears, sees and reads is important to the first moments of the research, when one does not understand what looking specifically at the fieldwork. However, one of the main characteristics of ethnography is the participant observation within the fieldwork (O'REILLY, 2012).

In the first phase I was a participant observer, which required me to gain access to the teachers' lives and spend time with them. Although at the beginning I did not want to intimidate the teachers with my presence, I knew that the amount of time spent with them would allow me to better understand their reality. Then, I used to spend three or four days a week in the school setting, over different hours of the day, observing different routines. As highlighted by O'Reilly (2012), in ethnography researchers build relationships with the participants. The time I spent in school contributed to building trust and understanding between us. Though, being a participant observer always brings the discomfort of being a stranger trying to participate in others' reality and learning while doing the researcher's work (O'REILLY, 2012). Additionally, O'Reilly (2012, p. 97) affirmed that:

Arguably, the objective part of participant observation is the observation part. If you are simply being there, hanging around, taking part, you are no more than a participant (as we all are in our daily lives); but as a participant observer, you are someone who is observing as well as taking part. (author's emphasis).

In this sense, I desired to learn deeply the teachers' reality and so I also conducted interviews with teachers and informal interviews with the previous and current Principal, Pedagogical Coordinators, and also staff from the Municipal Educational Office. I talked with other teachers in the school, attending their meetings, celebrations, and Saturday activities. I

took pictures of the school, the teachers' activities, and the school's neighborhood. I helped the physical education teachers to organize and clean their sports equipment. We also had personal contact; they gave me rides in their cars and sometimes we went out to have a beer. I have even participated in one teacher's family party. During this first phase of the research, I was immersed in the teachers' daily practice.

Patton (2002) argued that researcher participation in the field can vary in different ways. First, the extent to which the researcher participates in the setting can range from non-participant to full-participation. In this present study, it was understood that my participation increased while I lived in the teachers' daily work experience. Second, the degree of collaboration can also differ in research. While in the ethnographic phase I was the solo participant observer, in the action research phase the teachers started to collaborate with the research as well. Third, Patton (2002) highlighted that the time of immersion in fieldwork can also vary. In anthropological studies for example, research can last years, while in other investigations it could be shorter. The author concluded that the duration of the observation would depend on the time and resources available to carry out the research (PATTON, 2002). In this present research, 11 months were spent in data collection. During the first two months I was exclusively a participant observer. Subsequently, I maintained this role, but I also started to intervene with the teachers in their reality, engaging in the action research phase.

3.1.2 Action research phase

The action research phase aimed at intervening with the teachers in their reality, reflecting and transforming it. In general, this type of research blurs the border between research and action; it aims at integrating theory and practice. Action research implies the fundamental idea of an inquiry done by or with the people, rather to or on them (HERR; ANDERSON, 2005).

It is known that there are plenty of action research approaches. Since Kurt Lewin developed his theory about action research in 1940, such studies have been evolving based on different conceptions of methodology, epistemology, and ideology (HERR; ANDERSON, 2005; ROSSI; TAN, 2012; TINNING, 1992). In this present dissertation, we grounded our investigation in a critical notion about educational action research. In this sense, action research consists of a project that includes strategic actions to improve a practice, through a spiral cycle of planning-acting-observing-reflecting, involving those responsible for the practice. It engages changes in individuals, group practices, and in understanding about their practices, and about the situation that constitutes the group's practice. The subjects of the action research participate

in and collaborate between themselves during the cyclical process of the transformation and improvement in their situation (CARR; KEMMIS, 2004). In summarizing these features, Carr and Kemmis (2004) affirmed that there are three main requirements to research considered action research: (a) it is concerned with the systematic investigation of a social or educational practice; (b) it is participatory and collaborative; and (c) it employs the spiral processes of self-reflection.

Rossi and Tan (2012) reinforced that the key design of the action research is its cycles and it should not be misunderstood as circles. In the self-reflective spiral, the subjects are products and producers of the history. During the planning and reflecting moment, they examine their practice, while in the acting and observing moment they practice in the social context. In each moment of the cycle, individuals improve and expand their understanding about their practice, and the situation where this practice takes place (CARR; KEMMIS, 2004).

During action research, the people could unveil their reality, critically problematizing and analyzing it toward *conscientização* and intervention. It is a process which involves dialogue, critical reflection and action in and about the people's situation; it is the participants' praxis in the cause for their reality (FREIRE, 2005a). According to Freire (2005a), this process is based on people's empirical knowledge, but nourished by the leaders' critical knowledge. When joined, it becomes a transformed knowledge of people's practice.

Similar to Freire's comprehension, Carr and Kemmis (2004) supported action research that is emancipatory. For them, an "Emancipatory action research is an empowering process for participants; it engages them in the struggle for more rational, just, democratic and fulfilling forms of education" (CARR; KEMMIS, 2004, p. 205). Kemmis (2006) explained that by defending an emancipatory notion of action research, he was advocating for emancipation from alienation, injustice, irrationality and suffering that can be found in every social and educational setting. In this sense, an action research project could unit people to reflect and act in their reality to transform it (FREIRE, 2005a).

In emancipatory action research, people unit themselves in a joint enterprise. They intend to change themselves to change their institution (CARR; KEMMIS, 2004). In Kemmis' (2006, p. 473) words:

On the view that action research initiatives can create public spheres in the very communications that constitute a 'project', I believe that excellent action research will encourage practical reasoning and exploratory action in communities of practice. It will involve critical theorising and research, and collective action aimed at changing practices, understandings of practices, and the settings and situations in which practice occurs.

Therefore, by understanding that the action research characteristics attend to this present dissertation's purpose and theoretical framework, during the second phase the teachers and also myself as a facilitator, were engaged in cycles of reflection and action toward intervening in the teachers' reality to transform it. The following sections detail the context where this research took place, who was part of the project and their roles in the research, as well as what was accomplished in each phase of the investigation.

3.4 SETTING

The description of the research setting should be detailed enough to allow the reader to visualize the investigation context (PATTON, 2002). This section presents not only the physical context of the research, but the history, laws and programs in which the school and the participants were immersed. The intention is to familiarize the reader with the full-time school (FTS) project in Brazil and in Governador Valadares, the city where the investigation took place.

3.2.1 Full-time schools in Brazil

Brazil has been developing its FTS project trajectory since the beginning of the twentieth century. This trajectory could be divided into three phases. During the first phase (1912-1980), three projects stood out. They differed from one another in relation to the theoretical framework used to support the projects, their purposes, and their organization. The "anarchist" project defended the working class, and their teaching methods sought to develop social class consciousness. Francisco Ferrer y Guardia was one of the most important educators in this project. He began the first Modern Schools in Spain in 1901. This type of school organization arrived in Brazil through immigration in 1912. The Modern Schools were aimed at preparing the students to live and govern a free society by developing the cognitive, physical and professional dimensions of the human being (GALLO, 2002; MARTINS, 2010).

The "integralists" project was a Brazilian political movement that begun in 1930, which intended to preserve traditional education by focusing on defending the Catholic religion, rigid discipline, and nationalism. This project created education centers in the entire country with the aim of increasing youth literacy and physical development (COELHO, 2005; CAVALIERE, 2010).7

The project that had the most influence on the FTS movement, was the "New School" project. Dewey's ideas of education were aimed at building a democratic school where all of

the students could learn in an active way. His ideas were foundational to this movement. The initial schools were built in Rio de Janeiro in 1930. The lineage continues shortly afterwards in Salvador in 1950. These schools were based on three large developing areas: work, education, and recreation. Anísio Teixeira, the main activist author involved in this this project, who studied with Dewey in the United States, believed in the possibility of building a democratic society through integral education (TEIXEIRA, 1930; GADOTTI, 2009).

In the second phase (1980-2007), "Centros Integrados de Educação Pública" (CIEP) (Integrated Public Educational Centers) were built as large facilities where children could learn the arts, sports, and various occupations that reached beyond traditional content and were included in schools (e.g. Portuguese, mathematics, geography, etc.). The CIEP, which started in Rio de Janeiro (1985) was led by Darcy Ribeiro and influenced by Anísio Teixeira's ideas. This project spread throughout the country and was sustained by the federal government. Other state governments in Brazil also implemented FTS projects. The CIEP project was expensive because of the schools' extension and the diversity of material resources required by its contents. Many of these projects were finished at the end of nineties (GADOTTI 2009; CAVALIERE 2002).

The third phase began in 2007 and continues into the present. This phase was supported by the Brazilian Government investing in FTS through the "*Programa Mais Educação*" (PME) (More Education Program). PME was conceived as a strategy to facilitate the state and municipal schools' goal to extend the school schedule from four to eight hours per day, to expand the spaces in which school activities were offered, and to enhance the content offered in Brazilian public schools. In addition, the PME collaborated with an education project supported by the integral education concept. In this concept, the intention was both to question the traditional view that sees individuals in a dichotomous way (body divided from mind) and to support an active form of teaching and learning, as Dewey advocated (BRASIL, 2013; GONÇALVES et al., 2016).

The PME was supported by different authors' theories, such as Paulo Freire and Anísio Teixeira as cited here. Freire advocated UNESCO ideas publicized in the Faure report (1996) in Barcelona. There he said that the cities' spaces could contribute to the students' education. Then, through this idea, the PME suggested that the schools could use these spaces to enlarge the methodology and resources needed to support integral education. Museums, recreation centers, theaters, gymnasiums, and universities are among the institutions that could be used as some examples. Based on Dewey and Teixeira's ideas, the PME also defended the importance of investing in building and the improvement of schools' facilities. The idea was for the school

to be seen as a community reference supporting its neighborhood (CAVALIERE, 2009; SILVA, J., SILVA, K., 2013, 2014).

Many Brazilian laws have supported the legality of PME. Firstly, there is the Federal Constitution (1988) that defended education as a right for all Brazilian people; secondly, there is the "Lei de Diretrizes e Bases da Educação Nacional" (LDB) (Law of Directives and Bases of Education) (1996), which proposed that FTS be instituted as soon as possible in Brazilian cities. Thirdly, were the Laws number 17 (BRASIL, 2007) and 7.083 (BRASIL, 2010), that organized the PME program to provide financial support and professional staff. Yet, the president Temer's administration approved some changes in the original project and created the Novo Mais Educação (New More Education) program law number 1.144 (BRASIL, 2016). Through these changes, the initial project lost its strength and moreover, the new project was focused on learning mathematics and Portuguese. As a consequence, the concept of integral education for human beings was altered.

3.2.2 Full-time schools in Governador Valadares city

Governador Valadares is a city in the east of Minas Gerais state in southeastern Brazil. With a population of 263,689, it is the ninth biggest city in the state. The city lies on the Rio Doce River, one of the larger rivers in the state, and it is known for its abundant natural environment, that has treasures such as Ibituruna Mountain (IBGE, 2010).



Figure 3 - Location of Governador Valadares. East region of Minas Gerais state.

Source: IBGE (2010).

Commerce and agriculture, specifically cattle breeding, as well as various other industries have historically driven the economy of the area. Many of the Governador Valadares

citizens, who live in the United States of America, send money to family members who live in the area and this income contributes to the economy. Although the city is large, there are few sources of income for youth, few options for leisure and education; then many families do not have a sense of identity within the city. In addition, the number of crimes among youth is a social issue (GOVERNADOR VALADARES, 2009a).

In response to these concerns, in 2009 the municipal government implemented FTS project in Governador Valadares. The Mayor, through the Municipal Education Office, reorganized the educational system according to Law Number 129 (GOVERNADOR VALADARES, 2009b) and Resolution 03 (GOVERNADOR VALADARES, 2010). This reorganization occurred through six processes (ROCHA, 2017). Firstly, a public municipal educational test was employed to hire new professionals for the FTS project. Secondly, the teachers' work time was extended from 22.30 (part-time) to 40 hours (full-time) per week and sought to maintain teachers in only one school. The third process served to implement CPD programs in each subject area. These programs were organized in two ways. The first assigned a content facilitator and pedagogy coordinators in the Municipal Educational Office, and the second was located in the schools themselves and included a school pedagogy coordinator and allowed, for example, time and space to meet during the school day, as required by law. The fourth measure provided for the purchasing of pedagogical materials for specific classes. The fifth provision dealt with the implementation of the PME in all of municipal schools in Governador Valadares. Lastly, there were curricular and physical adaptations made in several schools.

The initial municipal FTS project was aimed at developing the students' social identity, diversity, and the sustainable development of the social environment. It organized the schools' subjects in such diverse curricular areas as: Communications and Varied Languages (Portuguese; mathematics, modern foreign language, arts); Identity and Diversity (history, philosophy, sociology, religious education, physical education, movement and recreation); Sustainable Environment and Youth Protagonism (nature science, geography and knowledge, of nature and society). Through this process, the project proposed including diverse content and non-traditional schedules where they could help all children become fully educated. Consequently, the known academic subjects were not only included in curriculum, but also arts, sports, culture, and social content were added (GOVERNADOR VALADARES, 2009a).

However, due to the cuts to educational resources made by the president Temer's government and the difficult situation of the state and municipal administration, the schools were facing problems of financial support in 2018. Although, only a few of the city schools had

the PME program in place this year, the structure and goals continued in all municipal schools. The children continued studying eight hours per day and the initial municipal FTS project was maintained.

At the end of 2018, it was announced that the FTS project would change its format in Governador Valadares city. In 2019, just the students from kindergarten and elementary school (6 months to 11 years-old) would study from 7a.m to 3p.m. The youth from middle school would study until 12.30p.m and after this, they could choose if they would like to attend the specific classes offered by school (GOVERNADOR VALADARES, 2019). This change was not seen only as a timetable alteration, but it resulted in reducing the integral education project in this city. Without the federal government financial support, and the modification of the PME's goals, which were no longer based in Freire and Dewey's ideas, along with the Municipal Education Office's timetable modification, the FTS project in Governador Valadares lost strength.

3.2.3 CPD in Governador Valadares full-time schools.

One important part of the FTS project in Governador Valadares was the CPD program. During its ten years of existence, the municipal administration changed twice¹⁶. At the same time, the Municipal Education Office implemented different forms of the CPD in relation to the government situation and its educational mandates. Subsequently, the forms of professional development varied over time. Law number 129 of 2009 (GOVERNADOR VALADARES, 2009b), which organized teachers' hours, affirmed that: teachers who worked a full-time, 40 hour¹⁷ schedule per week at one school, had to teach 30 hours and accomplish 10 hours of extra class work. Therefore, within these 10 hours, 6 would be designated to CPD (at the "Casa do Professor" - Teacher's House, and inside the school with their peers) and 4 hours would be dedicated to lesson planning, student assessment, and school documentation. In 2010, the FTS started working in Governador Valadares and the CPD was implemented in two different ways. Firstly, a content facilitator was put into place at the Municipal Education Office at the Casa do Professor. Teachers went to this place once a month. The facilitator was responsible for an area of specific content in the curricular area. In this way, all of the physical education teachers

¹⁶ Elisa Maria Costa, from Workers Party, was the Mayor in two periods initiated in 2009 and in 2013. The Mayor André Luis Coelho Merlo, from Brazilian Social-democracy Party, assumed the Municipal Office in 2017.

¹⁷ Teachers with contracts for fewer than 40 hours a week would still have their hours divided in the same, 75:25 ratio of lesson time to other duties.

from municipal schools met together once per month. Secondly, the teachers had weekly meetings in their own schools, which were coordinated by the Pedagogical Coordinator of the school. The school staff had the autonomy to manage this meeting and could organize itself by area, content, and/or with all the teachers together (GOVERNADOR VALADARES, 2010).

In 2015, the *Casa do Professor* was closed and CPD occurred only at the school level. Many schools chose to organize their CPD meetings by school content while other schools preferred that teachers functioned as individuals supervised by the Pedagogical Coordinator. Others yet chose to organize by curricular area, as advised by the Municipal Education Office.

Clarice Lispector School, which since 2016 organized the school by curricular area, assigned one teacher to be the facilitator of each curricular area. This curricular area facilitator would have to teach 20 hours and the other hours would be used to manage the curricular area CPD meeting. In the "Identity and Diversity" curricular area, two different physical education teachers assumed the facilitator role, each one for less than one year. At the beginning of 2017, the municipal government changed again, this job position was eliminated, and the CPD became the sole function of the Pedagogy Coordinator.

3.2.4 The *Clarice Lispector* Municipal School

Situated far from city center, the *Clarice Lispector* Municipal School is located in an area of social vulnerability. This school was built in 2014 and houses students between 9 to 14 years old. The school day starts at 7a.m and finishes at 3p.m. This school is the result of a partnership between the municipal government and one Mining Company. This company built the sport facilities, nicknamed "*Centro de Esportes*" (Sports Facilities), and the main school building. Presently, the municipal government maintains both by supplying pedagogical resources and teaching professionals to provide education for almost 700 students per year. The school has 20 classrooms, one meeting room, library, one cafeteria, one teachers' room, an administrative secretary room, one room for the Principal and another room for the Pedagogical Coordinator. The *Centro de Esportes*, which is within the confines of the school property, measures 50 thousand square meters and has a soccer field, an athletics track, two swimming pools, and four bathrooms (ESCOLA, 2016, p. 6).

¹⁸ This is a pseudonymous adopted in this dissertation.

Figure 4 - Picture of the athletics track and soccer field. Teacher doing recreational activities with children and several typical poor houses around school.



Source: Artifacts.

Figure 5 - Picture of the swimming pool area.



Source: Artifacts.

Figure 6 - Picture of the cafeteria and classrooms.



Source: Artifacts.

Figure 7 - Picture of the teachers' room.



Source: Artifacts.

Figure 8 - Picture of the space for break time; classrooms.



Sources: Artifacts.



Figure 9 - Picture of the cafeteria and bathrooms.

Source: Artifacts.

In the city, different schools had different purposes, for example, there was one school focused on music and another on technology, etc. The municipal sport and education offices joined together to use the facility of *Clarice Lispector* School for youth sport training. The school was built during the time in which Brazil was preparing for the Olympic Games. As a result, the initial speech broadcast by the Mayor and the social media was named, "one school to produce youth athletes" (GOVERNADOR VALADARES, 2014a).

Once the Mining Company and the municipal government started this project, a course was offered with the purpose of selecting physical education teachers. According to each teacher, the courses were focused on coaching diverse physical education content, such as soccer, athletics, swimming, martial arts etc. At this point in time, the Municipal Sport Office managed the space and the professionals who worked there.

At the onset, there were only sport specific classes at the *Centro de Esportes*. The students from the *Clarice Lispector* School did not have physical education as a subject on their schedule. The sport specific classes functioned as a training program to develop athletes and to discover new "talents". The physical education teachers were sport coaches. The training sessions were managed, planned and developed by Municipal Sport Office.

In 2016, some changes were implemented at the school. The Municipal Education Office managed the whole facility and the Municipal Sport Office no longer coordinated the sports area. In addition, the curriculum of the school was changed to include physical education as a subject in the timetable. From that moment forward, the *Centro de Esportes* became part of the school, and physical education program had to follow the National Curriculum as cited in LDB (BRASIL, 1996). The school project intended to offer academic, social and sports

activities to achieve integral education for its students (ESCOLA, 2016). Since this cited year¹⁹ the students' timetables were completed as showed at the table 3.

Table 3 - Students' timetable (2017).

			Number of classes	
<u>Area</u>	Subjects	2 nd Cycle	3rd Cycle	4th Cycle
		9/10 years old	11/12 years old	13/14 years old
Communications and	Portuguese	6	6	6
Varied Languages	Reading and Writing	2	2	2
	Modern foreign language	2	3	3
	Mathematics	6	6	6
	Art	2	2	2
Identity and Diversity	Field sports	=	2	2
	Swimming	2	2	2
	Athletics	2	2	2
	Martial Arts	2	-	-
	Physical Education	2	2	2
	History	4	3	4
	Religious education	2	2	2
Sustainable	Geography	4	4	3
Environment and	Science	4	4	4
Youth Protagonism				

Source: Artifacts.

3.3 PARTICIPANTS: WHO ARE THEY?

Purposeful sampling is used with the intention of selecting information-rich cases that will lighten the research questions (PATTON, 2002). In this investigation, the selection of this school and the teachers occurred for a variety of reasons. These reasons resulted in a combination or mixed type of sampling with the purpose to attend to the interests and needs of the research (CRESWELL, 1998). First, my Master studies about FTS in Governador Valadares had generated indicatives to future studies with teachers' CPD in that context. Second, there was an interest in studying PLC in Brazilian context. Third, because the *Casa do Professor* ended and a subsequently lack of funding to accomplish the research, it was difficult to join physical education teachers in a group. Thus, as this school was focused on youth sport, there were a large number of physical education teachers working there. As a conclusion, this school and its physical education teachers became the sampling of the research.

It is important to highlight that the Ethics Committee of the School of Physical Education and Sport at the University of Sao Paulo (number 2.441.430) approved this research.

¹⁹ Although the research period had begun at 2018, the school delivered to the researcher the students timetable from 2017. In 2018 was included recreation classes at this timetable.

The Secretary of Education of Governador Valadares - MG consented with the procedures of the research, as well as the Principal of the school, signing an approval sheet. The teachers also signed an informed consent form that declared their agreement in participating in the study.

The school was organized to include a Principal, a Vice-principal, a Pedagogical Coordinator, teachers, pedagogical staff, general staff (cleaning and building support), and two office assistants. In total, there were 70 workers in the school, nine of which were physical education teachers (outlined in table 4). Although there were nine physical education teachers in the school, the only ones who were considered as participants in this study, were those who attended the physical education meetings each Tuesday. Because this dissertation had the purpose of knowing how a PLC could support physical education teachers CPD, the Tuesday meetings were the main point used as participants' selection. It is important to highlight that pseudonymous were used to identify the participants. This included André, Vitor, Pedro, Simone, Rodrigo and Jair.

Table 4 - Physical Education teachers in school.

Name	Teaching	Weekly hours worked	Job position	Time in school	Years teaching	Age
André	Swimming	40h	FTP	Old	13	38
Vitor	Physical Education	22.30h	PTP	Old	12	40
Pedro	Soccer/ Field sports	20h	PTC	Old	5	25
Simone	Athletics	40h	FTC	Old	9	31
Rodrigo	Swimming	40h	FTC	New	20	55
Jair	Athletics/PE	22h	PTC	New	10	39
Ronaldo	Principal	40h	FTP	Old	-	-
Sara/Erika	Recreation	Fraction*	PTC	New	-	-
Elis	Marcial Arts	Fraction*	PTC	New	-	-

FTP: Full-time permanent; FTC: Full-time contractual; PTP: Part-time permanent; PTC: Part-time contractual

*Fraction: less than 10 hours.

Source: Artifacts.

Jair participated in the Tuesday meeting only during the first semester and because of this, his data appear sporadically during the analysis. Still it is important to include him. Sara worked at school for just three months and participated in only two meetings. Erika, who substituted for Sara after she left the school and Elis, the martial arts teacher, never attended the physical education meetings because they only worked for a few hours in the school. Ronaldo was a physical education teacher as well, but he was the Principal of school and did not participate in the meetings. His data are related to his role as Principal of the school. In total, six physical education teachers were full-participants of this research.

Describing the participants is my first attempt to bring the reader closer to the research individuals. I will show how the participants arrived at school, list their personal characteristics, describe their roles, engagement with school problems, and motivation to join the physical education group. It is clear that it is just one small step in introducing the research subjects, but during this dissertation the reader will better understand how each one was reacted in this scenario. Each teacher contributed to the history of the school, this then provides another opportunity to deeply understand the context of the school.

André: a chance to change

André is one of the swimming teachers. He is a full-time permanent teacher in the municipal schools in Governador Valadares. To achieve this position, he had to be approved through the successful completion of a municipal education test. André was approved in 2010 and before *Clarice Lispector* School was built he worked in another school in the city. In his interview, he talked about this process and explained that when the school was constructed all permanent teachers from the city were invited to a seminar. In this seminar, the goal of the school was described as "building a school to training youth to be athletes". After that, the permanent teachers who were interested in working were able to ask the municipal office to move from their own schools to *Clarice Lispector* School.

The municipal administration explained that the teachers would not receive any increases in salary for this job. André then indicated that he was not interested in the position. Subsequently, the school where he worked eliminated some classes, thus forcing him to teach in two schools to complete his schedule. In addition, he saw the opportunity to work only with swimming content, which is what he always wanted. He was conscious that there was no guarantee that he would work with swimming, but he was willing to change from his school to *Clarice Lispector* School to try to get the swimming position there.

When he arrived at school in 2016, he was asked to work with swimming and, as he has a good position at Municipal Education Office classification, he received the job. Since that time, André worked in two different functions at the school. He was a swimming teacher during the daily routine, and after the school day ended, he coordinated and coached the swimming training project for the students.

When I arrived at the school, I noticed that André was a quiet person. He was constantly silent in the teachers' room and did not interact with teachers from the other areas. Although he was assigned the role of checking the school financial documents together with the administration staff, he did not engage with other school problems. During the general

pedagogical meetings, he was at the swimming pool training the students. Yet, he was proud of his work. On several occasions, he showed me the swimming portfolio that he built with the previous swimming teacher. He also coached in municipal swimming competitions with the students on some Saturdays. André was always worried about his classes, especially for the students who did not want to attend swimming classes and just stood or sat outside the pool. For him, physical education teachers had the responsibility to change this reality. The Tuesday meetings could have given him a chance to do just that.

Vitor: less bureaucracies, more teaching

Vitor was the other permanent physical education teacher. He also was approved during the municipal education test in 2010. Although he was a permanent teacher, Vitor worked parttime, just 22.30 hours, at *Clarice Lispector* School. Like André, the school where Vitor had worked had also cancelled some classes. More importantly, Vitor was an older resident of the neighborhood where the school was located. One of his motivations to teach at the *Clarice Lispector* School was its proximity to his home. In addition, his classes were able to be concentrated in the morning, which would facilitate his routine of teaching in the afternoon at a state school very close to the *Clarice Lispector* School.

Unlike André, Vitor participated in the course that Mining Company offered together with the Municipal Office. He arrived at *Clarice Lispector* School in 2016 as well. He was a Physical Education teacher for the school's primary classes. Vitor was known by the students and by the school staff as a strict teacher. He was very worried about his teaching. He talked with pride about his classes and also of the fact that the children did not misbehave in his presence. He was formerly a handball player for the city and this was reflected in his passion for invasion games. Every day that I observed his classes, he was teaching invasion games.

Vitor had not been participating at the school general pedagogic meetings. He informed the staff that all meetings were in the afternoons, when he was working at the other school. In addition, he did not want to become engaged with the school problems. At the beginning of the year, many times I heard his complaints about the school situation. He also seemed tired of the bureaucratic requirements of the public schools in the city. At the first meetings, he did not demonstrate a huge excitement to participate, but after this first period, when the group came together, he started to show that he believed in his work and realized that the Tuesday meetings could be a chance to improve it.

Pedro: let's bring the best moments back

Pedro was one of the longest serving teachers in *Clarice Lispector* School. He attended the Mining Company's initial course and was selected to be a teacher in this school at that time. Yet, it was not what made him present old-timer's characteristics, as pointed out by Lave and Wenger (1991). When the *Centro de Esportes* began, Pedro was the most enthusiastic teacher in the project. As he said, the school was his home. Everyone knew him and respected his advice, even the parents sought him out to talk about their children. He knew the history of the school and how it operated. He was always involved with the school problems and events. He was an active participant during the physical education and general school meetings.

Although he was the youngest of the group, Pedro had fulfilled various roles during different times at the school. He was the area facilitator one year, and during his interview he remembered that it was a hard task for him. He revealed himself as a person who faced many conflicts with other teachers. He told me that the physical education group had had a long history of struggle between teachers. Pedro also recalled the period when the Municipal Sport Office led the *Centro de Esportes* physical education teachers. He praised this moment as one of the best times in his work.

When he started to work there, he was a full-time teacher, but in 2018, he chose to work only part-time with the intention of improving his salary. If he would be able to work only a half day at this school, he could find another job. As a result, at the beginning of the year, Pedro was working in the morning at this school, in the afternoon at another, and at night, he was a football and handball coach at another venue. He told me he was working until midnight every day, and that he woke up at 6a.m to teach at this school. He was a young teacher but had already faced a difficult routine to improve his professional career.

He always taught soccer as a specific sport at school. In 2018, he began teaching other field sports, such as Frisbee, and North American football. He revealed that he believed in the *Centro de Esportes* initial project. Because of this, it seemed it would be very difficult for Pedro to abandon this school. He appeared worried about his classes, but I noticed that his larger concern were the school itself, the children, and the physical education project in school. He told the Tuesdays meetings would be an opportunity to bring back to physical education the best moments at this school.

Simone: someone to support me

Simone also said that she very much liked to work at this school. She had accomplished the Mining Company's course and she started to work in 2015 with athletics. At that time the

teachers taught in pairs and she worked with a man who was an expert in coaching athletics. Then in 2016 and 2017, again working in pairs, she taught other content than athletics. When she had to teach athletics again, after two years of not doing it, she became quite insecure. Possibly it was because she had not taught athletics in two years and because in 2018 she was teaching alone as well. Although Simone felt this insecurity, she has never given up on improving her classes. She did seem worried about the content development, but she showed a willingness to learn more about teaching athletics.

She was also concerned about the school. In 2018, she felt discouraged and asked herself if she really wanted to keep working there. She often complained about the administrative staff, the lack of support, and the ineffective structure of the physical education department. In the beginning of the year, she had complained about her colleagues as well. She said they never attended general school meetings and that they had tampered with the physical education equipment. Simone herself is fastidious about meeting school deadlines and attending meetings and she always reminded the other teachers of their appointments.

She made herself available to listen to the students' problems and was committed to helping them. She gave me the impression that she was concerned about their lives and the choices they might make after school finished. Many times, she made judgments about their lives as well. Simone was raised Catholic and sometimes she made assumptions about the students based on her religious beliefs. She addressed gender issues and women's roles in marriage and professional life. During the physical education meetings, she also had strong opinions about the women's role in school. She said for example, "For men, it is easier", "Without a man to help me I cannot do it", "Men are different than women; I need to be cared for". It seems that to Simone, the Tuesday meetings were an opportunity to support people, both as professionals and as individuals.

Rodrigo: I am here to help!

Rodrigo, the other swimming teacher, was the oldest teacher and was already known physical education teacher in the city. He had worked at a private school for 20 years. He revealed that in 2017 this school suddenly fired him. Because of that, he participated in the 2018 municipal hiring process in order to find a job in the municipal schools. He was formerly a swimming teacher at other places in the city. Thus, coming to the *Clarice Lispector* School was a chance for him to combine two important features in his professional life: the love of swimming and his need for a new job.

At the school, Rodrigo represented the stereotype of a newcomer. In contrast to André, his swimming partner, he was a talkative person. He talked with everyone in an attempt to get closer to people. He offered his help to improve various situations at school and he recounted his own history with the intention of sharing his teaching style. Rodrigo was also very worried about the swimming pool situation. It was as if he were seeing his dream of being a swimming teacher disappear. Yet, amidst this situation, he showed one quality that every school recognized: he never gave up on getting the pool cleaned. He bought equipment to fix the pool by himself; he argued with the staff who corrected him as he cleaned the pool, and in the end, he worked alone with André. For Rodrigo, participating in the Tuesday meetings was a chance to get to know people, engage in the school routine, to become known by the physical education group through demonstrating his willingness to help.

Jair: a lonely trajectory

Jair had participated in the Mining Company's short course, and in the first year he worked in martial arts. In 2018, he returned to the school, but this time he worked with physical education and specific sports classes. Jair was focused on earning his Master's degree. During the first semester, he was often occupied with passing the Master's degree test. In the middle of the year he was approved, and at the same time, the school changed his timetable. These two factors led to Jair abandoning the physical education meetings. While he did participate in the meetings with the group, he was always silent. In truth, Jair's attention was never really on the school or the physical education group. Although he was willing to help the group and the school, most of his time was spent investing in his own professional development.

Luiza: the researcher-facilitator

During the development of the research, I understood that my positionality was blurred. I was an outsider of the group, but I was also a participant in this work. I am a woman and I was 33 years old when this research period began. I am a physical education lecturer in a Federal University in Brazil and I received my physical education degree in 2008 and my Master's degree in 2014. Then, sometimes, I identified myself as an outsider - a researcher from the university environment. Yet, I already knew these teachers and this school since I am from Governador Valadares city and completed my undergraduate course at the same university as most of them. I knew this school because I had worked in a municipal full-time school in this city in 2010, and I coordinated, together with two other teachers, a short-course at this school in 2016. Because of this, here and there, I shared the same insider's feeling as the teachers.

I played two roles in this research. First, during the first phase I acted as a participant observer. During this time, I observed teachers' interactions with each other, with the administration, and with teachers outside of physical education. I observed their behavior during the classes, I engaged with the school problems and, in short, I became part of their daily routine. I even cleaned equipment rooms with them! After these weeks, during the action research phase, I became the group's facilitator. According to Carr and Kemmis (2004) in an action research, an outsider can be a facilitator, helping the teachers to establish a self-reflective community; problematize and modify their practices; identify and develop their understandings; and finally, helping them to take responsibility for their action. As Freire (2005a) supported, I tried to lead the teachers in this way, trying to help them in becoming an independent group. I helped them with their daily routine that involved collective decisions, tasks, and discussions. I mediated the negotiations between the teachers and the administrative staff regarding to requirements, events, and the teachers' requests. Depending on the teachers' needs, I also organized different actions with them, which included workshops, learning experiences, events, and projects.

Missy: the critical friend

Playing these two roles was not an easy task for me. Because of it, I was supported by my close critical friend, Dr. Melissa Parker (Missy). Carr and Kemmis (2004) affirmed that the critical friend is an outsider of the group that helps people to act more prudently and critically during the research toward transforming their reality. Missy is a Canadian woman, who had worked for over 35 years in universities in both the United States and Ireland. During this research period, she was a Senior Lecturer at University of Limerick, Ireland. She had been working with teachers' professional development since 1976, and specifically with Communities of Practice since 2010, when she was researching this phenomenon in different contexts and countries. Missy helped me with my weekly analysis of what I had been observing at the school. Each Friday, via Skype, I reported what I thought were important incidents to her, at which time I debriefed and planned for the upcoming days. Missy is an English native speaker, all data were transcribed verbatim in Portuguese, and the relevant information was translated into English for meetings with her. Missy became the second supervisor of this research and together we analyzed all the data and discussed the ongoing results of the process. Because of this, sometimes I will refer to our analysis using "we" as a way to acknowledge these collective thoughts.

3.4 DESIGN

As was presented before, this study was a qualitative research project realized in two phases. The first phase aims at understanding how physical education teachers develop as professionals in a full-time school in Brazil. The second phase seeks to investigate how a PLC or a CoP could support physical education teachers' CPD in a full-time school in Brazil. After presenting the setting and participants of this research, this section explains how the two phases were designed and the transition from the first to the second phase.

3.4.1 Phase 1: Understanding the school and its subjects

To initiate this research with the teachers was necessary to know the context where they were immersed, to understand their needs and reality, and finally, to ask if they would agree to participate in the project. Thus, in terms of design, during the first semester of 2018 I was embedded in the school on a full-time basis. I attended the school general meetings, and the meetings of the physical education teachers with the Pedagogical Coordinator. I spent most of the time trying to help the teachers in what they requested, talking with the teachers and other people in the school, and conducing the teachers' interviews.

The meetings of physical education teachers and Pedagogical Coordinator occurred on Tuesday. The teachers called these meetings Tuesday meetings. As outlined in table 5, during the some weeks the teachers did not have proper meetings (detailed in section 4.1). In my turn, on Fridays, I had a meeting by *Skype* with Missy. During these researchers' meetings, I reported the critical incidents I had observed during the teachers' routine to Missy.

After 6 weeks of immersion in the school and two informal meetings with teachers, Missy and I understood that something could be done to create spaces in which to improve the teachers' development as professionals. However, before starting the second phase and engaging in the action research project with the teachers, I explained the main purpose of the research for them, and ask if they would agree to participate with us. The table 5 describes what was realized in the first phase, as well as highlighting the questions that I used to promote the teachers' participation.

The third meeting was the transition to the second phase. After this, the research became a project that was initially intended to foster a PLC with those physical education teachers and to understand how this PLC could support their CPD. Missy and I did not know what the group could produce. We did not even know if that group would develop as a PLC or not, yet after

their acceptance, we were engaged in understanding what they needed and wanted during the action research phase.

3.4.2 Phase 2: Intervening with the teachers

During the second phase of the research, I engaged with the teachers in their routine. Missy guided me during this process. When meeting with Missy would not be possible, we planned two or three meetings with teachers in advance. Even though the Tuesday meetings had finished by the beginning of November, Missy and I kept meeting until the end of the final interviews with the teachers.

Table 6 describes everything that was developed with the teachers in the action research phase. It is important to highlight that I kept observing the teachers' routine and acting with them during this period. I also attended Saturday activities and general school meetings, yet, the table presents just what was realized during the Tuesday meetings. In the table, I also present the main questions that I used during the Tuesday meetings and the teachers' thoughts or decisions. Although the meeting details are described deeply in section 4.2, these main points described in table 6 can be a guide during the reading of the results.

Two main points were part of the action research cycle of planning-acting-observing-reflecting (CARR; KEMMIS, 2004). First, during the Tuesday meetings the teachers and I saved time to discuss and solve the administrative tasks that they had to accomplish. It involved the students' profile, the students' attendance, and the planning of sport events and school projects. This time also involved decisions that the teachers wanted to take related to the school and physical education as a curricular area. For example, they wanted to request new sports equipment, to understand about their rights regarding their place to teach, and the number of classes taught. Second, the group was dedicated to learning and changing physical education curricula. This pedagogical investment involved building a new physical education aim for the school, to organize the lesson structure, and to invest in new teaching strategies. Figure 10 demonstrates the cycle of the second phase of the project.

Table 5 - Description of the first phase of the research.

		Table 5 - Description of the first phase of the research.			
	Phase 1: Understanding the school and its subjects				
MONTHS	WEEKS	WHAT WAS DONE DURING THE WEEK AND AT THE MEETINGS			
FEBRUARY	1	 During the week: Class observations; Interviews; Main points observed during the teachers' routine: lack of teachers' schedules; absence of proper meeting (teachers were waiting at teachers' room). 			
	1	During the week:			
		- Class observations;			
	2	- Interviews;			
	3	- Main points observed during the teachers' routine: lack of teachers' schedules; absence of proper meeting (teachers were waiting at teachers' room); Revenge Plan (general teachers' meeting).			
MARCH	4	First informal meeting: F: Why do classroom teachers want to punish children by removing them from physical education (PE) classes? F: How can we make PE something that is recognized and respected in this school?			
MA	5	 During the week: Class observations; Meeting with Principal and Pedagogical Coordinator (asking proper space to meet and an organized teachers' schedule); Teachers check their interviews. Second informal meeting: Notes of the teachers' reflection are showed; F: Where do you want to start? T: Reflection about PE aim at the school. 			
	1	During the week:			
ī		- PE routine observations;			
		- Offering help during the classes;			
		Third Meeting:			
APRIL		Facilitator explains the aim of the action research and asks if PE teachers agree to participate;			
⋖		Acceptance of the teachers:			
		F: What do you need, what do you want to discuss here? (Building a collective agenda);			
		T: Thinking about proper space and time to meet;			
		T: First collective task: students' profile.			

F: facilitator's actions; **T**: teachers' actions.

Source: Author's source.

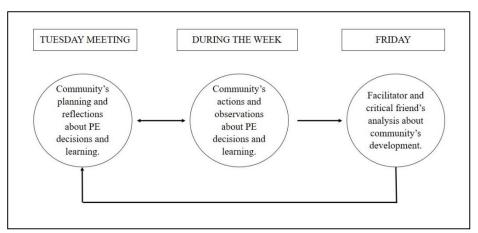


Figure 10 - Design of the action research phase.

Source: Author's source.

The intention of the second phase was to foster a PLC through this cyclical process of reflecting and acting with the teachers during their routine. In advance, we wanted to investigate the tensions and challenges of this process, followed by whether or not this community would present CoP features. Although the scheme drawn above describes the week, it does not represent the reality of the spiral of learning from the research development. During the process, we could observe and respond to the second research question of this dissertation: how a PLC or a CoP could support physical education teachers' CPD. The next section demonstrates how the data were collected and analyzed during this process.

3.5 DATA SOURCES AND ANALYSIS

Supported by Patton (2002), we understood that triangulation of methods strengthens the research findings. In this sense, this research used data and investigators triangulation (PATTON, 2002). Through data triangulation, a variety of data sources contributed to the investigation such as: teachers' interviews, field notes, meetings with the teachers, social media records and artifacts. Simultaneously, the facilitator and the critical friend analyzed the data continually. The following sections detail the data sources and analysis.

Table 6 - Description of the second phase of the research.

Phase two: Intervening with the teachers				
MONTH	WEEKS	WHAT WAS DONE AT THE MEETINGS		
	1	Fourth Meeting in PE equipment room; administrative tasks; notes of the last teachers' reflection are shown;		
T		F: How can we create a PE meaning?		
APRIL		T: Choosing a PE approach.		
A	2	Municipal Education Office personal presents the annual sport project to the teachers.		
	3	Fifth Meeting: Administrative tasks; Principal attends the meeting (teachers and Principal negotiation); teachers draft a letter to Sport office.		
	1	Sixth Meeting: Planning school projects; notes of the last teachers' reflection are shown;		
		F: Which PE approach do you want to study?		
		T: Healthy, Cultural and Critical approach.		
		T: Doubts about: How can we organize the PE lessons?; Can the lesson's structure be the same for every content?; What does ludic mean?		
		Can I teach sport in a ludic way?; If I teach skills, am I a traditional teacher?; What is the world vision of the PE group? Repeat or transform?		
	2	Seventh Meeting: Planning sports events; notes of the last teachers' reflection are shown;		
		Healthy approach workshop: reading a text; participating in a traditional PE lesson; discussing the teaching strategies used; trying to build a		
×		PE lesson based on healthy approach.		
MAY		F: How many different ways could we teach this?; What do you see here regarding teaching instruction?		
F		F: Does this approach aim to educate the children to transform the world or to repeat the social order? How does this approach impact		
	2	students?		
	3	Eighth Meeting: Notes of the last teachers' reflection are shown; teachers explain what was understood.		
		<u>Cultural approach workshop</u> : remembering PE classes; reflecting about sportification in the PE classes; sharing the experience of one teacher		
		who worked with Cultural approach; trying to build a PE lesson based on this.		
		F: How many different ways could we teach this?; What do you see here regarding teaching instruction? F: Does this approach size to advect the children to transform the world on to report the social and a? How does this approach impact on		
		F: Does this approach aim to educate the children to transform the world or to repeat the social order? How does this approach impact on students?		
	1	Ninth Meeting: Discussion about Centro de Esportes; teachers request a meeting with Principal; teachers draft a letter to the secretary of		
		municipal education; notes of the last teachers' reflection are shown; teachers explain what was understood.		
		<u>Critical approach workshop</u> : facilitator presented the main features of the approach; teachers tried to plan a PE lesson based on this.		
		F: Does this approach aim to educate the children to transform the world or to repeat the social order? How does this approach impact		
	_	students?		
JUNE	2	Tenth Meeting: Critical approach workshop: External university lecturer conducted a workshop with the teachers called, "Sport and		
		Empowerment": creating an activist sport approach for youth from socially vulnerable backgrounds. Activity with students: listening to		
	2	students' voice.		
	3	Eleventh Meeting: Notes of the last teachers' reflection are shown; teachers explain what was understood.		
		F: What was your perception about this?; What can we use from that in our school? T: Discussion about the difference between DE sim and the sim of the school; the situation of municipal educations to school?		
		T: Discussion about the difference between PE aim and the aim of the school; the situation of municipal education; teachers' disappointment		
		with the school. F: Understood this situation, what is the solution? We can give up or keep going with the work, I am with you, what do you want to do?		
		r. Onderstood this situation, what is the solution? We can give up of keep going with the work, I am with you, what do you want to do?		

JULY	2	Twelfth Meeting: Facilitator apologizes; teachers' reflection about the PE community's situation; teachers decide to keep working but ask for a meeting with municipal education coordinator; F: What is the theoretical framework of PE in this school? What is the meaning of our work? T: Teaching sport for social transformation. Planning the second semester (meetings by <i>Skype</i>); teachers' ideas about lesson's structure and sport events. Thirteenth Meeting: Breakfast with teachers; planning sport events; final discussion about theoretical framework of PE in school; facilitator's meeting with municipal education coordinator. End of the first semester
	3	Fourteenth Meeting: Reporting the presentation in AIESEP conference about our project.
	1	Fifteenth Meeting: F: What is the best lesson's structure to achieve the aim that we built? What are the teaching strategies to achieve this aim? T: Teachers' negotiation about lesson's structure; thinking about teaching strategies.
AUGUST	2	Sixteenth Meeting: Notes of the last teachers' reflection are shown; teachers explain what was understood. F: Did someone implement this lesson's structure during last week? Could you share this experience? T: Teachers share their experience and challenges. F: What are the teaching strategies that could contribute with a critical approach? What teaching strategies do you use in your classes? T: Teachers share their teaching strategies. F: How can we learn new teaching strategies? T: Teachers decide to organize workshops.
	3	Mayor's strike
	4	Seventeenth Meeting: Teachers report the Mayor's strike; school calendar would finish earlier; teachers' schedule changes; teachers should teach on Saturdays fortnightly; teachers' disappointment; teachers decide to keep working; schedule of workshops.
SEPTEMBER	2	Eighteenth Meeting: F: In this difficult situation, what are you doing?; How are you?; What are you thinking and feeling? What do you want to do during our Tuesday meeting? What do you need now? T: Teachers reorganize the workshops; teachers plan the Saturday class. Swimming workshop.
OCTOBER	1 2	Nineteenth Meeting: Teachers share their experience about the swimming workshop. Twentieth Meeting: Assessment with teachers F: What are you thinking about for next year?; What did you experience here, individually and as a group? What did you perceive about this experience? T: Reflection about the project. F: Why did you think that this moment gives you strength?; What do you think that the Tuesday meeting is about? T: Reflection about the community.

Twenty-first Meeting: Assessment with teachers 1

F: Why did you say you didn't do anything? What did you want to do that didn't work?
Facilitator does a presentation about everything that the community produced.
F: Do you believe that the people in school notice that you were acting even more?; Is everything okay in being a critical person, a resistance voice inside the school?

T: Reflection about teachers' voice and decisions in school.

F*: facilitator's actions; **T***: teachers' actions.

Source: Author's source.

NOVEMBER

3.5.1 Data sources

This research took place in a FTS in Brazil from February 2018 to January 2019 (11 months). During this period, multiple data sources were collected, including: meetings with the teachers - Tuesday meetings (21); researchers' meeting (facilitator and critical friend) (26); initial and final individual teachers' interviews (10) and informal interviews; field notes generated by the facilitator's observations (65); social media records collected by the *WhatsApp* group (37); and the artifacts that the community produced (14). Additionally, I collected school documents that helped to understand the history and context of the school.

Meetings

Two types of meetings were data sources, the Tuesday meetings with the physical education teachers (21) and the researchers' meetings between the facilitator and the critical friend (26). The Tuesday meetings happened in the period reserved for teachers' extra class work in which their CPD activity should have occurred, from 7a.m to 8.40a.m. The teachers could participate in the meeting or they had the option to accomplish the extra class work in another period with the Pedagogical Coordinator. The researchers' meetings happened by *Skype* each Friday because the critical friend lived in Limerick, Ireland, and the research occurred in Governador Valadares, Brazil.

In the first phase of the research the teachers did not have a proper meeting and even a suitable meeting space. Instead, the teachers came together in the teachers' room talking between themselves or on their cell phones. When the facilitator started to talk with the teachers, the meetings were recorded (3). The 6 researchers' meetings were recorded and transcribed verbatim in English. Table 7 demonstrates the length in minutes of audio recordings during the first phase of the project.

Table 7 - Length in minutes of meetings with teachers and with *critical friend* during the first phase.

Months In 2018	Meetings with the teachers	Meetings with the critical friend
February	-	Missy meeting 1 (34')
	-	Missy meeting 2 (51')
March	-	Missy meeting 3 (54')
	-	Missy meeting 4 (35')
	-	Missy meeting 5 (33')
	Tuesday meeting 1 (55')	Missy meeting 6 (37')
	Tuesday meeting 2 (62')	-
April	Tuesday meeting 3 (51')	-
Total	3 meetings; 169' minutes	6 meetings; 246' minutes

Source: Author's source.

When the second research phase began, the teachers decided to hold their meetings in their sports equipment room. Yet, in August, I moved to Limerick, Ireland, and the Tuesday meetings were accomplished by *Skype*. Due to problems with internet connection the Tuesday meeting happened in the Pedagogical Coordinator' office From the 18 Tuesday meetings, approximately 20 hours of audio were recorded and transcribed verbatim in Portuguese. In this phase, 20 meetings with Missy were recorded resulting in 15 hours of audio and transcribed verbatim in English, which served as a base to data analysis. Table 8 demonstrates the length in minutes of audio recording in the second phase of the research.

Table 8 - Length in minutes of meetings with teachers and with *critical friend* during the second

phase. 2018/2019 Meetings with the teachers Meetings with the critical friend Tuesday meeting 4 (85') April Municipal education presentation Tuesday meeting 5 (104') May Holiday (workers' day) Missy meeting 7 (56') Tuesday meeting 6 (114') Missy meeting 8 (40') Tuesday meeting 7 (80') Missy meeting 9 (43') Tuesday meeting 8 (66') Missy meeting 10 (41') Holiday (Catholic holiday) Missy meeting 11 (27') June Missy meeting 12 (29') Tuesday meeting 9 (52') Tuesday meeting 10 (67') Missy meeting 13 (58') Tuesday meeting 11 (103') July Tuesday meeting 12 (86') Missy meeting 14 (47') Tuesday meeting 13 (17') Missy meeting 15 (16') End of the first semester Holiday July (two weeks) Holiday July (two weeks) Tuesday meeting 14 (14') Missy meeting 16 (25') August Tuesday meeting 15 (50') Tuesday meeting 16 (69') Mayor's strike (school closed) Missy meeting 17 (49') Tuesday meeting 17 (70') September Tuesday meeting 18 (57') Missy meeting 18 (73') Swimming workshop October Tuesday meeting 19 (27') Missy meeting 19 (56') Tuesday meeting 20 (60') Missy meeting 20 (50') November Missy meeting 21 (61') Tuesday meeting 21 (64') Missy meeting 22 (36') Missy meeting 23 (47') Missy meeting 24 (30') Missy meeting 25 (32') Missy meeting 26 (52') December January Missy meeting 27 (25') 18 meetings; 1196' minutes 20 meetings; 900' minutes Total

Source: Author's source.

Interviews

The teachers' interviews were conducted at the beginning and at the end of the research, using an interview guide with open-ended questions (PATTON, 2002). The initial teachers' interviews aimed at understanding the teachers' experience, the school context, the teachers' previous CPD and what they expected about the CPD meeting in the future (Appendix 1). Interviews took place in a private room, and were recorded by two different types of technology - cell phone and voice recorder. The final teachers' interviews were conducted after the school calendar ended. It aimed to understand the group's interactions and engagement, the teachers' learning and negotiation inside the group (Appendix 2). The table 9 demonstrates the teachers interviewed and the length of each interview. Note that Jair left the group in the second semester, and Vitor, even though he was in the group since the beginning, was not interviewed at the beginning of the year since he declined due to lack of time.

Table 9 - Length in minutes of interviews with teachers.

Initial interview (February/March)	Final Interview (December/January)
André (35')	André (28')
Rodrigo (34')	Rodrigo (82')
Pedro (75')	Pedro (28')
Simone (57')	Simone (41')
Jair (42')	-
-	Vitor (26')

Source: Author's source.

Informal conversational interviews (PATTON, 2002) occurred frequently during the research. These informal interviews involved different subjects: teachers, participants of the study; as well as the current and the previous Principal of the school, the Pedagogical Coordinator, the Municipal Education Office staff, and other teachers in the school. The aim of these informal interviews was to know in depth the context of the research and notice the micro changes that could have occurred with the investigation. The data generated by these informal interviews were recorded in the field notes and may appear in the results chapter with the label Field notes.

Field notes

Field notes were recorded by the facilitator as a participant observer throughout the project. There were two types of field notes. The first was aimed at registering the teachers' routine, the school context, and the teachers' interactions, behaviors and classes. The second was a researcher' journey, where the facilitator's concerns, impressions, thoughts and decisions

were reported. In sections 4.1 and 4.2, the label "Field Notes" refers to daily observations, while the second type is labelled, "Researcher's journey". The data generated by these two sets of field notes informed the interviews, researchers' decisions, and supported the findings of the other data sources. In total, 65 observation days were recorded in the field notes. The majority of field notes was concentrated mainly in the first semester, due to the facilitator's presence in the school every week. During the second semester, social media interactions were recorded instead.

Social media records

Social media records are a way for the facilitator to be "close" to the teachers during the project (GOODYEAR; CASEY; KIRK, 2014). During the second semester, the Tuesday meetings happened by *Skype* and the group adopted the app *WhatsApp* as a vehicle for group discussions and decisions. The facilitator copied the typed messages and transcribed all voice messages. From August 2018 to January 2019, 37 days of group's interactions were recorded.

Artifacts

During the project, artifacts of the group's work were collected. This included: pictures taken during the project; schematics that represented the groups' reflections in the Tuesday meetings; Tuesday meeting agendas; letters that the group produced; school projects and sports events that the group planned; list of sports equipment that the group required; and the group's reflections about meetings with the Principal. Additionally, all documents collected during the data collection period were scanned and saved, including the School Project, the laws published by the Municipal Educational Office, and the school's directions and announcements.

3.5.2 Data analysis

Data analysis in qualitative research is always complex (CRESWELL, 1998). With this awareness, the option was made for inductive and ongoing analysis using thematic analysis methods (BRAUN; CLARKE; WEATE, 2016). We believed that it was a simple but complete way to represent what was found in the fieldwork. An inductive analysis allows the researcher to understand the interrelationships among the data collected without making assumptions (PATTON, 2002). However, it is known that in some moments, the analyst already had contact with the literature, but it does not mean that the inquirer is going into fieldwork to test or to analyze previous hypotheses (PATTON, 2002; BRAUN; CLARKE, 2006).

In an inductive analysis themes are constructed from the data, yet, it is not a passive process. It is through the interaction between data and researcher interpretation that the data are analyzed (PATTON, 2002; BRAUN; CLARKE, 2006). Thus, the intention of the inductive analysis is discovering patterns, themes and categories in the data (PATTON, 2002). An inductive investigation that uses thematic analysis methods has its themes generated bottom up; they are connected with the data themselves. It means that the themes generated are data-driven. Therefore, the themes would bring from the data something important to the research question. It will represent the data partner and meaning to the data set (BRAUN; CLARKE; WEATE, 2016).

The analysis is not something linear or fixed with inflexible rules (PATTON, 2002). It is recursive; the researcher will move back and forth with the data and toward understanding the themes generated (BRAUN; CLARKE, 2006). Braun and Clarke (2006) offered some indications about general guidelines for thematic analysis. First, the analyst should be familiar with the data; actively immersing in and reading the data. Second, the researcher will generate the initial codes. Patton (2002) added that in this phase the analyst should make notes in the margins of the transcript texts about what is interesting. Third, Braun and Clarke (2006) stated that after the data is coded and collated, the researcher should searching for themes. It "involves sorting the different codes into potential themes, and collating all the relevant coded data extracts within the identified themes" (BRAUN; CLARKE, 2006, p. 19). In the fourth phase, the themes will be reviewed. The review requires reading the themes, codes and data, and analyzing if the themes truly represents the data. In these moments, subthemes can be useful to organize large and complex themes. The fifth phase involves naming and defining of the final themes, and the last phase is writing the report, describing in details the theme and their importance to respond to the research question(s) (BRAUN; CLARKE, 2006).

Based on the Patton's (2002) description about inductive analysis and Braun and Clarke (2006) emphases about thematic analysis, I accomplished the data analysis as follows:

- a) One meeting with Missy was read and I made comments in the margins about issues that we had discussed. My notes were general ideas about future possible codes.
- b) I coded the interesting data extracts with labels that I could connect with my understanding about the meaning.
- c) I read other data sources, mainly the field notes and transcripts of meetings with teachers from the same week as the researchers' meeting in analysis, and tried to understand if the codes made sense.
- d) I came back to the researchers' meeting and confirmed or changed the codes.

- e) I repeated this process with each researchers' meeting.
- f) I grouped the codes in subthemes.
- g) The subthemes were organized into themes that responded to the research questions.

The first analysis was intended to investigate how physical education teachers developed as professionals in a full-time school in Brazil. Thus, the themes of the first phase give a wide-ranging view about the teachers and the school, trying to demonstrate how the CPD of those teachers occurred. Some codes began to be noticed during this first phase (e.g. teachers' autonomous decisions), yet they became more frequent during the second phase. Because of that, these codes are part of the analysis of the second research phase. In the same sense, some codes that were frequent in the first two months, also appeared in the second phase. As slowly they became less dominant, they were used in the first phase analysis. There was not an exact point where the first phase finished, and the second phase started. The research did not stop or had a break between the two phases. It was ongoing and dynamic. This division presented here is just a didactic way to organize the data analysis.

During the second research phase, the codes produced from the meetings with Missy generated six subthemes that helped to respond to the second research question (outlined in table 11). The first three subthemes are related to the products of the PLC. The other three subthemes explain the process by which the PLC was developed. It is important to emphasize that the research incidents observed and analyzed are not an exclusive part of one theme or other. The themes are linked and sometimes one can explain the other. This analysis - process/product, was realized to focus on one theme each time, but in fact, it happened simultaneously.

The final meetings with Missy (November 2018 to January 2020) were used to organize and to review the themes that I had identified. While we discussed the subthemes and themes, we kept returning to other data sources to confirm what I had interpreted. Our intention was to demonstrate the process and product by which the newly-developed PLC supported those physical education teachers' CPD.

Table 10 - Themes that emerged from first phase meetings with the *critical friend*.

MEETINGS WITH MISSY	CODES	SUBTHEMES	THEMES
09/02	Preparing the beginning of the research.		
23/02	Different concerns of the teachers; context; disempowered teachers; who is each one?; facilitator's entrance; teachers' interaction; school purpose vs. school structure.	Understanding the school context	Theme 1: "Who are they?: Understanding the teachers' context and the hardships that they face"
02/03	Different concerns of the teachers; facilitator's entrance (offering help); who is each one?; context (here and now actions); facilitator's concerns; what is this PLC about?; relationship between facilitator and teachers; facilitator's strategy; teachers' essential needs.	Undaman din aha da ahan	
09/03	Different PE classes; facilitator's entrance (offering help); facilitator's strategy; Be calm! (facilitator's support); teachers were asking for CPD; facilitators' doubts.	Understanding the teachers	
15/03	Context (here and now actions); teachers were asking for CPD; Be calm! (facilitator's support); Different concerns of the teachers; what is this PLC about?; teachers' essential needs; facilitator's strategy; disempowered teachers (marginalized, alone).	Understanding the group development	Theme 2: "Transitions from lonely teachers, to a group, to a community: Changing interactions to survive"
23/03	Teachers were asking for CPD; facilitator's strategy (put teachers together); teachers' essential needs; teachers' autonomous decisions; first common teachers' concerns; thinking solutions together; facilitator's learning; Be calm! (facilitator's support); teachers' voice.	Understanding the group voice	332.110

Source: Author's source.

3.6 TRUSTWORTHINESS

Despite different perspectives regarding trustworthiness in qualitative research (PATTON, 2002; CHO; TRENT, 2006; SPARKES; SMITH, 2013), this research was based on the Cho and Trent (2006) holistic validity approach. This approach perceives validity as a process whereby the researcher's concerns, safeguards, and contradictions will be demonstrated and challenged continually. It aims to be inclusive, combining different criteria when it is relevant to the participants and researchers, while attending to the research purpose. In the authors' words, "Our emphasis is on both theory and practice. Trustworthiness criteria, when they advantage the research, researched, and production of the account, should by all means be utilized" (CHO; TRENT, 2006, p. 333). Through this perspective, validity aims not only to demonstrate the degree to which the research corresponded to the reality investigated (SPARKES; SMITH, 2013), but also to the transparency of the research process (CHO; TRENT, 2006).

To attend to the research questions of this study, different trustworthiness criteria were adopted: triangulation of the data sources; prolonged engagement; presence of the critical friend; and member checking. Triangulation of the data sources was intended to describe the phenomena through different perspectives, and the prolonged engagement from the researcher's immersion in the field, deeply described the participants' contexts (CHO; TRENT, 2006). The presence of the *critical friend* encouraged researcher reflexivity and challenged data interpretation (SMITH; MCGANNON, 2018). Member checking occurred when each week I gave back the community's previous reflection through drawn schematics and checked with them about the themes discussed. According to Smith and McGannon (2018), it can be a reflective process, to both the participants and researcher, generating insights and checking the existent contradictions.

3.7 RESEARCHER SUBJECTIVITY

Since science has pursued objectivity as a great value to research, the researchers are advised to control subjectivity since it is understood as being "biased, unreliable, and irrational" (PATTON, 2002, p. 574). However, echoing previous discussions, the dichotomy between what is objective and subjective does not imply the quality of the research, rather, the quality is addressed through the rigor in which the research is carried out (PATTON, 2002). Yet, the problems regarding the dichotomy between objective and subjective have been polemic.

Table 11 - Themes that emerged from second phase meetings with the *critical friend*.

MEETINGS WITH MISSY	CODES	SUBTHEMES	THEMES
02/05/2018	Disempowered teachers; what is the PLC about?; essential needs; democratic leader; Be calm!; understanding the school; who is each one? (newcomers and old-timers); put them together; autonomous decisions; facilitator's strategies; teachers' voice; relationship (facilitator and teachers).		
11/05/2018	Autonomous decisions; PE voice in the school; facilitator's strategies (workshop); teachers supported each other; democratic leader.	Teachers' needs	
18/05/2018	Autonomous decisions; PE voice in the school; democratic leader; teachers supported each other; facilitator's strategies (workshop); understanding teachers' needs; collective work; teachers recognized the challenges of the others.		
25/05/2018	Autonomous decisions; essential needs; democratic leader; PE voice in the school; teachers supported each other; group's Ups and Downs; teachers were building their practice; listening to teachers' voice.	Teachers' decisions	Theme 1: "The production that facilitated community development"
04/06/2018	Autonomous decisions; facilitator's strategies (workshops); barriers; teachers supported each other (excitement in learning together).	Teachers' voice	Theme 2: "Three critical elements led to a successful CPD through community development
14/06/2018	Teachers supported each other; teachers were building their practice; essential needs; autonomous decisions; PE voice in the school; having a leader; collective work and tasks; barriers.		
29/06/2018	PE voice in the school (recognition); autonomous decisions; having a leader; barriers; teachers supported each other (learning together); teachers were building their practice; essential needs; facilitator's feeling; group's Ups and Downs; listening to teachers' needs.	Teachers built their practice	
06/07/2018	Teachers' voice; democratic leader; teachers were building their practice; PE voice in the school (recognition); autonomous decisions; teachers supported each other; barriers; Be calm!	Teachers supported each other	
13/07/2018	Recognizing teachers' work; democratic leader.		
03/08/2018	Here and now (context); teachers were building their practice; autonomous decisions; democratic leader; facilitator's mistakes; PE voice in the school; barriers; group's Ups and Downs; facilitator's strategy.		
24/08/2018	Autonomous decisions; teachers were building their practice; here and now (context); barriers; teachers supported each other; group's workshop strategy.	Teachers had a democratic facilitator	

13/09/2018	Here and now (context); focusing on their practice; organizing themselves as a community; teachers supported each other; short but intense life of the community; empowerment.
02/11/2018	What is the PLC about?
09/11/2018	School decisions; acting for themselves and for the kids; feeling strong when they are in group; resilience; barriers; empowerment.
From 15/11/2018 to 14/01/2019	Organizing the data.

Source: Author's source.

Therefore, it is important to highlight that the qualitative research has as the main characteristic the intimate relationship between the researcher and the phenomenon investigated, and because of this, researcher subjectivity is a persistent issue (PATTON, 2002).

In this research, it is clear that all participants knew each other. I led a short-course in this school in 2016, when I acted as an external facilitator. In addition, the teachers and I were from the same small city in the countryside of Brazil. I studied at the same university as some of them and played handball with others. They were not my friends, but we knew each other previously. In some sense, we shared the same desire to be successful in this project.

Despite this, in an attempt to demonstrate the rigor in which the research process was conducted, I used all of the procedures described above to report the experience lived with the teachers. I kept going back and forth in all data I had collected, I talked with my *critical friend* weekly and with other subjects in the context, such as Principals, Pedagogical Coordinator, and other teachers. I also constantly came back with incidents for the teachers' analysis. I am aware about my attempt to report this experience mainly through teachers' perspectives, but I also believe that the special contribution of qualitative research is "learning through empathy" (PATTON, 2002, p. 51). In this process it is almost impossible to be far from the research findings or teachers' interpretation; we learned together during this project, and the research describes this learning process.

The following chapter demonstrates the results of the data analysis. To build this chapter, I used different data sources to demonstrate the same phenomena as seen by different perspectives. Yet, the main data source for the analysis was the meetings with Missy. We believe that through this depiction, the reader will understand the tensions and challenges in fostering a PLC as a strategy for physical education teachers' CPD, as well as the resilience and resistance of these teachers in their precarious work context.

4. RESULTS

The results were separated into two different sections. The first, section 4.1, aims at responding the first research question. It will describe the school context and teachers' development as professionals in the full-time school investigated. The second, section 4.2, aims at understanding how a professional learning community (PLC), or a community of practice (CoP), could support the continuing professional development (CPD) of the teachers investigated, which answer the second research question.

4.1 HOW DO PHYSICAL EDUCATION TEACHERS DEVELOP AS PROFESSIONALS IN A FULL-TIME SCHOOL IN BRAZIL?

The original intention of this research was to develop strategies with physical education teachers regarding their professional development. In different ways, we had a dream to create spaces for them recognizing themselves as empowered and reflective teachers. At the same time, we hoped that they could act as a group to improve their teaching and learning skills in a Brazilian full-time school.

After several meetings with Missy, we realized that before any of desired aims could be achieved it was important to recognize that the teachers have a rich life history as professionals and, primarily as individuals. It was necessary to understand how these teachers were accustomed to proceeding in their CPD. As a researcher from university, I could not just arrive at school and inform them of what would be good (or not) for these teachers functioning in this reality. Before offering to help and proposing some action, it was essential to understand what their reality was. It was crucial to listen to the teachers' needs and recognize the challenges they faced every day at school.

The first part of the results will demonstrate the processes that occurred while I was living with the teachers on site all day at the school during the first research period. This period refers to one month of observation and one additional month when I started to conduct small interventions with the teachers. For the duration of this period, I observed teachers' interactions with each other, with administration staff, and with teachers outside of physical education. I watched their behavior during the classes and engaged with the school problems in short, I became part of their daily routine. I also started to offer help and got them to work together on small tasks.

It was necessary to have this experience to understand the school and the teachers individually. For example, I needed to first understand the situation at the school, the teachers' behavior and their teaching methods and concerns. And, secondly, I needed to understand how the physical education teachers operated as a group in school. How did the physical education teachers interact as a group in that full-time school? Or, to ask a more fundamental question, were they actually a group? It was necessary to examine the interaction that went on between each other.

The results generated from my observations, Field notes and conversations are separated into two large themes. The first theme addresses the school and teachers in context. I made an effort to understand who the teachers were and the difficult school situation that they faced. The second theme looks deeply at the teachers as a group and explores the behavior and expectations of these individuals at school.

There is the belief that explaining the situation of the teachers and the school will give the reader an understanding of the teachers' difficult circumstances. In addition, it provides tools for the researcher to operate from. It was crucial to take action and to listen to the teachers and their needs and within the context of their reality.

4.1.1 Theme 1: "Who are they?: Understanding the teachers' context and the hardships that they face.

The first step towards recognizing how physical education teachers develop as professionals was to understand the context in which they worked. There was no way to comprehend their development without identifying their work routine, their teaching context, and their concerns and actions. First, I describe the school situation that involves a poor area of social vulnerability where the school was located, the disorganized state that the school found itself in because of the lack of administrative support, the shortage of teachers, and the almost non-existent teaching schedule in the beginning of the academic year. Secondly, I illustrate how the teachers had different concerns and fears, what their strategies were to survive this difficult environment and the lack of empowerment that isolated them from each other.

4.1.1.1 Here and now: the context of Brazilian full-time school

Unfortunately, it seems the Brazilian people have grown accustomed to their hard lives. The teachers in schools and the other individuals who live in this city and work in this school seemed to be resigned to the poor conditions in which children and their families were living. When someone who is not part of that environment arrives there, each aspect of the situation shocks them and causes them to reflect on the efficiency of the teaching and learning process they encounter. For that reason, sharing this reality deeply with the reader is an important part of this work. It helps the reader to understand the social vulnerability that children and teachers faced every day, the confusing situation of schools, the almost non-existent support that the administrative staff received and, because of that, the poor support that could be offered to the teachers and the effect that would have on the teachers' classes.

"I am very sad about the students": the social vulnerability surrounding the school.

The school is located in an area of social vulnerability. During the research period, I always went to school by bus. The journey from the city center to the school lasted almost 40 minutes. The bus stop was in an old neighborhood near the school and I had to climb two hills to arrive at the school. On the way I saw many disadvantaged houses. There were iron grids on the windows and the walls were dirty. The houses were very small and many times, I saw the people sitting outside because it was too hot to stay inside the house. Among these people were old men and women talking in front of their homes and little shops (outlined in figures 11 and 12). Fortunately, there were no children on the street as they were in kindergarten or other schools. One day I did see a group of three teenagers. They were smoking marijuana and stared at me while I walked by. The only thing I could do was to lower my head and continue on my way. When I arrived at the school street, I saw a different type of neighborhood (outlined in figures 13 and 14). It occupied a big empty space with few houses. These houses were in better condition than the others. They had garages, big windows, and the walls were painted. It seemed the people who lived there were afraid of the violence. There were many electric fences and different security systems.

Figure 11 - Picture of the neighborhood of school. Bus stop street



Source: Artifacts.

Figure 12 - Picture of the neighborhood of school. Bus stop street.



Source: Artifacts.

Figure 13 - Picture of the neighborhood of school. New street in front of school.



Source: Artifacts.



Figure 14 - Picture of the neighborhood of school. New street beside the school.

Source: Artifacts.

The school was in the middle of these two realities. It seems that, in some way, the school was changing the reality of that space. Until the school was built, the main street that gave access to the school from the poorer neighborhoods was not paved, and the children faced a difficult task to travel to school. At present, the street is big, paved, but almost deserted, surrounded by high bushes on both sides.

Figure 15 - Picture of the neighborhood of school. Street that gives access from the bus stop to school.



Source: Artifacts.

On my first day, I arrived with the children and I noticed the students' poor conditions. Riding their old bikes, they arrived at school alone or with their brothers and sisters. Another small group arrived by private bus, but it was as damaged as the students' bikes. Only few of them wore the school uniform. Many were wearing shorts and flip-flops and carrying just one notebook or an old backpack.

My work was trying to explain these conditions to my *critical friend* Missy. Even though I was born in the same city as this school, even I was not familiar with this reality. At this moment, I thought the best way to handle the situation would be to take pictures and send them to her. When she saw them, we started to discuss how teachers could teach under these conditions. This thought accompanied us throughout the analysis process.

Missy: I am looking at your journey... the things you sent me, I am fascinated! Absolutely fascinated! It is such a different vision of school, in many senses, that I am accustomed to. Because was build the Olympics... you have beautiful facilities, the swimming pool is gorgeous, the track is gorgeous. But then I looked at the school... you have fences, and it is dirty, and do you know what destroyed me? Seeing the children barefoot.

Luiza: I guessed you would see it that way.

Missy: You get in a very poor school, poor area. I am looking at the first picture and... "oh my god, this child is barefoot" and then I look the picture in the cafeteria "there are a lot of children barefoot". So it is a very different culture, than when you said they build the Olympics and they want to make athletes, I am like... [amazed].

Luiza: It is difficult to understand, do you know?

Missy: And the mountain is gorgeous. It is very interesting what they want for children and those ... don't they have a gymnasium?

Luiza: No, they don't have one.

Missy: Everything is outside. (Researchers' meeting 1)

The teachers described moments that helped us better understand the students' social vulnerability. These teachers were aware of the difficult financial circumstances under which these children lived and, at the same time, they were trying to do their best to provide the opportunity for the youth to have the greatest possible physical education experience at school.

One day a father came to me and said "Teacher, my daughter told me you asked her to buy swimming clothes, and the soccer teacher asked for appropriate shoes also and explained it is not cool to play soccer barefoot. But this month I used the "Family Allowance" [social welfare program of the Brazilian Government] to buy educational materials. I have three kids, so, I do not know when I will have this money to buy her swimming clothes". So, look at the kind of person I am working for. I cannot make a lot of rules. So I said for students: "For people who have the financial resources to buy swimming clothes, it is fine. For those who do not, be calm, you will be able to participate in the same way". (André)

At other times, the vulnerability was also reflected in the students' susceptibility to negative influences. The teachers understood the students' poor situations, providing many examples of how the kids were involved with drugs, violence and difficult family circumstances. It was difficult for the teachers, working with these children, to avoid becoming involved with the children's problems. We know that the teaching and learning process have an emotional aspect, and in this situation, the teachers were overwhelmed by the students' difficult social environment.

Sincerely, I am very sad about the students. They have a big life experience, life history, but... We have many students who died, who are involved with drugs. So, I really do not want these students to be involved with wrong things. We have students who are in prison. (Simone)

One day during the first semester, we had a workshop with a university lecturer. Afterwards, she sent me a letter describing her perceptions of the school and the youth. An excerpt from this letter reveals the strategies children used to face their challenges. The children had basic needs that came ahead of their desire to learn. They had to survive their troublesome lives.

Little by little the children and young people arrived at school. They came barefoot, smiling, and climbing the hills and the school walls. In their backpack, they seemed to bring the hope of freedom. Suddenly, a boy jumped a wall that was twice his size to eat and talk to his friends of another class – I loved it.

The police just arrived in the school and the school director allowed them to enter in the physical education field. Some students ran out of school, fleeing from the police. [...]. The teachers explained that the students who had fled were smoking marijuana.

In addition to this, the teachers' social conditions were very similar to the students. Either the teachers were contracted on an hourly basis, or they were permanent teachers who worked part-time (22.30 hours) per week, or full-time (40 hours) per week, after successfully completing a Municipal Education Office test. If the teacher was contracted on an hourly basis then s/he would receive their salary according to the number of classes taught. It is a constant struggle get a job in Brazil and this directly impacts the operation of the school. Many teachers need to work in more than one school to supplement their earnings. This was the case for Pedro, Vitor, Rodrigo and Jair. Jair explained his point of view, "if I compare... you do know, for those who have to survive, for example, I always was a survivor. I did not teach in private places because of the salary (Jair).

Some additional information might help to understand the teachers' reality in Brazil. The Brazilian federal government set the minimum teacher salary at R\$ 2.557,74 (Brazilian currency, or around US\$ 678) per 40 hours worked in public schools. Yet in Governador Valadares, the teachers receive less than this amount. The minimum salary of a classroom teacher in this city is around R\$ 1.917,00 (around US\$ 511) per 40 hours worked (Municipal Law n.170) (GOVERNADOR VALADARES, 2014b). To better illustrate this situation, a comparison between the minimum teacher salary in this area and the general minimum salary in Brazil which is set at R\$ 998.00 per 44 hours each week (around US\$ 216) reveals that the teacher's salary is just a little more than twice the Brazilian minimum salary.

"The school is a mess": how can one work like that?

The second code resulting from the data analysis revealed how the students and teachers' social vulnerable conditions, combined with a confused educational situation in Governador Valadares city made the organization of the school difficult. It was hard to establish a daily routine. Several problems surrounded the school and as consequence, affected the teaching and learning process. At the beginning of the academic year, there was a lack of structure, shortage of teachers, and a deficient teaching schedule. On several occasions, the students had to leave school early or simply go to the soccer field and stay there with physical education teachers:

Today the 11-14 years old students left early because there were no teachers. The Vice-principal is trying to organize the school. But it is very difficult. One physical education teacher is helping her. He stayed in front of the school gate and he helped to organize who was allowed to go away and who was not, because of course, all the students wanted to go to home. One student with autism tried to run out of the school. The teacher caught him and the student hit and bit him. The teacher seemed to be very nervous and said "The mothers know that we do not have teachers for these kids yet, and even knowing that, they bring the kids to the school". The teachers have assumed many roles inside the school. They are trying to help, but the situation is chaotic. (Field notes 6)

These situations often resulted in fights and teachers had to intervene in these cases. They were always telling stories about some fight, or some problematic situation that occurred during the break or lunchtime. The teachers' room was not a place where teachers could relax and speak about pleasant things. Many times, they were required to solve problems with parents, between students, or even between teachers themselves:

Today one teacher quickly crossed my path and, he was screaming and scolding. He started to talk about one student who accused him of sexual misconduct. The girl was telling everyone that the teacher was groping girls in the school. The teacher was very angry and started to scream at the student. All the other students saw the scene and started to scream together. All the teachers ran there to help him.

Another teacher told me "The situation is intolerable". He said that everyone is expecting something bad to happen. The children are all together at the field soccer while there are just four teachers from the other areas inside the rooms. (Field notes 6)

This disorganization of the school leads to teaching staff being angry, exhausted, and resentful of the other staff at the school. I noticed that the teachers were affected by this constantly frustrating school reality. They became resigned easily, and unsatisfied and impatient with different situations. Their feelings became evident through different behaviors.

Some of them decided not pay attention to the school problems, others argued all time with administrative staff, and others seemed to be sick regularly and missed the school day:

We went to the meeting room. Simone arrived late, she was very tired and she seemed to want to give up on the profession. I am very worried. Pedro was very angry, because the administrative staff changed his timetable. There is a rule in the municipal educational office that said: mathematics and Portuguese classes have to be in the beginning of the school day. About that, Vitor said: why do not they create one school just for math and Portuguese? Is it the only thing that matters for them? So, do that!" (Field notes 25)

Interestingly enough, these precarious conditions were not new for teachers. They had faced similar problems for many years. Nevertheless, these issues continued to impact their daily professional routine. Pedro indicated in fact that in the previous year they faced similar conditions, "It was a mess, we were here just trying to survive. I am afraid for this year. We are very, very close to being in the same situation" and he described what happened at school as a result, "teachers do not teach, they do not want the kids in their classes. [...] So, you have to have your mind in good shape to support it" (Pedro). André unmasked the ravaged situation highlighting teachers' feelings:

Since I was a student, school was always like that. Without a functioning structure and enough money, it is a struggle. So, whoever is here, is here because they love it. It is very hard. But some days you are tired and think: "I give my life for this and I did not see any improvement, always it is the same thing!" [...] Always we have these difficulties, the structural issues, you are seeing here. The swimming pools pumps are broken. Every year it is a long process to buy things, because we do not have enough money to buy materials, cleaning products. This year was worse because in 2017 finished the way of hiring staff changed. Then, almost all staff were fired. The man who cleaned the swimming pool too. The water was rotten. We thought about all kinds of solutions, but we had to empty the pool. We called some students to help us, and we did it and cleaned up the pool. Just like that, the things work here. (André)

Even in this poor condition and disorganized scenario the teachers were blamed by the society, which constantly demanded better student results. Jair's reflection demonstrated that the hard reality of the schools forces the teachers, who already have a low salary, to buy materials and use almost impossible strategies to get the students' attention. Furthermore, Jair also reveals how the teachers are criticized by the other people who have no experience teaching. Or, at other times, the teachers blame themselves for not achieving the expected results of learning:

I heard some very cool speeches in the university about the "rola bola" teachers. When I started to work in school, I changed my mind. I discovered that I would go to one night class in

²⁰ "Rola bola" teacher is a very common expression in Brazil. At the university, the lecturers will repeatedly encourage their students not to be a Rola Bola physical education teacher. Literally, the

a poor neighborhood, and I had to buy the balls. The students did not miss my classes in a Friday night. So, I started to ask myself: What is a "rola bola" professional? Or what is a professional who buys him or herself the materials to give the maximum opportunity to their students who are poor kids and do not have anything in their lives? (Jair)

Meanwhile, there were other problems they could not solve alone. And the scenario showed they did not have enough support to do their work. As if in a chain reaction, the administrative staff did not have enough support from the Municipal Education Office. The data reveal that all these episodes led to lessons without planning, stressed teachers, and a high turnover rate of professionals. The absence of support that ran concurrent to of the lack of structure, shortage of teachers, and deficient timetable, contributed to the reinforcement of the deplorable situation at the school. Besides that, teachers declared how this absence of support affected their work:

[Commenting on CPD]. I have never had an experience like this before. You live here with us, you saw. This morning we arrived at 7am and we are going to stay here until 11am. Nobody came here until now to talk even one minute with us. So, what did I do? I went to do the work that another staff have to do, but it is not done yet. I am not here to just sit down and wait. Wait for what? Will the money fall from the sky? I cannot wait. (Rodrigo)

Even though teachers wanted to do something without someone else asking or ordering them, many times they could not act because there were things they could not control themselves. They depended on the administrative staff. During the research period, I noticed, little by little, the teachers understood they could manage only their classes, which is one small piece of their work. But even that was impacted by the entire organization of the educational system. Jair declared, "I am very lost. When I say lost what I mean is: I do not know how I have to do my lessons plans, how the assessment works, [...] we did not have meetings" (Jair).

There were many times that teachers were completely abandoned. The school year started on February 19th, but the physical education teachers meeting started at the end of the March. On several meeting days, I took notes about what the Pedagogical Coordinator said, "she did not come to the meeting because she had other priorities. Then, the teachers understood she does not even perceive them as an important part of the school" (Field notes 22).

Besides being ignored by the administrative staff the teachers felt pressured by them. The teachers were aware that at some point they would be blamed for the school's problems. When they were together, they talked about statements made by some of the administrative

expression means "roll out the ball", or the teacher who just throws the ball to their students and leaves them alone to play, instead of teaching.

staff. Teachers told stories about how the administrative staff complained to them about children who were at soccer field walking alone or students who were on the roof of the buildings dancing or playing. Sometimes, they claimed that these students were not from their classes, other time they argued with the children. At the end they realized, it was too difficult for them to teach their classes and take care of these students at the same time:

Today the Pedagogical Coordinator went to the sport facilities to understand what had happened with some of the kids. Pedro was very angry and said: "She never came here to help us, when she comes is just to pressure us". After he said: "The school will deteriorate again. They need to fix the gate, we need someone powerful at the gate. The school is so big". He was saying about the children who run away from the other classes and came to the sport facilities. And later he said: "I am discouraged!" (Field notes 26)

The lack of support was also evident for personnel at higher levels. Over time, the administrative staff did not have support from Municipal Education Office either. The Principal, the Vice-principal, the administrative secretary, were discouraged in the same way as the teachers. Nobody knew what they could do to organize the school and the burden seemed to be very heavy for them:

I was in a meeting with the Principal, when one classroom teacher arrived and started to cry. She said: "We want to solve the education problem. We love what we are doing here, but the Municipal Education Office does not support us. I am stressed. I am crying because I love the kids and I want the best for them. But not like this, without support, with inexperienced staff. We are not able to do it!" And the Principal completed the statement: "We don't have support for our work. I run away from the office because I might kill someone." (Field notes 2)

Through the little details I could perceive that the administrative staff was lost. They were trying to find a way to do their job. Yet, at the same time, just like the teachers, they felt alone. The Pedagogic Coordinator was one example. She had never previously worked in a big school like *Clarice Lispector*, and she constantly had to ask what her function there was. She was learning her job and simultaneously was trying to understand what that job was:

Today I had a meeting with the Pedagogical Coordinator. She is a young girl. She arrived in the school yesterday. She did not have any experience with this kind of school. She had always worked in kindergarten schools. She did not understand the purpose of this school, or what the purpose of physical education was. But she seemed very open to learn, and she wanted to be one of the facilitators of the process. She explained to me that her job was just to inform the teachers about documents. She wanted to understand what was happening here. She told me that the orientation she received from the Municipal Education Office was vague. She did not know what she had to do. (Field notes 1)

The data reveals institutional instability. It was caused by a confused hiring process that changed with the years. There was constant changing of the administrative staff and teachers in the schools in socially vulnerable areas. The beginning of the year was disorganized and delayed which impacted the teachers and their work.

Finding a good school to work in, in this city can be a real battle. The hiring process consists of a points system based on various categories: (a) the number of courses or qualifications the teachers completed, for example, a Master's degree or small workshops (b) number of days worked in schools (c) teachers assessment, for example, if the teacher missed some work days or had any problem in the school. The person who has the most points is the first to be able to choose which school they want to work in (GOVERNADOR VALADARES, 2017).

As a regular consequence, schools that were in risky situations or based in an area of social vulnerability receive the professionals who had less experience, or who were badly assessed in other schools. This was the case at the *Clarice Lispector* School, "then, he [Pedro] explained to me that he got a job at this school because nobody wanted to come here. The school is in a poor neighborhood, far from the city center" (Field notes 1).

In this way, the struggle becomes cyclical. The school has difficulty to improve their circumstances because of several problematic conditions, and they receive non-qualified professionals, which, as a consequence, served to perpetuate the educational *status quo* at the poorer schools. Of course, there were excellent professionals at this school that chose it for different reasons, for example, that the school was near their homes or they liked the school's mission etc. But the low number of permanent teachers is an example of how the teachers from this city did not perceive this institution as a good place to work. It is because the permanent teachers, generally chose the best schools to work in where they could stay until their retirement.

Then the Municipal Resolution n.09 of the 17th November 2017 (GOVERNADOR VALADARES, 2017) put into effect by the Municipal Education Office changed the point system. They were trying to reorganize the system to give more weight to teachers who had degrees or had completed a higher number of courses, but the outcome of this resolution was that the point difference had become very unequal. Because of that, if a teacher had completed two courses (honors degree, for example) of 360 hours, then they will get 3.0 points in the system. Yet, if the teacher worked 20 years in schools then s/he would get just 2.0 points in the system. This change resulted in large confusion during the hiring process. Teachers who have worked more than 10 years at the same school were in a worse position than other teachers who

just attended one course, and these veteran teachers may have had to move to another school. As a result, many teachers changed their jobs or even lost them.

Sara, one physical education teacher who was in this group at the beginning of the academic year, was an example of this. She claimed that the municipal schools were very disorganized, so she left the school to work on a state school project. Before she left, she admitted that she was only in the school waiting until the State Education Office called her to assume her new position. As she expected, in April she moved to another school and the children did not have classes for two weeks, until another physical education teacher could be contracted.

In addition, the Municipal Education Office was not able to organize the hiring process before the beginning of the academic year. Consequently, the school year that should have started on the 5th of February, started on the 19th of that month. Because of this delay, during this month the *Clarice Lispector* School had a lack of teachers, which disrupted the school organization. Jair pointed out this problem, "the Municipal Education Office did this hiring process in this way this year. [...]. Until now, the school did not organize our schedule. And this disturbs teachers' work too" (Jair).

Pedro also experienced all these changes. He had been working at *Clarice Lispector* School for almost four years. He revealed how this hiring process and the school's poor conditions affected the school management. The teachers were accustomed to moving from one school to another, but at the same time, they did not have a reference point from which to do their job because each administrative change resulted in another concept of education, which altered the management policy of the school, causing different tasks to be asked of the teachers:

I think it is the problem of this school. The administrative staff changes all the time. There were four Principals in four years. I do not know how many Vice-principals worked here. And the Pedagogical Coordinators... I really cannot remember. I think, they were more than ten. This is... I am sure... the bigger problem here. (Pedro)

The administrative staff were also overwhelmed by this situation, especially the Principal. He used to be a physical education teacher in this school, but when the new Mayor won the elections the previous Principal moved from the Municipal Education Office and he was invited to be the Principal. He did not have experience in managing schools but he was open to learning. After assuming the job position, he started to face many challenges. Several times, he said that he would not finish the academic year as Principal. He left and came back to the school several times during the observation period and he also seemed tired and discouraged:

Today we received news about the Principal. He left from school for a while. He is sick with pneumonia. Now, the oldest staff member (Salen) of the school will come back and be the Principal for a while. Some teachers liked this news, they said she is very discipline-focused and that the school needed this. Other teachers were whispering that the Principal will not come back. I really believe this could be true. Because he said to me last week, he does not believe in the school any more, or the whole education system. Therefore, he thinks it is better to leave the school. (Field notes 23)

Yet despite this school's messy situation, the teachers always seem to be aware of their role. They wanted to work, and they were very concerned about what they could do to realize it. Missy comprehended the reasons for it, "because the school is unsettled. [...]Rodrigo wants to teach, but he can't teach, they feel stressed by the mess of the school, they feel like they can't do their job for a lot of reasons" (Researchers' meeting 2):

Luiza: They want to do something to improve the school.

Missy: Yes, yes, yes. And you can help them to do that now.

And today was very good...

Luiza: Yes, very good. The teachers, for example, Rodrigo and André, the swimming teachers, they made the cleaning products to clean the swimming pool themselves, and put the children to work cleaning too.

So now they already have one pool cleaned, and they said "Okay, now we are going to start our classes", "We are not going to expect anyone else, we did it, and now we have our swimming pool, and we have the swimming classes". They want to do it, Missy. (Researchers' meeting 4)

Over time, the teachers acted regardless of the situation. They started to understand that they will have to act by themselves to solve the little problems. For whatever yet unknown reason, physical education teaching and the children were more important than the school's issues. Vitor and Pedro had saved several soccer balls at the end of the last year for the school soccer games. Then they took these materials and started to use it in their classes. Simone borrowed some athletic equipment from one University teacher-training project which occurred after the school day ends. André and Rodrigo cleaned the pool with students.

During the meetings with Missy all these scenarios were summarized and reflected upon. Understanding the school's problems, although scary, was an important process. The task was recognizing the difficult situation of the teachers and acting with them to improve it. Being part of their environment, sharing their challenges, praising their little attempts, and putting them together were all small but necessary first steps:

Missy: So the Principal took a leave of absence? What do you mean? He left and afterwards he planned to come back? And then the vice-director left the post. Which one is the Pedagogical Coordinator?

Luiza: The Pedagogical Coordinator continues with us.

Missy: Okay. It sounds like the school is a mess.

Luiza: Continuing to be a mess Missy, and I don't know what to do.

Missy: I think Luiza, one of the things you've got to recognize with this group is it is very difficult to teach and teach well when the school is a mess. It is very, very difficult, everything else. When the world is falling apart around you. It is very difficult to keep your focus. And I think recognizing that with the teachers, if you can do that... Let them understand, if you may have not done it already, how you understand what mess the school was in. And the teaching in that context is very very difficult. (Researchers' meeting 6)

"It is about the individual pleasure in doing a good job": Different classes, different conceptions of education

The teachers arrived at this school at different times. But, most of them were there since the beginning. In 2014, Pedro, Jair, Simone and Vitor did the training course which decided which teachers would work at the *Centro de Esportes* in *Clarice Lispector* School. André, Vitor and Ronaldo were permanent teachers in other municipal schools. When the project started, they asked the municipal office to transfer them to *Clarice Lispector*.

As described in chapter 3, the Mining Company built the school and provided all the resources at the beginning. The company also proposed this training course to prepare teachers to work with sport training there. The teachers who attended the course believed the purpose of the school would be sports training. In one meeting, Simone remembered what the teachers had initially been told about the school's goals. Yet, "this initial purpose had never been achieved. We never worked with sport training" (Pedro) (Teachers' meeting 2).

Even though physical education teachers were aware that this "fantasy purpose" had never been achieved, in different ways, they continued to believe in it, "even though we had been abandoning this purpose, we continued with it. Because we did something, such as championship all the time" (Pedro) (Teachers' meeting 2). When the school Principal was changed in August of 2015, the new Principal started to ask questions about a problem: is it a school with the sports facility, or is it a sports facility which has a school? Then, they realized that they were not coaches working in a club, but actually teachers working in school. From that point on, they started to think about the pedagogical portions of their teaching, as Pedro continued explaining, "our initial course did not have anything about sport pedagogy, anything about children, anything about school daily routine. Nothing" (Teachers' meeting 2).

This Principal left the school in January 2017, in the middle of the pedagogic discussion about the school identity. And, although teachers wanted to do something to continue to teach, throughout their teaching they appeared to be lost. Previously, in the Mining Company project, they had someone to tell them what to do or give them some belief they could hold on to.

However, after the departure of the Principal, who had been supporting the teachers while the identity of the school was changing, they were at school alone, each one by his/herself, trying to guess what should be taught, and embarrassed for revealing that they did not know what they had to teach.

Because of this, each teacher used to teach in different ways. They were trying to do what they thought was best to achieve the purpose that they believed in individually. Besides that, the quality of their teaching varied significantly because of this lack of purpose, the messy situation of the school, and bad working conditions they faced. There were days where they taught excellent lessons, but on others, some of them just stayed seated, looking at their mobile phones while the children were playing alone.

I observed many physical education classes and I noticed these different ways of teaching. Vitor and Pedro believed that their purpose was education through sport, and they wanted to develop players who understood the games. Vitor is an experienced physical education teacher. He organized the contents throughout the semester and used different strategies to teach them. He also was aware of content development. He observed the children and gave them feedback.

Pedro used to teach soccer as a specific sport class, but in 2017, as well as soccer, he started to teach other field sports, such as: Frisbee, baseball, etc. He had a lot of control over his classes. Almost all of the students participated during the lessons and truly liked them. His lessons had one clear purpose, and the strategy used during the classes matched it. Pedro was also aware of the importance of including every student, especially the girls:

Pedro saw something and he went near the kids who were playing soccer. He asked why the girls were not playing. It seems a normal rule there. Girls play with boys. So, Pedro stopped the game and the girls started to play. Nobody complained about that. (Field notes 1)

Pedro and Vitor seem to be conscious about their teaching purpose. But, because they conducted their teaching in way that promoted deep learning (taking into account the down days), they were very strict with kids. Both their teaching method and their agreements with the children were directive. Vitor was stricter with the children and sometimes he used to scream at them.

Missy helped me to analyze this point. In this school's difficult situation, the teachers believed that they would help children if they could control them, or teach them how to behave during their class and respect the teacher in a directive way. Vitor said someday that he would help, "the classroom teacher to whip the kids into shape" (Vitor's class, Field notes 16):

Missy: Vitor is angry, but he is always angry with kids... but you said his physical education class is amazing. Why did you say 'amazing'? What does he do?

Luiza: I think... Vitor and Pedro classes have a beginning, have a purpose, have a ... they know what they teach, and they are worried about the students learning, about its content, about their classes. They are very engaged during the classes. Vitor asked the kids "What do you think about it, or try again..."

Missy: Yes, but you said angry with kids...

Luiza: Sometimes he is very... he is tough with the kids... he is very angry.

Missy: He expects things of them. He wants them to learn. And that is how he shows it.

Luiza: Yes, and how he takes the control.

Missy: Yes, but what I understand is, if these kids come from undisciplined lives, he sees that he needs to help them learn. (Researchers' meeting 6)

Jair adopted another strategy, "he told me that teachers had to go slowly and be patient during their teaching. He showed that he was gradually getting closer to the students and achieving his goals" (Field notes 24). In his classes, during the entire first semester Jair taught volleyball. He used to save a ball and he did not obligate children to participate in his class. If the students did not want to attend the class, Jair allowed them to do something else, for example, playing soccer or sitting in the shadows. He also tried to negotiate with the students. He suggested that during the first 50 minutes students play the volleyball, and for the other 50 minutes Jair let them play what they desired. It was a known strategy of all the teachers.

I noticed Jair's classes were based on playing games. Although he had used one different but very traditional strategy on the first observation day, on the other days he proposed one adapted volleyball game. At this first class, he told me, "the equipment disappeared and was stolen, and because of that he had just one ball left. He had the students form a line, then he asked them to do a volleyball forearm pass or a set pass" (Jair's class, Field notes 9). And, on the other days, Jair always organized one game in which boys and girls played volleyball together while he stood on the sidelines of the net refereeing the game, giving some feedback to students and teaching volleyball rules, for example player rotation rules.

Simone believed the purpose of her classes was to teach athletic motor skills. She also focused on doing exercises to improve health. She was concerned whether students were doing the exercises. For example, one day she asked children to run three times around the athletic track, but this activity did not match with the purpose of the class. She did not use games, competition or other strategies during her classes, she only asked students to get in line and accomplish the task. During the year Simone changed her classes in a positive way, but these classes continued to be very different from the other physical education classes. Besides teaching how to perform athletic skills, she also taught about the content. For example, one day

she invited me to observe a class where she would show videos to the students about athletics competitions and discussed it with them. I have never observed any lesson like this in the school, and it seemed that the other teachers did not care about "learning about the sport". As a result of her teaching style, Simone was refining her sport conception alone, but happy with her individual results:

Simone was teaching Shot Put for young children, like yesterday. She had been improving her explanations and she had demonstrated that the purpose of the classes was matching them with the suggested activities. She also improved the content development. After class, she came up to me and told me that she was very happy because she could realize everything she had planned. (Field notes 27)

The swimming classes were the only classes where teachers could work in pairs. When the children arrived at swimming pool they were separated into beginners and advanced swimmers. André taught the advanced students who attended their classes in the bigger pool. Rodrigo took care of the beginner students, who were just starting to learn swimming, at the smaller pool. They combined their sport conception among themselves but diverged from the other physical education teachers.

The swimming classes were about "knowing how to swim". I observed, "today one child said to another 'Look, he is not moving his leg correctly'. So the kids were able to learn more about the content and not only doing the activities, but the teachers did not perceive it" (Field notes 23). The teachers taught with two purposes in mind, first, to find some sport talent for the swimming team, and secondly, teaching children the swimming skills. André and Rodrigo demonstrated knowledge about the content. They were confident in their statements and feedback to students. They always did assessments of the students' progress. They were aware of which student could go to the bigger swimming pool and which could not.

Although André was more open to explaining to the students the process of learning swimming than Rodrigo, who has a directive way to speak with children, they did not listen to the students' voices. Many times students made statements about the classes, or even asked questions about being part of the beginner or advanced group, but the teachers did not seem to care about it. And it did not change the children's opinions about the swimming classes, they loved it.

During the year, the teachers became aware of some changes they could make in their lesson plans. Rodrigo revealed that they started to put students to work in pairs, because he started to believe the children could understand the learning process. He said, "the students

automatically will absorb the movement sequence required to perform the task" (Teachers' meeting 15).

Throughout this description, we noticed that the teachers continued their work. Even without knowing for what and why they were teaching, teachers wanted to make progress. They believed individually in what each one was trying to do there. At the meeting Pedro said, "anyone here could disagree, but it is about the individual pleasure in doing good job. And, at the end of the class, every student liked it and you think 'Oh, today I won my day. Today everything was good!'" (Teachers' meeting 17).

Not surprisingly, teachers in this school were busy. The data indicated that the teachers were always overwhelmed and suffocated by the amount of work that they were pressured to do. Besides the classes, there were always things to be done "here and now". When I started to research FTS in Brazil, I believed that this kind of school could be a solution to professional development problems. But, even the initial project at FTS, which was aimed at having teachers working 40 hours just in one school and allowing teacher meetings to be timetabled during their work routine, was not enough to realize the teachers' CPD.

Of course, I will continue to argue in favor of FTS, because I believe in this way of school organization, the concept of education it contains and the opportunities it provides to the students. It can be the first step towards education change in Brazil. But, merely providing time and space to professional development is not enough to achieve it:

I noticed the teachers were just surviving in the school. Many things were happening and they didn't have enough time to think about their own professional development. Even in a school where they are given the opportunity to be together, getting to meetings is very hard for them. They cannot stop and think, for example, how they can improve their lessons. Every day a lot of things emerge and they have to abandon everything to solve that immediate problem. (Field notes 25)

In this way, professional development was a small forgotten piece of their daily routine. Almost a dream far separated from their reality. They had to solve problems "here and now" while trying to survive this difficult routine. As a researcher, it was important to recognize this routine as a hard task for them and find a way to continue helping them:

Luiza: I don't know, really. I think teachers have many things to do, and these things do not allow them to think in their practice, in their classes. So I am very afraid for them, but they do want to build the curriculum. They told me "Luiza, we want to be involved in this task, we want to do this curriculum for this school", but until now... they are only doing other things. I have little space in meetings to discuss curriculum with them.

Missy: Luiza, I think it is all good. And I think your work, from listening to you and I looking at your transcript in your document is fine. And I think André is correct, they have other things that may be more important than curriculum, and I think for your project, and I am not saying

"do not do the curriculum", but this might be a finding of your project, just getting them to work together to solve their own problems, or to learn to solve their own problems, is a wonderful finding. And if you do not get as far as curriculum, that is okay! That is a big, big... I would say in English, enormous task, it is a big thing to do. And I might have dreams of doing that, but I have more basic needs. Then the basic needs have to come first. (Researchers' meeting 6)

4.1.1.2 "I am here alone": stories of disempowerment

In the middle of all these issues, I had a mission to create spaces for teachers' development. But to achieve this, besides understanding the school, I had to understand the teachers individually. What were the implications of that difficult context described previously? When physical education teachers were observed more closely, why do they seem weak, discouraged, and isolated from the school?

As described in the methodology chapter, the nine physical education teachers had different characteristics. These differences were in relation to the time they spent at school, ages of the participants, diverse job positions, and how these teachers participated in school routines. This section demonstrates that these differences also appeared when they exposed their concerns and fears. They revealed how they felt about the school and what they were thinking about their own lives.

They also created different behavioral strategies to live in that environment. They were trying to deal with a combination of a difficult routine in a socially vulnerable context and their personal dreams and projects. Some teachers acted in a healthy way, they were trying to keep the "mind in good shape" as Pedro said. Others, with a hopeful attitude, were trying to help the school, thinking of solutions, planning events and creative classes.

But during this observation and while I tried starting some actions with them, I realized that they were disempowered. They did not trust and believe in anyone else. They also had bad feelings about the school administration, their colleagues, and the Municipal Education Office. The physical education teachers did not feel their work was recognized by the people in school, or even by wider society. Although, they used some strategies to survive that hardship routine, most of the time they just 'twiddled their thumbs' and expected someone to tell them what they needed to do.

This illustrates how the teachers were silenced. After long time of never being listened to, they did not realize that they could do something to improve their hard lives, by acting on their own. They were separated from each other and paralyzed in that difficult situation. They did not perceive the power hidden in their collective work.

"What can I do?": individual concerns and strategies

When the observation period started, I went to school and only listened. I listened to the physical education teachers, other teachers in school, the administrative staff, and the students. I also listened to the school movement, space and silence. But I already knew the school because in 2016 I went there to teach a short series of lectures and workshops. I knew the school was figuratively separated into two different spaces and conceptions: the *Centro de Esportes* and the "*Clarice Lispector* School", which could be divided into physical education teachers' beliefs and classroom teachers' beliefs.

What I did not know at the beginning but was able to perceive throughout the process of listening, was that among themselves the physical education teachers' beliefs were totally different. Although the physical education group was big in relation to other schools, where physical education teachers are a maximum of two, the nine physical education teachers from *Clarice Lispector* School seemed to working alone in the same way. As Jair said, they had to survive and they believed the best way to do it was alone, so they thought and acted by themselves.

Jair worked as a physical education teacher in schools before getting his degree in 2008 and, in 2017, he also was a substitute lecturer in university. At the beginning of the year (2018), he was trying to pass his Master's degree entrance test to advance his dream to teach permanently in a university. He told me, "my focus never was working in schools, it is the truth. My dream was to work in a university. If I have to be a teacher, I would like to teach in a University!" (Jair).

Jair's strategy was to focus on his personal career. He complained to me many times about the difficult school situation. The teachers were undervalued, physical education equipment was missing or damaged and then there was the lack of space. As a survival strategy, he gave up getting involved with the school problems and focused on his own professional development.

He planned his life around this dream and he was well organized. He taught lessons, submitted all the documents required by the Pedagogical Coordinator on time, and went to the meetings when they were held during the work day. Even with all these tasks, he found time to read academic articles during his break time. He wanted to plan his time because he knew that his time outside school had to be used to work in another school, and to study for the Master's degree entrance test. His life was very difficult, and he was tired. One day, the physical

education teachers saw Jair sleeping in his chair during lunch time. Below is an excerpt from the conversation that took place:

If you give me a task 'Jair, you have to do it today, this table for example' I will try to do it today, because tomorrow I have another appointment. I do not know, but each one has their own schedule. And I know my schedule, my time is precious. So, I am very worried because when the tasks accumulate, I know, I will face some problems. I will miss something. Now time is running out and I know that I have other things to do. I have my personal goals. I will have to use this time for them. (Jair)

In the second semester, the teachers lost a number of classes because several were cancelled or merged. The municipal schools faced a difficult moment. The teaching schedule changed and Jair stopped participating in the physical education teachers' meetings. He had already started doing his Master's degree and he did not have classes on Tuesday. As a result, he could not go there only for the physical education meeting. We talked on *WhatsApp* about it. I noticed it was very difficult for teachers who have more than one job to get involved deeply with the school. Even though Jair liked the school and for the moment it provided a place for him to earn money to pay his bills, he wanted to look for another job with better conditions.

Pedro also had concerns about his career. He was studying to be approved for the state education test, but in the end, he did not pass it. Besides that, he truly liked being a teacher in that school "this is my home. I know all the kids, every one of them, I am free to make jokes, talking when necessary, doing what is necessary to do" (Pedro). He was the most involved teacher in the school. Pedro was there since the beginning, and the administrative staff also recognized that he was one person who they could count on to deal with school's problems. He believed in the school purpose and in their work there. He always participated in meetings, gave ideas with the aim of improving physical education classes, helped with school events, and even with children who had some special problems in school.

At other times, Pedro did not know how to properly control his willingness to help. At the end of the first semester, we talked about the necessity of having one leader for the physical education group, and although I considered him for this role, he told me he did not want to fulfill it: "he told me about the conflicts with Ronaldo, Simone and especially with André. He told me that he did not want to upset the group again" (Field notes 50). Sometimes Pedro argued with other teachers because he wanted to defend his own opinion. For example, he had a disagreement with André over what the proper number of the swimming classes should be. On another day, he argued with Jair about the number of classes. Because when Sara left the

school, her classes were distributed among Jair and Pedro, and he tried to negotiate with Jair about how this division could be completed.

In addition, Pedro was concerned about the physical education teachers who did not actually teach and just let the children play alone. In his opinion, this was a big problem and had many consequences for the daily routine. Children often ran away from Portuguese or math classes to play soccer:

Everything changes a lot here. In former times that was not the case. When my colleagues roll out the ball, they allow other students, who run away from another classes, to come here and play with their students. For example, it will never happen with me. No student will come here while I am here with my students, teaching my lesson. (Pedro).

But this year, he did not say anything to the physical education teachers, according to my Field notes, "he said that the physical education group is very calm now and he did not want to run the risk of being involved in conflicts. Because if he scolded someone who was not teaching properly, he believed everything would get tense again" (Field notes 50). We spoke on WhatsApp about these concerns and I explained to him that we have to be patient and understand the teachers' points of view and concerns. He agreed with me, and despite the disorganized condition of the school, he continued to be involved with its problems, and to actively participate at the meetings.

Simone told me that she loved teaching, "I like the school, and I like being here. I like teaching. I cannot see myself doing anything else besides teaching" (Simone). But to get this job she faced the difficult task of teaching athletics, a subject that she believed she was not qualified for. Her strategy was to ask for help. There was an after-school athletics university project and she went to talk to the lecturer about it and they started to form a partnership. She allowed him to use her classes to teach athletics to physical education teacher education students. She could observe these classes and learn more about the subject. Simone also asked me for help. She wanted me to teach some classes and let her observe them. Sometimes we talked about lesson planning and strategies that she could use in her classes.

During the year, Simone tried using different creative strategies in her classes to teach athletics. Although she was an insecure teacher and always described herself with harsh words as a stupid or dumb person, she reflected on her teaching and started to make small changes. Often she took pictures or made videos and sent them with *WhatsApp* to the group of the school, to the physical education group, and sometimes to me:

Luiza, please do not laugh at me, my video recording was homemade. I screamed during it, I asked children to pay attention, I whistled... But this was what I was able to do today in the 12-years-old B class. It has been so nice! We did the practice part of the Javelin Throw in every class I taught since yesterday. [...] Look the pictures, it is cool! [...] I need to do my best. And the classes are the only thing that make me happy. (Social Media records 15)

Rodrigo was the newest teacher in the school. He had taught many years in private schools and chose to come to *Clarice Lispector* School because there he would only have to teach swimming, his area of expertise, as he said. Unfortunately, when he arrived at school, the swimming pool was dirty and the pump was not working. His priority was to get the pool cleaned to achieve his dream of teaching swimming. Because of the condition he found the pool in, he was worried about being able to do a good job. As a newcomer, he had to be seen as a good worker, he had to prove himself as a good swimming teacher:

So, the big problem here is the lack of team work. When I say team work I mean, one staff depends on the other. I need the guy who cleans the swimming pool. I also need my friend, the other swimming teacher [André], as well as, I need the facilities, in this case, the swimming pool cleaned. (Rodrigo)

During the year, he made every effort to achieve this aim. Rodrigo built cleaning equipment himself to clean the pool. He brought his own tools to the school to fix the pool. He tried to teach the man who took care of sport facilities how to clean the pool faster. And because of this, he got angry many times, and argued with this person during the year. Together with André, he also mobilized the students to hold a raffle to buy cleaning products for the pool. Rodrigo always said he could not wait until the solution "falls from the sky".

Vitor is an experienced teacher in municipal schools. He had the notion that what he could control was just his class. During the years that he has been teaching in Governador Valadares, he already faced many difficult situations with the municipal education policies. So, his concern were about his own rights as a permanent municipal teacher and about his own work. He was also very angry about the school and the educational situation. In one physical education meeting he said, "the education system is s***, and it is the end point. [...]. I do not believe in this s***, but let's go to do our own work, because I just believe in our work. Let's go!" (Teachers' meeting 17). This attitude justifies Vitor's strategy to survive at school. He complained all the time about the school and the conditions that teachers were obligated to work in. He did not get involved with school events and meetings, and sometimes he arrived late to school. Vitor told me he would only agree to teach primary classes, or classes that he has already taught. At the beginning of the year, he argued with the administration staff about his schedule.

He also works in one state school near *Clarice Lispector* School and, as a permanent teacher, he believed that he had the right to choose his own classes and schedule, to combine his two schedules in the best way for him.

During the year, he started to become an active participant in the Tuesday meetings. He always offered important comments during the discussions. Vitor demonstrated his knowledge of physical education theories and worried about the lessons and the students. Even though he was angry with the educational system and the school administration, he revealed himself as fulfilled with his work teaching physical education at school. One classroom teacher did an assessment with her students about physical education classes which revealed that children valued Vitor's classes very much. They said he is organized and he knows how to control the class. "When I showed it to Vitor, he was very happy with the students' recognition" (Field notes 40).

Ronaldo assumed one hard task, being the school Principal. His concern was about getting the school working well. But during the year things got worse and he isolated himself with the administration staff in an effort to finish the year without big problems, and after that, he said he would give up the profession. During one conversation about the school he started to show his own fears, which led me to think, "Who will be here next year? André, Vitor and Ronaldo are the permanent physical education teachers. But even Ronaldo does not want to be here next year" (Field notes 7).

For this same reason, André felt himself alone. He believed he could not expect anything from Vitor and Ronaldo, and he knew Rodrigo, Simone, Jair and Pedro might move to another school at the end of the year. His initial strategy was to encourage the group to develop a curriculum. He thought that it could be a way to maintain the physical education organization even if newcomers arrived at school next year. The second strategy was to limit his own work to the swimming pool space. In my Field notes I registered that André said, "I am here alone, I am the only permanent teacher. Because I cannot work with Vitor in this way. He is working 22.30 hours per week and he is not here". André warns me that Ronaldo, who is a permanent teacher too, will leave the school at the end of the year. He continued, "if I am alone here, what can I do?" (Field notes 5)

André's concerns were only about his classes - the children that do not participate in classes, the swimming pool materials, and the swimming pool cleaning. Essentially, the strategies to survive the difficult situation at the school, André, like Vitor, focused on his own work problems. He closed himself in that space and did not get involved with any other situation

in school - as though he thought "I am doing my part and it is enough". When I reported this situation to Missy, she tried to explain to me André's attitude:

He just forgot the school. "I will focus on swimming, because I can control swimming." It makes sense, because that is what he can control. And if you read André's words when he talked about kids at risk, "I can't control what happened in that room, I can't control what happened outside my gymnasium, but I can control what happens here." So, André's perspective may be very healthy, because he can control what happens in the swimming pool. (Missy, Researchers' meeting 6)

Evidently, André dedicated himself to doing the best he could in that space. He coordinated a swimming project training the students after school. He did one portfolio to record and demonstrate his work with swimming at the school. He talked with administration staff trying to get grants to fund a swimming project. Rodrigo and André also organized some uniforms for the swimming team. And, when the school did not have money to buy the cleaning products for the swimming pool, they organized a raffle to buy the products themselves:

These three years I am working with swimming here, I am professionally fulfilled with my profession. I really like swimming training. [...]. Besides the classes that we are working during the school day, I am working with something I really like that is swimming training. And, I really like training, I love competition, I love conducting my athletes to one competition. I am in love with this kind of thing. So, I feel very fulfilled working with swimming here. (André)

Although the teachers were resilient, the barriers they faced were stronger than their strategies. They could try many tactics to do good work and improve the context and accomplish the education mission, but lonely, isolated, and unrecognized, they did not have enough strength to confront their significant problems.

The "Plano de Vingança": the lack of recognition and the silenced teachers' voice

As described, the school was in a chaotic situation regarding the administration and budget. All teachers were tired of fighting to survive this messy situation. They talked about many issues, especially about the students who behaved in an unexpected way, such as those who ran away from their classes. During their break or lunchtime, teachers always complained about these cases and sometimes they tried to find solutions to their problems. One of these possible solutions that they tried was to make a plan for the 13-year-olds' class. The Portuguese teacher presented this plan during one general meeting at school. She said that teachers have had a meeting to find a solution to the bad behavior of that class. They called it by the nickname

Plano de Vingança (Revenge Plan). In her words, it was not a punishment, just a moment for children to reflect about their acts. The *Plano de Vingança* consisted of keeping students doing their homework in their classroom instead of attending their physical education classes. While the students were in the room with Portuguese or math teachers, the physical education teachers could be in the teachers' room resting. Feeling worried, I described the situation in my Field notes:

At the beginning, many teachers agreed with this plan, even some physical education teachers like André, Rodrigo and Sara. Others, like Simone, were in doubt about it. Jair was in silence. Just Pedro and another classroom teacher were totally against this idea. Pedro reminded everyone that they have problems with students' behavior in physical education classes also. But they have to solve the problems there, with the students. He argued that teachers at the school do not recognize the physical education importance. (Field notes 12)

The *Plano de Vingança* was one example of the lack of physical education subject recognition. The data continually reveals others' examples of how physical education was marginalized at this school. Yet, for physical education teachers, working alone and apart from the school seemed common for them, "physical education always was not recognized at the schools. Since I am a physical education teacher and since I studied in the school [...]. The school believes physical education is just recreation time" (Rodrigo). Worried about this situation, Missy and I started to talk about how we could use this situation to suggest some alternatives with physical education teachers. Missy explained to me:

People see physical education as marginalized, physical education has been marginalized... First, the Pedagogic Coordinator does not show up. Second, the classes are used as a reward, or as a punishment. It is not good. So again, we are into this idea of 'How can we make physical education something that is recognized and respected in the school?' (Missy, Researchers' meeting 4)

Furthermore, during one informal conversation with physical education teachers, I asked them questions about their perceptions about the value of physical education. I noticed that teachers had difficulty understanding the value of physical education at school, and besides that, even the physical education teachers did not understand the importance of their work. Hence, it was necessary to avoid contrasting "classroom teachers *versus* physical education teachers", but instead highlighting the importance of physical education as a subject within the school, thereby empowering the physical education teachers:

Luiza: Okay, Let's think! Why don't the teachers in school recognize physical education as an important content?

Simone: You are helping me to think about many things I did not think about anymore. [...] We have to work more because the other people think we do not work... Because of it, we have to go back to study. Because even we do not value our own daily work.

Pedagogic Coordinator: Because students go out of the room. They think like that.

André: Really? I cannot believe they think like that. I teach so much at the swimming pool. I am teaching all the time. I do not write anything on the board, I do not stay at the room...

Luiza: Vitor just said now, yes, practice and theory are together. Why? Anyone else?

Vitor: Because they experienced another kind of physical education class.

Pedagogic Coordinator: They experienced physical education classes just as recreation time. The physical education classes are attractive.

Vitor: I think there are some teachers jealous about this physical education "attractiveness". Jealous because students like to stay with us and do not like to stay with them. (Teachers' meeting 2)

The lack of recognition from society, by the school, and even from physical education teachers themselves was one recurrent issue. Additionally, physical education teachers continued to make jokes about how they were seen by society, or even questioned themselves about the reasons for this lack of recognition, for example, "so, they [administration staff] do not demand anything from the physical education teachers. Why? Don't we have enough knowledge? Isn't our knowledge important for society's future?" (Simone). The teachers kept challenging:

Luiza: Another news, next week we will have a holiday. [...].

Simone: Holiday? Why?

Jair: Workers day, your day Simone!

Simone: Hum... but do I work? [**Tongue-in-cheek**]

Jair: I do not, I just play with kids [**Tongue-in-cheek**]. (Teachers' meeting 5)

Although these perceptions were frequently expressed during the general meetings, break or lunchtime, they were not powerful enough to rouse teachers from their state of inertia. Instead, negative feelings that emerged from the context and that surrounded them were more powerful and had the opposite effect. While on the one hand they often discussed their position in school and seem angry with the lack of recognition, on the other hand, they could not move forward because the negative feedback immobilized them. Field notes reveal "[...] this school has been totally demoralized. Even the Principal does not believe in the school project. He cannot believe in the school aim at all (Field notes 7). Furthermore the teachers did not believe in the administration staff. When the teachers were trying to think of solutions to the school problems, they demonstrated this lack of confidence. Pedro said "But we already asked this, and I am sure they will not answer us. But who knows... someone to come here sometimes, oh yes, we

need someone powerful at the gate" (Teachers' meeting 4). Pedro was frustated with the administration but he still had ideas to solve the school's problems.

Additionally, the teachers believed that regardless of how they acted to help the school, the Municipal Education Office would obstruct them. I noticed that they felt unsupported while trying any different strategy to improve their work, and were afraid of reactions to strategies. For example, Simone intended to do a picnic with the students but was anxious about the Principal's reaction. In another meeting, the teachers exhibited their expectation about administration reaction:

Simone: The problem is the Municipal Educational Office just arrives here and says, "It will not happen!"

Vitor: I do not have doubts, it can happen. And it is possible they say: "Okay, now we will hinder all work that teachers have done". (Teachers' meeting 1)

One situation might illustrate how things happened inside the teachers' daily routines. This example also suggests how teachers' voices are silenced by several processes. Two of these processes were, firstly, the busyness that narrows the teachers' actions, as Simone said, "I act automatically [without thinking] because the school narrows us. We have to comply with the school's work. You have to fill many papers" (Teachers' meeting 2). And secondly, throughout a top-down school management, such as what happened during a general meeting:

We started the meeting and when the Municipal Education Office representative was explaining the project for the teachers, the substitute Principal [Salen] arrived and just said: "Dear teachers, tomorrow we will welcome the Carolina School from 8a.m to 11a.m. So, I expect you can prepare everything". The teachers were surprised. Some teachers complained that was too much time, while others asked about the purpose of the visit. She answered that she already talked with Pedro and everything will be all right. [...] After she went away, teachers started to complain again. They said that it is always like that, the administrative staff ask them things for tomorrow, without asking teachers' opinions. (Field notes 25)

Rodrigo reveals the disconnection between administration and teachers and that the Municipal administration seems to be unaware about the reality of working in schools, although the teachers were aware of how the Municipal Education Office overworked them. He remembered, "they are not here every day, they are not here living with us. They don't have the difficulties that we have here" (Rodrigo). The people from that office are not as deeply familiar with the school as the teachers are. Then, it is almost unfair to teachers that the Municipal Education Office staff, "just want to ask things: do the project, do this... do that" (Rodrigo). The authoritative actions of the municipal staff indicate how teachers' voices might be silenced by little details. More than that, how this undemocratic, almost autocratic and

dictatorial school management influences teachers' disposition to think about school's problems in a collective way. And as result, the teachers are disempowered, feeling weak and discouraged. Simone illustrates how this process of disempowered occurs with an example from their daily practices:

The other teachers asked me, why are you so sad? Because it is always the same thing. For example, the kid did this, did that... I have never complained during the lunchtime, because I thought it was one moment to relax. But now, I am complaining all the time. And do you know why? Because I am almost exploding. Why? Because it is always the same thing. And the meetings don't have any time to listen to teachers. Because there are too many demands from the Municipal Education Office. We do not have time to speak about anything. When you have time, the meeting is over. (Simone)

Since the teachers' voices have never been listened to, they were accustomed to expecting someone to give them orders. It was a recurrent process, and, tired of fighting to be listened to, teachers gave up and kept themselves in that inertial position, just waiting for someone else to tell them what they should accomplish. After all, in this way, they could not be judged for making wrong decisions, they would be distant from school problems, and they could at least complain to release the stresses of their difficult daily routines. For example, I noticed this situation when the teachers were talking about the lack of sports equipment, "Vitor and André were talking about the problem with the material room. I noticed they had the solution for it, but they are always waiting for the Principal. They do not perceive that they are able to solve these small problems" (Field notes 2).

Teachers were expecting someone to "spoon-feed" them in all kinds of situations. Sometimes, even in choosing the content for their classes, they did not have the willingness to do it by themselves, "we decided to work not just with soccer, but with other field sports too. [...] but I need to know what the Principal wants about these contents (Pedro). In this way the Principal, who was also accustomed to expecting orders from higher administration levels, was as overwhelmed by inertia as the teachers.

And, if in this simple situation they expected direction, in the more difficult situations it was worse. When Pedro and Jair were worried about the number of classes that each one would teach after Sara left, they wanted to know from the Principal what would be decided. They expected some initiative from him. But the Principal seemed like he did not know what he would decide either. He told me many times, that everything in the school has to be approved by the Municipal Educational Office first. During one Tuesday meeting, the teachers asked me to invite the Principal. They wanted to listen to the solutions from him:

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Luiza: So, each one could do his or her question and Ronaldo can explain for us. In this way, I think, we can solve this problem about who will lose a number of classes and who will teach

Sara's classes.

Ronaldo: Come on guys, say something!

Jair: What? You are the Principal... (Teachers' meeting 5).

The top-down school management was deeply rooted in this disempowering context. Although physical education teachers were conscious of it and complained about it many times during the research, they constituted one disempowered group that, in its turn, belonged to one bigger group, even more disempowered. In that moment, I realized that there were not any fast actions strong enough to break that cyclical process. Years of disempowerment could only be changed by a long process of empowerment.

To conclude, this first theme of the research provided comprehension about the school environment and the individual teachers. It was revealed that teachers lived in a troubled context because of the social conditions which surrounded them, but also because they lived in a disorganized educational situation at all levels, inside the school as well as outside of it. This section also presented information about who the teachers were, their attitudes, strategies, and beliefs. Lastly, it was evident that physical education teachers faced one continuing process of disempowerment, against which alone, they could not fight.

Following on from these results, the second theme looks deeply at the physical education teachers' behavior as a group, and considers these questions: Did the teachers themselves show any sign that they could be a group? What were the notions of the physical education teachers about themselves? Did they perceive the colleague beside them as a person who would face the problems with them? Was there any possibility to empower these teachers through some work in a community?

4.1.2 Theme 2: Transitions from lonely teachers, to a group, to a community: changing interactions to survive

After two months just listening and observing teachers' actions and needs, I started to use the physical education meeting time to draw the teachers together. At first, it was only an informal chat about their reality, concerns, and thoughts about the school. Also, if the Pedagogical Coordinator did not show up at the meeting, then we could use the meeting to understand deeply who each one was inside that group.

The second theme describes what happened in this period, from the beginning of the observation period until when teachers started to change their actions. Individually they did not

know each other or the challenges that their colleagues faced daily. After becoming close, movement toward the center was noticed. It was as if they needed to be closer to face their difficulties.

Furthermore, they were not merely complaining about their lives, they began to desire change and they wanted to do something to improve their work. The first subtheme shows that teachers slowly perceived their common concerns and in addition, that these concerns could bond them together. So, they changed their interactions in an attempt to survive. For the second subtheme, their relationship with CPD is described, including their good experiences with it and the main features that they value in CPD. Teachers also showed what they needed in the initial months that I was at school and why they asked for CPD. Beyond understanding their context and their lives as teachers, it was necessary to understand if they wanted to improve their learning and development through building a PLC. This theme shows that this possibility for growth existed among these physical education teachers. They were hungry for change!

4.1.2.1 Coming together: concerns a common ground

At the beginning of the year when teachers were interviewed, or during the observation time, their concerns were about themselves individually. Over the course of time, together in the meetings, they started to perceive that they had common concerns. Then, it was these common concerns and problems that started to bond them together. This was a crucial step for the research, because getting closer to the teachers, understanding them and the school, would facilitate working with them and helping them to empower themselves.

Gradually, the physical education teachers came closer together. At different moments during the research, the four teachers who were not permanent teachers, the contractual teachers, became closer and noticed their shared difficulties. Later, the whole group (both permanent and contractual teachers) started to notice that they had more common problems than they imagined. Because of this discovery, they started to change their interaction, from limited individual interaction where teachers cultivated relationships just with a few people, to small group interaction, when they understood that making decisions together could make them stronger.

"I just want peace to work": the concerns that bond the physical education teachers

As already mentioned in chapter 3, there are different employment status levels for teachers in municipal schools. Some teachers are on permanent contracts, which means that they are secure in their employment at municipal schools. Other teachers, called "contractual" teachers, are hired on yearly contracts after a municipal hiring process, which means they face the possibility of losing their jobs at the end of each academic year. Teaching status also differs according to the number of hours specified in a contract. Some teachers, whether on permanent or yearly contracts, may be employed for 40 hours a week, while others may be employed for only fraction hours per week. Regardless of the number of hours specified, all teachers have the same proportion of hours for in-class time and hours allocated for other duties such as preparation or meeting purposes. This ratio is 75:25, meaning that 75% of hours are for lessons, with the remaining 25% for the other duties, extra class work.

Surprisingly, in two meetings where the teachers had the opportunity to talk together, they started to think of their concerns as a physical education group. First, one small group inside the bigger one showed their fears about losing their jobs at the end of the year. These contractual physical education teachers always complained about their situation and said they might not be there next year. Pedro, Simone, Rodrigo, Jair, and Sara comprised this group. In different ways, they showed their own concerns about being a contractual teacher. In March 2018, the State Education Office proposed a test for permanent teachers. Except for Rodrigo, these teachers did the test. If they passed this test, they would have been a permanent teacher in state schools. Pedro explained the benefits of being a permanent teacher;

I am studying all nights. Because being a permanent teacher is better. You do not have to participate in public hiring processes, you are relaxed. So, you can plan and study for your classes. You have a steady income and you can pay for your own study. You can pay for your house and transportation bills. You do not need to be like me now. I have 20 classes now, they said that one class will be closed. So, every day is a different news. If you are a permanent teacher everything can fall apart and you are there, relax. (Pedro)

Unfortunately, they did not succeed at this test. Even if they had passed, there were only seven job vacancies for physical education teachers in Governador Valadares and although they said they were dedicated to studying for the test, they did not achieve good enough marks. Everyone was sad about their results. Simone for example, talked about herself as a stupid or lazy person. Pedro got a better mark, but it was not enough to get a permanent teacher position.

Consequently, their concern continued: where would they work in the next year? And beyond that, they would have to participate in the municipal hiring process again. To improve their assessments and get a better position in this municipal hiring process they started to do specific courses, which focused on different aspects of physical education teaching. During our research meetings, the contractual teachers' group started to worry about the following year even when the current year was just beginning. I was worried also, because I noticed that teachers wanted to work at *Clarice Lispector* School, but they had to solve some issues before that:

I was very worried about the situation of the contractual teachers, so I talked with them. Simone told me she does not want to work with athletics next year, she wants to work with physical education, but she told me 'Here, Vitor is the owner of the physical education job position'. Then I said, 'But you can change. Jair is teaching physical education, so you can change with him'. Jair did not say anything about being here next year or not, because of his Master's degree classes. Then I said, 'Jair, you can come here, you can attend classes on your day off'. In conclusion, I notice, everyone is doing honors degree courses, Rodrigo also. They are safeguarding their on all sides. (Field notes 50)

Gradually I was trying to understand what being a contractual or a permanent teacher means for them. Besides the doubt over having a job or not, being a permanent or contractual teacher creates some tension between the teachers. In their beliefs, there was a separation between those teachers who are experts (were approved on the difficult test) or are experienced in their profession, and those teachers who did not pass the test or are newcomers to the field. I summarized some teachers' concerns about their job security, in my Field notes:

Rodrigo arrived at the meeting with one news, "Colleagues, there was a physical education meeting at the Municipal Office yesterday. We had not heard about it. My friends told me and asked why I did not know". In this moment every teacher was very worried, especially the contractual teachers. In the Municipal Office there is a rule: if you miss an obligated meeting, they can withhold the money of that work day. (Field notes 18)

Later in the year, I began to notice in practical ways what being a contractual teacher could mean. If some changes occurred at school, the first teachers to be impacted by it would be the contractual teachers. For example, when the school timetable changed or some class had to be cancelled because of the low number of students, the contractual teachers would lose their classes and their salary would be lower than before. Teachers knew the rules of this "hiring game". Therefore, they always were worried and vigilant about it:

The Substitute Principal explained to me that the school timetable will change again. Because there are rules in the Municipal Office that suggest Portuguese and math classes begin in the first periods of the school day. Besides that, she told me the school administration will have to fire some teachers and reduce the number of the classes at the school. Everyone is afraid of these restrictions. (Field notes 26)

Like the contractual teachers, the permanent teachers also had problems. The school day started at 7a.m. and finished at 3p.m. Yet, the teachers who worked 40 hours had to stay at school until 4p.m. every day, except one. This extra hour served to complete the workload of the teachers, because according to municipal law, lunch time is not a worked hour. Then, during the extra hour each day, the school organized their meetings and some necessary events, or some days the teachers stayed there alone doing nothing. However, the teachers who did not work 40 hours per week were not required to stay at school until 4 p.m. Ronaldo, Vitor and André were the permanent teachers. Ronaldo, as Principal, had to be present at all events, thus, he would accomplish this extra hour easily. Vitor worked just 22.30 hours at this school, thus, he did not need to be there for this extra hour, but he needed to accomplish his duties in his 25% extra class work. André was the only physical education permanent teacher who worked 40 hours per week at the school and should stay at school until 4p.m. four days per week.

During difficult moments, the teachers united themselves in these small groups, the contractual teachers and permanent teachers. It seems each group wanted to defend their own professional life. The school always provided moments of "ups and downs". In one of these negative moments, all teachers have to work every Saturday for the entire second semester. The contractual teachers started to think that it was not fair. If they worked per hours during the week, on Saturdays they have to work proportionally too. In this case, Vitor would have to work fewer hours every Saturday compared to André, who would work all day on Saturdays. At the physical education *WhatsApp* group they talked about that:

Pedro: Hey colleagues, now the news is official. Some school Principals already exempted contractual teachers from Saturday. I listened to one contractual teacher, Saturday his school will work just with permanent teachers. We have to wait for this answer until tomorrow, but we cannot go to work Saturday if contractual teachers from others school been exempted. [...]

Simone: And how can we proceed, Pedro?

Pedro: I will ask, if the Principal does not say anything, I will ask him to inform himself because we have already been at a disadvantage.

Vitor: Ow, It is nice! [Tongue-in-check].
André: I f* myself! (Social Media records 17)

When the contractual and permanent teachers started to sit together to talk about their lives, their common concerns appeared slowly. These concerns were related to surviving the

difficult routines. They realized that firstly, they could talk about it and notice similarities, and secondly, they could act, looking forward to solving problems that disturbed their routines.

One common concern that they noticed was the problem with students' behavior. All teachers at school complained about it all the time, but the students' behavior, in fact, masked a specific concern for physical education teaching. When teachers started to talk about students, they quickly understood that students behaving in unexpected ways was a problem for the whole school, and the bigger problem for the physical education teachers was how the school planned to solve it.

One example of the physical education teachers coming together to solve issues comes from *Plano de Vingança* situation where the teachers proposed taking students out of the physical education classes as a punishment for their bad behavior. At the first moment, the physical education teachers remained silent, but afterwards, when they talked about it together at their own meeting and reflected on what that action could mean, they perceived that physical education was not recognized as an important subject for student development. This was truly their common concern. Therefore, it was important to consider in terms of both the school-level problems and the physical education level problems:

I took this opportunity and started to talk with teachers about the initial question: "Why did the other teachers want to punish the kids by pulling them out of their physical education classes?" I wrote their questions and solutions. I noticed that they have one big concern with discipline issues, and with the kids who do not participate during physical education classes, they understood that the physical education is not recognized at school. (Field notes 15)

At the same time, they noticed that solving school-level problems was a hard task for them. From then on, the physical education teachers started to look at themselves. And it seemed that their concerns concentrated on their classes, including the lack of sports equipment, and the disrepair of the physical space they used to develop their classes, which included the damaged soccer field with no grass and markings. Lastly, they looked at the students, and the students who did not participate in classes and instead ran away from school, "they taught one class where 20 students participated and 10 did not participate. [...] They started to think of ways to solve these problems" (Field notes 5).

The lack of sports equipment was not new for them. These teachers already worked in other schools in Governador Valadares. Physical education equipment is expensive and many different types are required, consequently, schools always faced problems trying to buy this equipment. Jair, tired of this situation in all schools, bought the physical education material he needed for his physical education work. Simone and Jair were thinking about doing the same

at this school but Simone, "advised Jair about waiting for the new sports equipment to arrive. She said, 'be calm Jair, only six weeks remaining, let's wait until August to see if the equipment is coming or not'" (Field notes 45). At the Tuesday meeting Simone said:

The sports equipment that I use is from the University project. The school does not have sports equipment. If I was teaching a relay race with batons, I would not have any, unless I start to cut some broom handles, so I could have the materials. But where can I store it? (Teachers' meeting 9)

Although it was a common concern of the group, it seems they did not know how to solve it and everyone made some individual attempts. At the beginning of the year, some teachers stored physical education equipment, hiding balls and other kinds of equipment in their cabinets. Other teachers were angry about their colleagues' attitude and about how the school did not care about physical education equipment, but they did not know what to do either:

Pedro had sent a message to the physical education *WhatsApp* group at 7.30a.m asking about the only soccer ball that they had. Nobody answered. When I arrived, we talked a little bit about it. He complained about this issue and said they cannot lend physical education equipment to staff. I agreed with him. We need to talk about it at meeting. He also talked about Jair's strategy. He did not agree that Jair saves one soccer ball and volleyball in his cabinet. (Field notes 44)

This is the only school that has an athletic field, two swimming pools and a big outdoor space for physical education in this city. Instead, this school does not have any covered space such a gymnasium to teach indoor sports. This is the opposite of other schools, which have only gymnasiums. But because they had this outdoor space and new sport facilities, they faced maintenance problems. The lack of cleaning products and the broken equipment in the swimming pool, the reduced number of staff to work at the *Centro de Esportes*, the constant theft of equipment, and the lack of sports equipment that forced teachers to modify the classes were issues that affected their daily teaching.

As well as these problems about the physical structure there was another, bigger concern, losing the *Centro de Esportes*. Since the school and the *Centro de Esportes* were built by Mining Company, the school administration had faced many problems. Initially, the *Centro de Esportes* was managed by the Municipal Sport Office, not the school. Later, this space was incorporated into the school, and then the school administration had to take care of both spaces, and tried to integrate both into one school purpose. The school's financial resources were too low to manage two big spaces. Then, the teachers lived under the shadow of losing the *Centro de Esportes*. Constantly, they heard news about Municipal Office attempts to close the access from the school to *Centro de Esportes*. Physical education teachers wanted to talk with the

Municipal Education Secretary about it. They were not just concerned about losing the space but as a consequence, losing their jobs:

André: The school will lose the *Centro de Esportes*. The speech I heard is it. [...]

Jair: So, logically it seems that it will be at the second semester.

Pedro: No, but this cannot happen.

André: The school cannot be harmed, we have to finish the year.

Pedro: Yes... how could they fire everyone?

Jair: No, I am not talking about firing the teachers. But I think they will start to introduce some projects here. So, first the schedule will overlap, and then they find a way to... at the

next year... [finishing gesture]. (Teachers' meeting 7)

Their concern indicates how the teachers were united by their difficult situation. While for the contractual teachers, losing the *Centro de Esportes* could mean losing their jobs, for the permanent teachers it meant not having sport facilities to work in. The school does not have any spaces for physical education classes, apart from a martial arts room. If the decision was made to build a wall separating the school and the *Centro de Esportes*, students and teachers will not have access to that space, and worse than that, the children would remain without physical education classes because there was only one other uncovered space, which was the school patio. Pedro was worried and stated:

Colleagues, I have to be sincere with all of you, my speech will be like that. "I did not come here to ask anything, I just want peace to work. I just want to stop the nightmare and the worry that keeps coming to us. Do we have the *Centro de Esportes* or not? Do you intend to build a wall there? Is it what do you want to do?" (Teachers' meeting 9).

Therefore, the physical education teachers showed that there were possibilities to work together. Even though they faced many problems, they could face them together. The routine difficulties were similar for everyone, and consequently, they could receive assistance from others who lived the same experience. Although they were strangers and the physical education teachers had little interaction together, they had to get to know each other. And they had to do it while struggling together to survive.

Changing interaction: from little individual interaction to little group interaction

Through the process of perceiving the similar problems and challenges faced by each member of the group, the teachers started to change their interactions. At the beginning of the year, they were separated from each other, and because of this they did not realize the problems that each one faced. After they became closer, they recognized that the problems of other

physical education teachers were their own problems too, and it made them move one toward the other.

In Governador Valadares's FTS, the teachers who worked 40 hours per week shared one common space for nine hours per day. The main part of their day was spent there, including the main meals. They arrived at 7a.m and had one break of twenty minutes around 9a.m. Later, they had lunch for one hour at 12p.m, and stayed there from 3.pm to 4.pm. Thus, the teachers have been living their work and rest moments together.

Despite that schedule, at the beginning of the year they seemed to be living in that space together but alone. There were few moments where I could perceive any interaction. They were always in silence, looking at their mobile phones, sitting apart from each other. I said to Missy on the first day that, "I observed that teachers interact just a little. André is more silent than others, he sat far from people and had lunch alone" (Researchers' meeting 1). Pedro and Vitor were the others who caught my attention. Pedro interacted more with the classroom teachers, and Vitor did not interact with anyone. Jair and Simone were old friends and they were always talking and making jokes between each other. Rodrigo, as a newcomer, was trying to get to know people, so he was very chatty.

These moments of interaction changed a little bit during the first two months. Sometimes I could notice pairs inside the bigger physical education group for example, Simone and Jair, André and Rodrigo, Vitor and Pedro. André is, "very respected by the group" (Researchers' meeting 1). Although he spoke only a few times during the meetings or break/lunch time, when André said something, most of the teachers stopped to listen:

I perceived good interaction between Simone and André. They have been working together a long time in this school. He listened to her patiently, even if she sometimes does not conclude her ideas or he disagreed with her. She agrees with everything he says. (Field notes 20)

The others physical education teachers were very distant from this little group of six teachers. As Principal, Ronaldo was always involved with the school's problems. Sara intended to leave the school, so she did not want to deal with school problems. Sometimes, during the classes Sara talked with Simone, but during the break times she was alone and silent. When Sara left the school, another physical education teacher was contracted, Erika, but she was not part of the group either. She taught few classes at school and she attended her CPD meeting on another day. And, "Elis is totally excluded from the group. She works at the martial arts class with the primary kids. [...]. She goes to the CPD on another day, alone" (Field notes 8).

Even though I could notice these few moments of interaction between Simone, André, Jair, Rodrigo, Pedro, and Vitor, most of the time they still seemed distant from each other, and more than that, distant from the other teachers in school. As a group, they were isolated from the school, and within the group, each one was isolated between themselves. When I noticed one movement of interaction, I took notes:

During this break time, the teachers were talking in the teachers' room. Some of them were interacting among themselves, talking about daily life. It seems to me, the physical education teachers are always separate from the classroom teachers. They sat around one table while the classroom teachers sat at another table. Vitor was present but always quiet and looking at his mobile phone. Rodrigo was talking with André, and on the other side of the table Sara and Jair were whispering something. (Field notes 6)

Yet something still appeared strange for me. The teachers were separated from each other, but there was some reason for this that I did not yet understand. I did not know that something had happened among those teachers. In his interview, Pedro explained that they, "[...] already had worse moments here. The group was very separated. There were three teachers on each side. (Pedro). After this I looked deeply at this relationship, and I noticed on one side André was like a leader, and on the other side, Pedro was.

Although Pedro also had said that, "today is different. Today is calmer" (Pedro), he was aware that "[...] the conflicts are always continuing to come back" (Field notes 33). Jair and Pedro argued about the number of classes when Sara left. They did not have the power of manage the schedule, but they could discuss it with the school administration. The school had closed some classes, teachers had lost classes, and as consequence, their salary would be reduced. Besides that, they were arguing, "about the timetable. Pedro does not want to lose his day off. And Jair does not want big gaps between his classes during the school day" (Field notes 33). Finally, it became clear the problem was actually that André, Simone and Jair were jealous because they believed the people in school protected Pedro when his timetable was created. In addition, "teachers heard that Pedro was telling bad things about André's swimming classes" (Field Notes 33). The tense situation still existed between the teachers.

There were many instances of struggle inside the group and the dimensions that influenced these conflicts included the social conditions of the teachers, the top-down administrative decisions, and the different and sometimes problematic relationships between members. The teachers did not have the power to change everything, thus they had to focus on what could be solved by them. Then, I heard Jair's and Pedro's personal reasons to struggle with the number of classes, and I suggested that we talked about their reasons for the conflicts

inside the group during the meeting. They both agreed, demonstrating their willingness to solve the problems. It seemed that they did not want to return to the group of the past, when they were separated into two factions. In my Field notes I registered Pedro's perceptions when I talked with him about this situation:

Today Pedro was very worried. He heard that as Jair has a better position in municipal educational classification, Pedro will have to give some classes to him. Pedro said "How will I do it? It is not correct. Then I will have to take some classes from Sara. And worse, it will create a bad atmosphere inside the group. Jair is very kind." So, I suggested that they talk about it with all group members during the meeting tomorrow. Pedro said "Great idea. In that way nobody will whisper about it." [...]. After this, I talked with Jair about this idea. He agreed with us and said that he lost many classes. So, I think it will be good to share this problem with the group. (Field notes 29)

Nonetheless, there was not enough confidence between the members of that group yet to be open. Though they had talked inside the group about this theme and everything seemed to be solved, Jair and Pedro then discussed the issue with the Substitute Principal, who needed to solve the situation. In the end, Simone was included in this discussion. Simone, who has the best classification on the hiring process list could choose to have Sara's classes or not. Initially, she told the group that she did not want Sara's classes, but later Simone sent me a message saying the opposite:

Later Simone contacted me in a private *WhatsApp* and said she will teach Sara's classes. This position was the opposite of what she said at the group meeting. She asked me to help because she does not want to just let the kids play as Sara did. I answered I would help her, but I highlighted that she needed to talk with Pedro, because he will be the most impacted in this case. (Field notes 30)

The teachers needed to understand that addressing conflicts are an important part of the group's daily routine. Both Jair and Pedro had the same willingness to build a group, but they also think in a different way from the other. Jair said that, "there is a person there who was very individualistic, and he believed that in this way it would not be possible to build a group" (Field notes 33). And Pedro said that he did not want to disturb the peace of the group, and they, "needed to work together, as a group" (Pedro). Then, teachers began to recognize that thinking in a different way and having diverse points of view was not a problem as long as they learned how to manage differences.

Step by step I was able to notice this learning. First, I perceived that teachers knew they were a separate group. They felt this cold atmosphere among the physical education group and, in general, from the school's classroom teachers. Sometimes they exposed their feelings and

concerns about this lack of interaction. Also, they showed that they knew the importance of being there together, talking and supporting each other. Pedro said, "there are 60 days since the classes started and until today we did not do anything together. I swear, I do not know the name of some physical education teachers" (Pedro). Unlike Pedro, who looked at the physical education teachers, Simone reported the lack of interaction regarding the classroom teachers. I took notes about this issue at my Field notes:

It was the elementary students' break time, 8.40 to 9a.m. Some new elementary teachers were at the teachers' room. I listened to Simone saying, "Nossa, I really wanted to teach the elementary classes, here you interact among each other". She was talking about the middle school teachers, who have almost never interacted between each other. (Field notes 7)

Secondly, the physical education teachers noticed that they have similar concerns and problems. These connections started to pull them together. Slowly, they were more confident in saying their opinions inside the group, even though they avoided arguing between each other face to face. For example, "Pedro said, 'there are some teachers who leave the kids alone, without doing activities with them'. I know he was talking about Sara, but he had not the courage to speak with her directly" (Field notes 22).

Additionally, they were changing their mind about the school and their colleagues. Later in the research, when I come back with the initial interview transcripts to allow teachers to check and approve the transcripts, Rodrigo seemed very worried about what he had said. I took notes about our conversation at my Field notes. He explained that, "these were the first impressions, and with the passing of time, he has been seen the school in another perspective" (Field notes 18).

Beyond differences, they perceived that they have personal similarities. They started to talk about their personal lives. They noticed everyone faced many challenges to be a physical education teacher. They revealed their life stories and their experiences with physical education. I registered at my Field notes one day that, "the teachers were very excited. They were talking about our barbecue. Rodrigo offered his house. I encouraged them, and we talked about it for a long time" (Field notes 21). They were starting the process to know each other and be closer. During one break time teachers were talking about their personal experiences, what connected them even more:

Simone, Pedro, André and I were talking about our beginnings as physical education teachers. Everyone remembered their challenges to study. How long they have to walk to arrive at university. Their suffering to pay the university fees. I noticed everyone was born in a poor

family. They struggled very much to get their physical education degree. Everyone studied at the same private university in our city. André and I studied at the same time period, while Simone and Pedro four years after. Everyone remembered this period with happiness. And Pedro concluded, "But everything is experience". I think this moment was very good. Everyone shared their own challenges and victories. (Field notes 27)

By the end of the first two months, when teachers came together during the meetings, they took little steps towards becoming a group. In some way, it seemed that they understood that collective work could help them to face their challenges with routines and tasks. If the school required them to do something that seemed too challenging or boring for them, then they could share this task with the group. Hence, this task would be less burdensome for everyone. During the meeting they started to organize themselves and to share their tasks:

Simone: [**About the classes' profile**]. The Pedagogical Coordinator sent a message at *WhatsApp* group "Until tomorrow!" The teachers joked with her "Tomorrow is Saturday". **André:** But listen, how many are we? We are eight. Let's go separate these classes between us.

Rodrigo: Each one is responsible to build some classes, we should split up and make this.

Vitor: It is good because we do not need to make it at home.

André: We make a physical education students' profile. Don't need to separate each specific sport class. [...]

Simone: So, okay. Let's go... There are 17 classes divided by 8. I will do 3 elementary classes, okay? The other classes you can decide, and you send to the Pedagogical Coordinator.

Vitor: I was understanding that it would be a collective work. Everyone who teaches those classes would contribute to the profile. After, we will insert the same physical education students' profile done on the all teachers' notebooks.

Rodrigo: So, Simone can make the elementary classes, but I can give my opinion in this.

Everyone: Yes! (Teachers' meeting 3)

Finally, some data show how the teachers were changing their behavior in relation to the group. They wanted to talk about everything with the physical education group first, and afterwards make decisions. In this way, they also could justify hard decisions, as they were sharing their accountability among themselves. They noticed that they started to be stronger together and, equally importantly, they started to see themselves as a group:

Salen [Substitute Principal] asked physical education teachers to do only one physical education competition in school, but that all physical education teachers should participate. André's answer was very interesting. He said "Great idea Salen, but as we have been deciding everything with the group, we will talk with our colleagues and the group thinks in one project to the physical education competition". (Field notes 34)

Then, while analyzing the data, Missy and I noticed that with small actions the teachers started to change their interactions. In less than three months, they showed that, even though they were a group of teachers who work together, there was the potential to work as a

community. It was an indication that the group was stronger and wanted to work in a collective way, sharing their practice.

4.1.2.2 More than complaining: hungry for professional growth

Looking forward to encouraging this group to empower themselves, it was necessary to listen to teachers' voices. It was necessary to understand if they actually wanted to realize their CPD through organizing themselves as a group. In addition, it would be essential to understand what they actually needed and what they expected from this process.

Over the time spent at school, it became clear that the teachers did not just want to complain. They were willing to change, but they needed some help. They needed to be recognized as a group who had enough knowledge to work towards improving their professional situation. Additionally, they were aware of what could be good or not for them. They knew different CPD formats, nevertheless, they needed someone to support them in their change trajectory, someone who would manage all CPD features that they judged important around a concrete CPD moment in their lives. Thus, this subtheme shows the possibilities of development that we found together, facilitator and teachers.

What are you hungry for?²¹: asking CPD

During the first two months of simply observing the physical education teachers, and subsequently, when I started taking some small actions with them, I noticed that CPD is one known aspect of teachers' lives. Whenever they get a job in any school, they must attend some kind of CPD. The education offices have been experimenting with various CPD formats. CPD arrangements could depend on the purpose of departments, the kind of organization that the departments adopt, and the autonomy that they provide to the schools that are connected to them. For example, in the State Educational Office, teachers can come back to school outside of their regular teaching hours to attend some modules of CPD. As was pointed in chapter 3, the Municipal Education Office already tried different kinds of CPD since the FTS project began in Governador Valadares. The teachers who were working at *Clarice Lispector* School

²¹ This sentence, "Você tem fome de quê?", refers to well-known music in Brazil called "Comida" (Food). Artist: Titans, 1987. Access in: https://www.letras.com.br/titas/comida/traducao-ingles

took part in these CPD projects. Beyond that, they also brought other CPD experiences from outside municipal schools.

Municipal school teachers attended monthly meetings with a physical education facilitator at the municipal office, and simultaneously, they participated in weekly meetings at school with the Pedagogical Coordinator. It was the first phase of their CPD in Governador Valadares FTS, which lasted from 2010 until 2015, when the *Casa do Professor* was closed, and these meetings were replaced by weekly meetings at school with the curricular area facilitator. Teachers remembered these practices as the best CPD experiences that they ever had. For them it was important to be supported by one facilitator, "who understands them, some physical education teacher" and to have time and space to share their own teaching "with their colleagues and exchange good experiences" (Researchers' meeting 4).

That meeting we had at the *Casa do Professor* was very interesting. Because they organized it by area, so we had one physical education facilitator. David was our facilitator and I thought his management was very good. [...] He went to our school to understand what we were teaching. If we had done something different, he asked us to present it for other teachers. So, everyone at municipal schools knew what you were doing. Every day someone brought some interesting thing to present to us. And it was helping us with our teaching. I think this way was very interesting, very productive. (André)

During the interviews, the teachers referred to other experiences from outside schools, and it was one opportunity to understand what CPD features they valued. And more importantly, I could understand what they expected for successful CPD. Whether in or out of school, as André and Rodrigo said, it was essential that the CPD facilitator was from the same pedagogical area. Thus, Rodrigo affirmed that the facilitator could share "their experience with the philosophical and pedagogical part". For Rodrigo, even when the CPD is beyond the school context, he should be able to, "catch what they taught and transform my work here, in my reality, with my students" (Rodrigo).

Pedro pointed to his CPD practice in a Brazilian government sports program where he worked. As André had done, Pedro highlighted the importance of sharing their work with their colleagues, seeing other experiences, and learning within this process. But more than it, he described the importance of focusing on assessment and planning in their groups. Furthermore, he showed that they needed support from each other with pedagogical and content pieces;

In the "Second Time Sport Program" we had a meeting to study. [...]. So, everyone sat together, we did not have class that day, it was on Friday morning. In this meeting we talked about the week, we showed pictures that we had taken, and we told others what teaching sequences we

used. On the last Friday of the month we sat together to make the lesson plans. We were there together, in groups. (Pedro)

Simone did not consider a physical education facilitator as a necessary aspect of CPD. For her, it was possible to experience good moments at CPD only with the Pedagogical Coordinator, but these moments have to be organized, ongoing and effective. She had already lived this moment in other FTS projects where she used to work, "she [Pedagogical Coordinator] stayed in the meeting's room and the teachers went there. She always managed those moments with some texts, and the Municipal Office documents... but I saw the outcomes. We always solved the problematic situations" (Simone).

Teachers were always busy, and there were things to be done "here and now". And they were busy in their personal lives also. Simone said, "so I have never thought I would need to study so much as I need now. And I want to study, but today my life is so busy. [...]. Because of this, I stopped developing at all (Simone). As consequence, they would prefer to do the CPD meetings during their daily schedule. Teachers understand CPD to be a part of teacher's work. They believe that if they attended CPD outside the school, they should be paid for this. Jair emphasized these important features of successful CPD:

And in the State schools what I can say is... the best was one time that we had the "Pact for Education Program". There was a specific resource for this program. The teachers received some payment to go to the school on a few Saturdays. [...] So, you spent 4 to 6 hours per Saturday just studying, analyzing, trying to find some way of education improvement. (Jair)

But since 2017, when the municipal government and the Principal of the school changed, the teachers have not been having good CPD experiences in *Clarice Lispector* School. Simone said, "today she feels alone. Each one studies when and if they want. They do not have the content facilitator in the Municipal Office, a curricular area facilitator at the school, even the Pedagogical Coordinator, who has not been attending the meeting" (Field notes 2). Pedro also reported the same situation in the previous year:

But in the last year the meetings have not happened. You are observing here how these last three Tuesdays were. Nothing happened. So, the teacher did not come because he/she does not need to. Just the teachers who work 40 hours per week come here. [...] So, why will I come here at 7am? Why? If you know you will come here, and nothing will happen. Why do these teachers move from their houses? (Pedro)

The fact that the Pedagogical Coordinator has not showed up at meetings was a problem for teachers. Besides feeling alone, they felt that they were different from other teachers. I

analyzed when talking with Missy, "for them, having these CPD moments is one way to be recognized like other teachers, and not just as a recreation professionals" (Researchers' meeting 4). They seemed disappointed and, at the same time, they were angry, because even though the Pedagogical Coordinator did nothing with them during the meeting time, they were obligated to be there:

At the meeting time the Pedagogical Coordinator did not show up. She was with administration staff. The teachers were in the teachers' room talking. They told me that in the last year, it was usually the same way. Ronaldo was the curricular area facilitator and the Principal at the same time. So, he did not attend the meetings often. The Pedagogical Coordinator did not guide them either. Pedro frequently talked about it and said, "this year will be the same. We will not have our meetings. The problem is staying here without doing anything". And it happened. They were in the teachers' room looking at their mobile phones, drinking coffee, talking to each other. (Field notes 8)

For five weeks I watched this happen. Teachers alone at the teachers' room waiting for the Pedagogical Coordinator to tell them something. At the supposed meeting day in the sixth week, I took the opportunity to talk with teachers about it. We started to talk about their daily problems and I noticed that the teachers wanted to have the meeting. I shared this with Missy and we thought it was one opportunity to offer some help to teachers:

Luiza: I don't know what happened and teachers started to talk about the problem with *Plano de Vingança* against the 14-year-olds'class.I thought, "Okay, I have to take this opportunity and start to talk with them about it". So, it happened!

Missy: So, you know what you are telling me Luiza is, that the time you spent in school in the last 3 weeks has paid off. [...] It happened maybe by chance, but it happened, and it was very good. And that is the start.

Luiza: And I think the teachers recognized it, because at the end the teachers said to each other "Okay, now we had a meeting, now we started something". André and Vitor repeated this many times "All meetings have to be like this"...

Missy: Yes, Yes! It is wonderful. And when do you meet again? Next week? (Researchers' meeting 5)

In different ways, I perceived that they sought CPD, and they believed it was important. If it was part of their work and they must accomplish it, then they wanted it to occur in the best way for their professional development. They associated the famous "Tuesday meetings" with one moment to be far from their daily teaching problems, doing different things instead of teaching, and renewing themselves through new ideas. But more important than that, I told to Missy, "they know that this time is important, and they want one period where all physical education teachers can be together" (Researchers' meeting 4). Simone also affirmed that the

Tuesday meeting would be the only moment, "that we talk, we argue our point of view, we try to solve the students' problems" (Simone).

Simone was the most emphatic person in looking for CPD moments. She named this meeting as "moment of study". I reported to Missy that she said, "Oh Luiza, I want to come back to my studies, I have to study, I am very tired of teaching the same classes all the time" (Researchers' meeting 1). Then, it was a time to stop everything else and focus on improving their learning. I wrote at my filed notes that it seemed one break for them in their own professional lives, one space to, "forget the problems with students and focus on something different" (Field notes 2). One moment to focus on themselves.

Simone also pointed to the difficulty in doing it "without one person to guide this moment" (Field notes 2). As I demonstrated here, individually, there was not enough strength to make it alone. Besides that, I noticed that they have never participated in any CPD format that taught them how to be autonomous in their professional development. Most of the good CPD experiences that they remembered were examples of directive courses or moments where teachers just waited for someone to tell them what to do.

Listening to the teachers' voice: their recipe for successful CPD

Thereafter, my purpose was to try to listen to the teachers' voices. It was necessary to understand what they expected, and in addition, to help them to organize themselves autonomously. According to Simone, "If you have the meeting time, a timetable, a meeting room and a facilitator, as a consequence I believe the meeting will happen" (Simone). But in contrast, I started to realize that these aspects were not enough to enable a meaningful CPD. Just time, space, and one person will not lead to one democratic moment of professional growth. Teachers needed to learn what they really desired to improve in their daily routines and how they could manage themselves as an autonomous group to achieve it. If CPD was not in this direction, teachers run the risk of always being isolated, alone, and simply waiting for someone else to do something for them.

It was important to organize the meeting based on what the teachers thought was important. Three CPD requirements became clear: (a) they wanted a meeting agenda that can be accomplished, (b) they needed to see the effective outcomes of their work, and (c) teachers needed to talk about their difficult routines. Jair helped me to understand how they believed the meetings could be realized. To him, the meetings have to be organized, "it is simply, one agenda. What are we going to discuss next Tuesday? Just it. Simply" (Jair). This speech may

have been influenced by the experiences of meetings that they were attending. The Pedagogical Coordinator just arrived at the teachers' room and made some announcements. The information seemed out of context, divided into diverse parts, and as result, the teachers were always lost and did not understand what they should do.

Pedro also reinforced the importance of the agenda to the "monitoring" of the teachers' work. Authoritatively, he argued that one period should exist to, "show what each one is going to produce, the lessons plan, the schedules, and the syllabus for the week. Then, we are going to do this, and next week come back and ask what they produced" (Pedro). However, as Pedro had been physical education area facilitator at this school, it was interesting to listen to some advice from his experience. To him, "there should exist fast and practical solutions, things we can achieve. Because when we did not achieve the aims, I noticed the teachers were disappointed and unhappy" (Pedro).

Lastly, the most important feature that they highlighted was the importance of speaking. Teachers needed to expose their feelings and their problems. They wanted to use that moment to vent their frustrations. Simone said, "today we do not have this moment anymore, because of that we are crazy at this school" (Field notes 4). They advised me that the facilitator's role at this moment was to, "listen, listen, listen [...] we need this all the time" (Pedro). Pedro described in more detail the importance of this moment and I started to perceive that it could be something that could pull the physical education teachers together. Through giving opportunities to the teachers to talk, they would be able to notice their similarities, divergences and possibilities:

When I was the facilitator, I understood that the teachers needed to speak. We need someone who listens us. The teachers need to talk about their week, their problems. [...] It is important because it builds a dialog among teachers. So, one teacher says something, and the others talk about it also. (Pedro)

Although I had understood the features of CPD which they valued, I had to identify how they believed that these could be realized. I tried to figure out this point when observing their behavior, but I also asked them. The data revealed that they were anxious to work together. They imagined that this could be a good way to develop their work.

I summarized for Missy that, "they know the time is important and they want one period where all physical education teachers can be together" (Researchers' meeting 4), but, they knew the difficulties that they would face to achieve it. Definitely, the school timetable was the first big problem that they would have to solve. And it was not an individual problem, since the

school had teachers on various contracts formats with different hours. Then, building one timetable where nine physical education teachers are free at the same time was challenging and all the school might be impacted by this:

I think it will be very interesting if all physical education teachers could be at this meeting. But it is so difficult in this school. I remembered when Ronaldo was the facilitator. We had three periods to talk, but in these periods, everyone was separated. In the first period came two physical education teachers, at the second more two... (André)

Although they were aware of this challenge, they actually believed in the strength and importance of their collective work. They understood that each one could accomplish their individual work, but to develop their work effectively, the first step was to, "raise the affinity, improving the group work [...] the meeting has to be done for this purpose" (Pedro).

So, look. I think like that. I am working this year with one specific area, the swimming area. Then, I would like it so much if at this meeting we studied how to do that, how to think about that... and I would like also a union among all physical education teachers. Because it will not be enough if just I did some sporting event. Alone, it is not possible. So, if we are a group, we have to join together all physical education teachers to produce something that I can use at the swimming pool classes, she can use to improve the athletics classes... (Rodrigo)

More than that, they started to demonstrate what they needed to achieve. They told me they needed to organize their routines and build one voice that was unique to the physical education group. Furthermore, there were a lot of problems in their routines, for example, with the students who did not want to participate in the sport classes, or students who escaped from the classroom teachers and attended *Centro de Esportes*. Vitor also pointed out that there were problems that they could not solve. My Field notes show that he found he needed to focus on his classes, he wanted to use the meeting to talk about his students:

Teachers talk so much about the problems with students who run away from the classroom and come to the Centro de Esportes. I talked with Vitor to understand what he thinks about it. Vitor said: "My concern has to be with my students. Do you see any students of mine there? I think our meeting is good, but we are not able to solve these problems". I think he was trying to say to me that we cannot lose time with this. We have to focus on the classes. These problems disturb the classes, but it is not the kind of problem that teachers can solve alone. (Field notes 27)

In the same way as Rodrigo and Vitor, Pedro thought the teachers, "need to help to improve our teaching, to learn more, to analyze what is correct and what is wrong" (Pedro). The classes and everything that was involved, such as the students, the content knowledge, and the organization of lessons, seemed to be the biggest concerns of the group. Yet, at that point,

I did not understand that it was which they needed. And this misunderstanding was one important point of the research. In one way or another, the time spent at school and the daily routines we lived there together taught us both, facilitator and teachers, what they actually needed. What was that group about? What did the group build together? This is what is described in the next section. The ways we found together that reinforced this group, the challenges that we faced to continue with the group work, and the resistance, resilience and struggle of the physical education group, which continued until the end.

4.2 HOW CAN A PLC OR A COP SUPPORT PHYSICAL EDUCATION TEACHERS' PROFESSIONAL DEVELOPMENT IN A FULL-TIME SCHOOL?

The previous section explained how physical education teachers developed as professionals in one FTS in Brazil. It was shown that the teachers worked in a socially vulnerable area and in a conflicted environment. They felt pressured and without support from the school administration or from the Municipal Education Office. Yet, the important finding of the first phase of the research was to understand that these teachers were accustomed to working in isolation. Individually, they could only respond to a top-down, directive, and an undemocratic process, through which the teachers had become disempowered.

Alternatively, the results also revealed that the teachers desired to improve their practice. They yearned for meaningful opportunities in their CPD at the school. It became clear that the physical education teachers' lives were intense together. They would have enough space and time to develop as a PLC, or develop together as a CoP. They shared a routine five days a week, and they had regular meetings each week. However, only time and space were not enough to foster a CoP. Thus, after the teachers' agreement, this research became a project that initially intended to begin a PLC with those physical education teachers. Afterwards, the intention was to accompany the community's development, and to understand if it would display the features identified with CoP.

The teachers' needs, decisions, and voices were the product of the community. Everything that the community produced was revealed through these three results. The development of these achievements was not continuous. They were stronger at some moments in the year but kept happening during the whole year; sometimes teachers' needs, decisions and voice were more active, and in other periods more latent, depending on what the teachers' reality required from them.

From the section 4.1, it is clear that the strong "Here and Now" situation the teachers faced at the beginning of the year had never disappeared. The physical education teachers was challenged several times by this daily reality, and its development was a cycle of "Ups and Downs". The teachers made two steps forward and one step backward. In this process, they developed into an independent and autonomous community. The development was not intentionally structured and predesigned in stages, instead, it was more organic, ongoing, slow and dynamic.

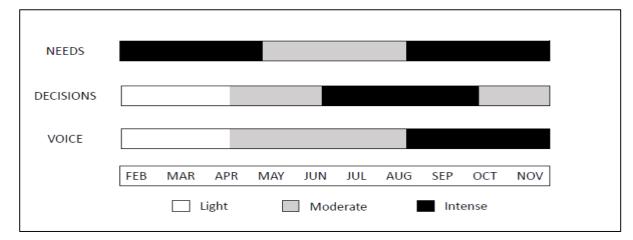


Figure 16 - The development of the teachers' needs, decisions and voice.

Source: Author's source.

The process whereby the community's product (teachers' needs, decisions and voice) was achieved reveals the essential critical elements that gave opportunity to physical education teachers' successful CPD. First, (a) the teachers built their own practice instead of complying with external CPD content. Second, (b) the teachers were supported by their colleagues and friends. Sharing their hard reality with persons who understood their lives provided the strength that the teachers needed to develop as a community. Third, (c) the community needed a democratic leader. Someone who despite their weaknesses, had never given up the teachers, and who created spaces to facilitate the teachers' learning.

I believe that this balance between product and process, what was done and how it was done, can offer the reader comprehension about how the physical education teachers changed from isolated individuals to form a physical education teacher community, in which I was included. Summarizing, the theme 1 describes the production of the community: teachers' needs, decisions and voice; and the theme 2 details the process whereby the community's development occurred.

4.2.1 Theme 1: The production that facilitated community development.

Through the observation period and after the teachers' agreement about participating in this research, Missy and I understood that something could be done to create spaces in which to improve the teachers' development as professionals. However, we did not know what the community could produce. We did not even know if that group would develop as a community or not. Afterwards, we noticed that the teachers and I constructed together the physical education teachers' community. As I said previously, this production was not in stages or steps;

on the contrary, it was by daily "Ups and Downs". However, observing the overall picture of the project provided another way to analyze the community development. It could have micro Ups and Downs, but the community development was always progressing.

This progressive development was composed of the community's needs, decisions, and voices. Their needs were related to two main purposes: first, organizing themselves and second, being recognized in school. The teachers felt that the administrative staff did not give them the same attention and importance that they gave to other subjects' teachers. Even the physical education teachers did not recognize themselves as teachers who had something valuable to teach. Thus, helping them to recognize their position in that space was essential and urgent. We had to act in two ways: organizing their path to CPD, and organizing the physical education program overall.

Concomitantly, the teachers needed to make some decisions regarding their practice. The school's aim was not the same anymore – youth sport training, and they did not know towards what goal they were working. They had to create collective and singular purposes for physical education, which would help them: (a) to understand who they were, (b) what kind of education they believed in, and (c) what they wanted to deliver through their teaching. They learned to act autonomously and to organize their physical education teaching.

With their needs addressed and feeling stronger and independent, the physical education teachers demanded to be heard as a group. They learned how to negotiate between themselves, and to make their voice concrete. They began to view themselves as one resistance group inside the school, which gave them more strength to continue their teaching lives. These three subthemes are detailed below.

4.2.1.1 Essential teachers' needs were addressed

In the first section of the results chapter, teachers' essential needs and their expectations about CPD in the school were identified. It became evident that in the chaotic situation where their lives were located, doing any kind of teaching work would be impossible before establishing some parts of their routine. Then, the central word to them became "to organize".

The teachers needed to organize their CPD. They criticized the absence of the meetings, the resultant misunderstood information about school decisions, and the inefficiency of the school to help them realize their CPD. Then, the first step was planning and continuing a regular physical education teachers' meeting. Additionally, the teachers needed to organize the teaching of physical education classes at the school. They did not know where the physical

education equipment was, what equipment they would need to develop their lessons, or in which spaces they would teach during that year. Lastly, they were burdened with many bureaucratic tasks, some of which the teachers did not understand. They were lost in their functions in the school. Thus, their first challenge was to establish an environment in which what Pedro described as 'peace to work', was possible.

This process of organization was dynamic. Even though the essential needs for the organization of teaching physical education had been addressed more at the beginning of the action research phase – such as: space to teach, time to meet and sport equipment organized, these concerns had never been fully satisfied. The continuing confused situation of the school, a kind of ongoing "Here and Now", always forced the group to redraw their essential needs and, more than that, how and when these constant needs should be addressed.

"It is our space, it is sports equipment, it is where we feel well": organizing the teachers' CPD

When I arrived at school on the 20th of February, I told the teachers that I was there to observe their routines; I was trying to understand the physical education teachers' lives. As described in section 4.1, I spent more than one month with them for this purpose. I lived the same moments they lived in the school. I stood in the teachers' room with them waiting for the Pedagogical Coordinator to chair the physical education meetings. I went to the school general meetings after the school day ended. I observed physical education classes and talked with the teachers about them. I conducted interviews with teachers, with the Pedagogical Coordinator, and with the Principal. I had lunch and attended the break time with the group, and, during this period, I also talked with other classroom teachers and students. However, my main focus was on the physical education meetings. It was at these times that I could talk with all the physical education teachers together, discovering what they wanted to develop and working with them to realize the group' goals.

In the first two weeks of school, there were no physical education meetings. I hoped this was a temporary issue because of the difficult situation of the school regarding to lack of teachers and a confused timetable. Unfortunately, my hopes were in vain, as the teachers continued without meeting all month, which they thought was because of a lack of recognition for physical education as a subject. Then, Missy and I noticed that the absence of the Pedagogical Coordinator offered an opportunity to talk with teachers and discover their opinions. It was a way to start with small steps:

Missy: So next week...How long do we say you will observe? ... I think we can make a defined time, but I think as you... like today, they want to do something good, they are feeling marginalized. And so, my advice to you would be... gradually, in small steps, remember "little steps", you are picking up on this and say, "okay, what can we do?" ... First, has the Principal told them that he wants them to do the curriculum?

Luiza: No, the Principal did not ask them.

Missy: Before that, if this continues with the Pedagogical Coordinator not showing up, it may be a chance to say, "Okay, what can we do? ... so that you can be recognized in school". Start to get into kind of pulling them together. [...]

Luiza: I think it is perfect! And I am continuing to go to the weekly meeting, and I think it is a great moment to listen to the teachers talking... "Okay, we want the weekly meeting". I took this opportunity to talk about it. I am doing this. Making the interviews, observing. It is very good.

Missy: Yes, because you make them feel very important, you can do that. Somebody is there to help them, no other teachers have help, and I think you are kind of making them feel important studying with them, so they... "we can make physical education not marginalized". That gives them status in the school. I think it is good!

Luiza: Is it without planning [the] weekly meeting?

Missy: Yes, for right now, not planning.

Luiza: Just sit down and talk with them. (Researchers' meeting 4).

Following Missy's advice, I kept attending the teachers' routines. During the teachers' interviews, the teachers criticized both the lack of CPD they received, and also the *Plano de Vingança* idea, where classroom teachers wanted to punish the students by not allowing them to take physical education classes. Both criticisms reinforced the supposition that Missy and I had: the first essential needs of the physical education teachers were to be recognized. Starting to talk with the teachers during the meeting time was a way to address this crucial necessity. In one meeting, Missy and I were drawing possibilities about the *Plano de Vingança* as a catalyst to teachers' reflection:

Luiza: Do you think I have to.... take the opportunity to be with them in the weekly meetings and talk about it.

Missy: Yes, but you can keep being quiet. This is very good... I like it very much. You are doing exactly what you need to do in this work. You are gaining their trust... And if you can help them how to be recognized then that is a lot of discussion, a lot of work, but it can be done. **Luiza:** I am going to do more interviews, observe classes, and start to discuss with them during the weekly meeting... (Researchers' meeting 4).

Although the teachers' desire to be recognized by the school could open one door to initiate the teachers' reflection, helping them to feel recognized could take a long time Thus, I first ensured that the group had their physical education meetings with an organized timetable, meeting agenda and space. My intention was to build a project with the teachers, creating space for their voices to discuss and decide their own CPD. After collecting information about how

the physical education teachers envisioned their CPD meetings, I started to struggle alongside them to achieve it.

The first thing I fought for was change to the teachers' timetables. Since the beginning of the year, I had been talking with the Principal about the importance of having a timetable where all physical education teachers could be together. Timetabling was not an easy task for the Principal as it involved changing the classes of all teachers in school. Yet, since the beginning of the FTS project, the intention of the Municipal Education Office was to arrange the CPD meetings by curricular area. This meant that the Communications and Varied Languages area for example, would have CPD meetings on Wednesdays, the Sustainable Environment and Youth Protagonism area on Thursdays, and likewise for all subjects.

This CPD organization depended, however, on another issue. In the Municipal Education system, some model schools were targeted for a specific subject area. For example, some schools were focused on music development, others on technology, and so on. As the *Clarice Lispector* School was aimed towards youth sport development, there were more physical education classes in its curriculum than in the other city schools, which justified the larger number of physical education teachers in this school. Consequently, all physical education teachers should have their meetings together, as an area. The day to hold their meetings was on Tuesday mornings.

In one interview, André expressed that the failure to gather all physical education teachers at the same time had been the first big problem to guaranteeing the "moment of study", as they sometimes called their meeting. I already knew about the absence of a collective meeting time, and had been discussing it with the Principal since the beginning of the year. In the first week, I took notes when we, "talked a little about the period reserved for the physical education area CPD. He told me that this timetable was already done" (Field notes 7). Yet the school timetable changed several times during the year and there were always problems to including all physical education teachers in the same meeting time. For example, the Principal advised me, "that the martial arts teacher will not be present because she was going to teach in another school on Tuesday" (Field notes 7). The teachers were always worried about this issue, and at their meetings they demonstrated this:

Vitor: Nobody's timetable is done yet.

André: Let's wait and see if the school will split the thirteen-year-olds class in two. Then, we could see how the timetable will work.

Luiza: I talked with Ronaldo and he is trying to put every physical education teacher together in the meeting time.

Sara: Yes, since then it is working.

Vitor: Yes, just Jair is not here. (Teachers' meeting 3)

The timetable was a significant concern to me and to the teachers, and unfortunately, it lasted all year. Every time some changes occurred in the school, the teachers' timetables, and, consequently, their participation at the meetings, was affected. Elis, and Erika had never participated in the meetings for this reason, and similarly, Jair left the group in the second semester. Vitor, André, Rodrigo, Simone, and Pedro formed the group who resisted all changes, although keeping them in the same meeting time was a constant battle.

For the second semester, we held the meetings by *Skype*. I had to move to another country and, taking this into account, Missy and I thought that reducing my contact with them to just one day during the week might be good. I said to her, "I think it could be an opportunity for teachers to work together, more together, and further from me". Missy agreed with me but advised me, "it is helping them to become... It is helping them to take a break from you. [...] But if we had been smart you should have practiced Skype with them before you left" (Researchers' meeting 15). I had planned the meetings with the teachers before I left, but I did not practice Skype skills with them. As a result, it took three meetings to reorganize ourselves. I practiced with Pedro who committed to bringing his computer and managing the Skype calls. André recorded the meetings, and afterwards he shared them in our WhatsApp group. Simone took notes and sent it in our WhatsApp group as well. Rodrigo arrived earlier to organize the meeting room. By the end of August, everybody was accustomed to the new meeting format. As the group was together only once a week in the second semester, the teachers always shared with me the news about the school at the beginning of the meeting.

During that August, they told me that they were inundated by bad news about municipal education. In agreement with most of the other Mayors from the Minas Gerais State, the Mayor of Governador Valadares went on strike to force the government of the state to send them the money that they should receive every year. This news directly affected education because the Municipal Office started to make cuts and reduced the money that would go to the schools. Many classes were cancelled, teachers lost the number of classes taught and, as result, the timetable changed again. The teachers were worried and reported their concerns at their meeting:

Luiza: So, how is the messy situation in school? Did the timetable change again?

Pedro: Yes, it changed. Did you see it? The Vice-principal sent it on *WhatsApp* group yesterday. **Luiza:** Yes, she sent it on Sunday night. But Vitor's timetable is overlapping. Do you think she

did not see it?

Pedro: Yes, his timetable is overlapping with the meeting.

Luiza: No, it is overlapping with other classes. Two classes in the third period.

Pedro: Hum, okay. Did he talk with her?

Luiza: I do not know. I asked him on the WhatsApp yesterday, but he just answered yes and no.

Pedro: I had found another mistake too.

Luiza: Hum, yes... And, could you update me? Vamos! Where are Rodrigo and Jair?

Simone: Probably Rodrigo is at the pool because now he has to teach Ms. João how to clean it. But I did not go there, I did not see any movement there. I have class now 8.40a.m. Jair has three classes and two gaps, probably he will not come here in the morning. Because if he came now, at 7a.m, he would be standing here until 3p.m with many gaps between the classes. (Teachers' meeting 19).

This ongoing "Here and Now" made the teachers confused in their work. When I asked about the classes, Pedro explained how his classes had been impacted by the unclear timetable, "last week was so complicated to me because... Let's explain like that. I did not follow our agreement. The timetable had been made daily, you did not know which class you would teach, how you would teach and who would teach" (Teachers' meeting 1).

The Mayor's strike was just the start of the challenges that the teachers would face. Another of my Field notes indicated the difficult scheduling situation that the school was facing, "today teachers were informed that the classes will finish on November 30th, and all contractual teachers will be fired. To complete the 200 school days, the school will have classes every Saturday and on holidays as well" (Field notes 61). As the group intended to design the meetings to help meet teachers' needs, in this situation, the meeting agendas changed to accommodate the new teachers' necessities. The agenda became just talking about all the changes taking place.

Before starting the action research phase of the project, I asked the teachers how they believed the meeting should be organized. In April I asked teachers if they would agree to participate in the project and if they believed the group could organize the physical education meetings. Jair had explained about how to build one meeting agenda and Simone had shared her experience with this in another school, but during our meetings I wanted to show them that we would build the agenda together:

Luiza: So, one part I think we need to build together... I did not ask you on the interview because you told me you did not have a meeting, but it is important to know if you already have one meeting agenda.

Vitor: We did not have a meeting, so, we did not have a meeting agenda.

Rodrigo: The meetings we participated in were with all teachers in school.

Vitor: Here in Municipal Schools the meetings were in afternoon. I was in the other school, I have never participated in it.

Simone: In the other school I had a meeting agenda. [...]

Luiza: Simone had an experience in the other school. How was it Simone?

Simone: The Pedagogical Coordinator did the meeting by curricular area. So, there were history teachers, religious study teachers and us, from physical education.

Luiza: But how did the Pedagogical Coordinator build the agenda?

Simone: She arrived and delivered one sheet which had "Agenda of the day" written down. There was some text, the aims of that moment that could be problems with students, some information to the teachers etc. After she made some questions about those issues and we had our chance to speak at the end of the meeting.

Luiza: So, you can see that she built it alone. It is not the idea here. The idea here is we build it together. We are going to include what we want to do, which structure we desire for the meeting. In the interview, I asked you. What do you need, what do you want to discuss here? I will not come here, bringing something ready and just press it on you. You answered me, for example, you want to have time to talk about your problems, to share what happened during the week. What more?

Simone: I think we have to have one moment to... for example, we must deliver the students' profile now, the scheduling of the year and the planning notebook. (Teachers' meeting 3)

At the end of this meeting, the teachers understood the aim of a collective agenda. We produced together one structure for all meetings (outlined in figure 17). This structure was changed at various times during the year. We always tried to adapt the meeting to teachers' needs. However basic, they needed to understand that we were organizing their school lives. They needed to feel secure at school to achieve their work. It was good to see them comprehend that they had been listened to and they were then part of the building process. They needed to be conscious of their role and responsibility in that process.

Figure 17 - Agenda of the teachers' meeting

General Meeting Agenda

- 1. Sharing the week
- 2. Filling the documentation
- 3. Working on PE curriculum
- 4. Moment to discuss the school problems
- 5. Building the next meeting agenda.

Source: Artifacts.

On several occasions, the agenda item "1. Sharing the week" became the time to discuss their school problems. Their difficult reality was to try to survive the school problems, and consequently, the agenda item numbers 1 and 4 were combined or even mixed during the year. We also decided that the group had essential needs that everybody must discuss together and think of strategies to meet those needs. Thus, agenda item, "2. Filling the documentation" - where the teachers would fill students' profiles, attendance, etc. - gave space to collective work regarding physical education practices. Missy and I thought that let them talk about their problems at the beginning of the meeting was an important moment which could unite them even more:

Missy: I think your strategy is very good. Your plan is good. I liked the fact that you used the beginning of the meeting to talk about what you called collective work. You know... maintain the *Centro de Esportes...* re-planning how they do their games by the year. I think that is very very good... Because... let them talk about things that they need to talk about. Who is going to talk to the Municipal Secretary?

Luiza: André wants everyone to go together. It is good.

Missy: No, I think it is good. That is those things they need to talk about, so that is good. So, you use some time for that. Then you use some time for the curriculum piece, and you have... the active part is wonderful. (Researchers' meeting 8)

By May, the group had the timetable, the meeting agenda and now only the meeting space was needed to guarantee they had the essential components of an organized meeting. I had talked with the Pedagogical Coordinator and the Principal about this. They agreed that the library would be the best space for the meeting. Nevertheless, the school was always a busy space where things happened suddenly. We always had to be prepared to improvise and rethink earlier plans. On the first meeting day, I arrived at school at 6.25a.m. I was worried about this first meeting and my idea was to prepare the library for the physical education meeting. I wrote in my Field notes, "when I arrived at the library, I noticed that the parents' meeting would be held there. Then, I talked with the Vice-principal and asked her to allow the meeting in her office" (Field notes 20). After this scheduling confusion, I thought that the best thing to do would be ask the teachers what they would prefer. What would the best space for them? During the meeting we talked about this issue:

Luiza: We have to think about the meeting space. Today we are here in the Vice-principal's office. It is great, we have air conditioning, but I do not know if it will be comfortable if everybody comes. I was thinking about doing it in the library, but there we do not have air conditioning. What do you think?

Vitor: And upstairs? In the sports equipment room at the *Centro de Esportes*.

Simone: From now on it will be colder.

Luiza: Yes, people said there is an air conditioner there, but it is completely full of sport equipment...

Rodrigo: But even like that we have space there.

Vitor: But it is our space. It is sport equipment, it is where we feel good. [...]

Luiza: Great, the meeting space will be in the sport equipment room at the Centro de

Esportes. (Teachers' meeting 3)

After the meeting space issue had been resolved, the group attended to the other things needed to make the space "theirs". To use this room, it would need to be cleaned; moreover, it needed chairs and tables. Yet more fundamentally, the group had to convince the Principal that we wanted to use that space; that it would be important for the group. The process of belonging to a place takes time. Slowly the group was occupying that space and feeling like "here is our

space". I posted pictures and artifacts produced by the group on the walls, and everybody helped to organize this equipment room.

The first essential needs had been addressed. However, although the group had the structure, it still needed to fill the meeting with something that would continue to help the teachers feel even more recognized and valued by the school and by themselves. The group needed to construct an identity for physical education that would give the teachers a genuine presence and a sense of belonging in the school. I needed to know what they wanted for themselves. Thus, the next section describes how the group organized the physical education as area at the school.

"I am worried about the lessons in practice": organizing the physical education area

Since the first informal chat with the teachers, I noticed that they were interested in contributing to the development of physical education classes. The permanent teachers wanted to make something long lasting; they were not just looking at the immediate problems. They were worried about the organization of physical education for the following years and for the future teachers who would come to the school to work with them. However, the contractual teachers looked at the problems of "Here and Now", such as teaching a new content. For example, I took notes when Simone said that, "she is worried about working with new content, the athletics; and André said he does not have any problems with his content" (Field notes 5). Through different perspectives, they demonstrated a willingness to improve physical education teaching. Yet first, they had to negotiate several bureaucratic obligations within the school. For example, they were required to submit documents (students' profiles, projects, attendance records, assessments, etc.) to the Pedagogical Coordinator who, in her turn, thought her role was to ask teachers for such. She said, "I am the supervisor. I have to guide them and to charge them to prepare all documentation. Because... we have teachers that do not fill out the documentation" (Pedagogical Coordinator). Beyond accomplishing the bureaucratic tasks, the teachers had to solve their own problems. All the physical education equipment was spread over the school; they did not know how much equipment they had and what they needed to buy. In addition, the swimming pools were dirty. The teachers had to determine how to solve these problems without money.

Following establishment of the meeting agenda, the group started to prepare the documentation requested by the Pedagogical Coordinator. It was a difficult task as the teachers saw no merit in the activity. During the meeting they said, "if we put a cake recipe there nobody

will notice"; "I always did the same report and no one noticed"; "The Pedagogical Coordinator received it from all teachers in school, so it is impossible she reads everything" (Teachers' meeting 3). Yet, I noticed that Simone was the most worried person regarding preparation of all these documents. She was always helping the group and reminding them of the dates by which the documents should be received. Until the end of the year, she offered her documents to everybody, "Hey guys, I finished my report. Please let me know who wants it by e-mail! Bye!" (Social media records 31).

Although it was a boring task, filling in documents also helped the teachers to unite themselves. It was the first small but collective task they faced together. When the Pedagogical Coordinator asked them to accomplish an initial assessment, Rodrigo, André, Jair, and Simone worked together to do it. I took notes about my impressions, "I think it is very interesting that everybody thought about the questions together. As this year is the first for her in this content, all teachers helped Simone to do the athletics questions. Even I helped!" (Field notes 8).

During the first semester, they continued to provide ideas about how these bureaucratic requirements might be different. For example, they said, "it could be more interesting if it was by curricular area" (Teachers' meeting 3). Beyond that, they decided to fill the students' profile together as a group. The group spent two meetings in accomplishing this task; they organized themselves and divided the classes between them. In the end, I do not know if all documentation was delivered, as slowly the agenda space for this bureaucratic task was losing traction during the meetings. The group did not talk about it anymore. It seems that they did not want to waste their meeting time with things on which they did not place any value.

Meanwhile, organizing physical education classes and equipment was urgent for them. André was worried about the documentation issue and Rodrigo advised him, "André, this sheet will accept anything. I am not worried about it, but I am worried about the lessons in practice" (Field notes 4). On other day, Rodrigo was talking with Jair and I took notes when Rodrigo kept showing his concerns about the classes, "Jair, I do not want to impress anybody, I am just trying to organize the things to see the outcomes of my work" (Field notes 7). The teachers, in their own way, was trying to build a better place to work.

First, they desired a space to teach. The swimming teachers faced the problem of two dirty swimming pools and the other physical education teachers were looking for sports equipment with which to work. Second, they had to learn how to share the space that they had. There were five physical education teachers to use two spaces, an athletics field and a soccer field, at the same time. Yet, the immediate problem was money to manage the space and the equipment issues. Even facing this problem, the teachers worked to solve it. For example, André

and Rodrigo began working together to fix everything at the pool before swimming classes began. While Rodrigo was repairing the pool André was, "talking with the owner of the cleaning products shop trying to convince her to sell the products to them and let them pay after". They told me the school swimming pump was broken and "the Municipal Sport Office did not lend them their swimming pump to clean the pool" (Field notes 8). Even still, they were successful in these tasks. Rodrigo repaired the pump himself and they received some money from the school to buy essential cleaning products. By the end of May, the two pools were ready, and they could start their classes as planned. The Figure 18 demonstrated when Rodrigo called students to help him to clean the big swimming pool while André continued to teach at the smaller pool.



Figure 18 - Picture of the teacher and some students cleaning the swimming pool.

Source: Artifacts.

The missing and damaged sports equipment was a more complicated problem to solve. Since the previous year, the school had been facing problems with people in neighborhood who were invading the school, stealing the sports equipment, and using the school facilities. The Principal was worried about this situation. Teachers were pressuring him to buy new sports equipment and he argued that he already had done so in the previous year. I recorded in my Field notes when the Pedagogical Coordinator reported the Principal's decision, "[...] from now on, the sport equipment should be keep locked in a room far from the location of the physical education classes" (Field notes 11). The Pedagogical Coordinator also said that the teachers must help her to check all current sports equipment, to compile a list, and to organize it. This top-down announcement made the teachers angry. Simone was the first to demonstrate initiative. One day I arrived at the Centro de Esportes and she was at the equipment room. I noticed that, "she was complaining that nobody helps, and everything was a mess. I started to

help her to clean, and the students helped as well. We started to think of solutions for that space" (Field notes 38). Although Pedro took pictures (Figure 19) and congratulated our work on the WhatsApp group, Simone was still feeling alone in her efforts to organize the physical education demands.



Figure 19 - Pedro's picture of the sports equipment room.

Source: Artifacts.

The following week, Simone invited me to continue to organize the sports equipment with her. It seemed that she wanted to contribute to the physical education program in some way. Moreover, it was a way to be recognized as well. While at the start only Simone showed some willingness to do this, as time passed, all physical education teachers got involved I reported this change in their behavior in my Field notes:

I went with the Pedagogical Coordinator and other teachers to the *Centro de Esportes*. We were making a checklist of the sport equipment. Everybody showed willingness to help. Vitor and Jair offered to bring their students to help to clean. Pedro and Simone were also involved. It was an intense day of their collective work. (Field notes 48)

The teachers acted in different ways regarding the sports equipment. They accomplished what the administrative staff wanted in terms of organization and surveying the available equipment, but they also made requests of the Principal. They required more sports equipment, and they were happy because the Principal allowed them to create a list of sports equipment to be purchased. I noticed that, "Vitor was very happy knowing the school has the money to buy the sports equipment. He told me we could do it together, with the whole group" (Field notes 43).

Although in the first semester the teachers felt confident in continuing their work, an incident demonstrated to them that resolving the sports equipment issue would not be an easy task. The teachers prepared the list of equipment to purchase, but the material never arrived. In the second semester, the teachers faced more challenges in teaching because of spending cuts

the Municipal Office made to school finances. At the end of the year, they reacted to the disappointing situation they were experiencing:

André: I do not know if you know about the reality of the school. But we were without cleaning products [...].Rodrigo and I, we did a miracle. We did a raffle and we gain R\$ 700, but it is not enough to use in both pools. [...] We asked three water trucks to fill the small pool. Because the water was rotten. So, we are using the small pool because with this money we keep it clean. And we abandoned the bigger pool. [...].

Simone: Yes, so we do not have water, we do not have anything. I fixed one soccer ball. If we want to realize the sport festival, we need it. Or, if the Principal buys one more [ball] with his own money, or we buy it, I do not know. [...].

André: Rodrigo and I are doing a miracle here. Even washing bathrooms. We washed bathrooms at the swimming pool area. Bathrooms with a lot of s^{***} . (Teachers' meeting 21)

Until the end of the school year, the teachers demonstrated their desire to do something to improve physical education. Nevertheless, sometimes it was problematic to resist the pressure and the adversity that threatened to overwhelm them. During the year, they faced several struggles but also victories. While this dynamic process of "Ups and Downs" occurred, they were building their own place in the school. They were continuing to fight to be recognized. In this teachers' trajectory along the year, after achieving small tasks together, they showed themselves to be strong enough to take decisions that affected physical education's purpose and structure.

4.2.1.2 Autonomous decisions impacting physical education's purpose and structure

I held two informal meetings with the teachers. For instance, on one occasion when the Pedagogical Coordinator did not show up, and because the physical education teachers seemed unhappy with the *Plano de Vingança*, I could take this opportunity and talk with them, to understand what they desired for themselves. The initial two meetings gave me understanding about their essential needs, but also highlighted the teachers' bigger issue, which was that the physical education teachers were lost. They did not know the purpose of their work. They did not understand the school's purpose as a whole.

When this school was built, the purpose of the school was youth sport development training. It was part of a municipal education project in which some schools would concentrate on different subjects, such as: music, technology, and sport. The facilities building was a partnership with the Mining Company that also offered a short course to prepare the teachers to train youth athletes. After Simone, Pedro, Vitor, and Jair participated in this course they were confident about the school's purpose. When André arrived, he was included in this project,

which fitted very well with André's goals. Overall, these teachers were convinced of the school's purpose and they worked to achieve the youth sport training. However, after the municipal government changed in 2017, the identity of the project changed and the teachers did not know about the school project. The money that the Municipal Office sent to the school was not enough to maintain the *Centro de Esportes*. Moreover, the physical education teachers did not have meetings that were part of their CPD. As a result, the physical education teachers felt lost, abandoned and pressured, first by the other teachers in school who blamed them for the students who escaped from the school to go to the *Centro de Esportes*, and second by the administration staff that requested bureaucratic tasks from them.

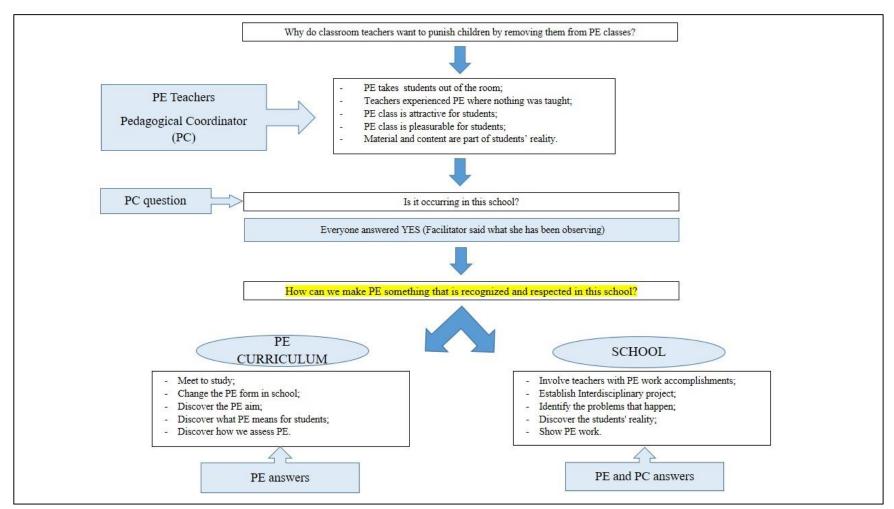
This subtheme identifies what the physical education group created and how they moved forward to identify a purpose for themselves regarding physical education lesson structure and teaching strategies. If the aim of physical education was not youth sport training anymore, the teachers sought to determine their new aim, and answer these questions: What did they desire for their students? and, how did they expect to keep learning to achieve their new physical education aim?

Building the physical education purpose: Who are we? What do we want for students?

When I started to talk to the teachers, they showed a significant willingness to identify problems and improve their work. On the one hand, within physical education they were unhappy with their classes; they had students who did not participate in the lessons; and they were unsatisfied with their physical education colleagues' lessons. Additionally, they had struggles with the school in general. They faced problems with students who went to the *Centro de Esportes* to escape their other classes; they did not feel totally supported by the administration staff; and they felt the other teachers in school were jealous of them.

At the first informal meeting (outlined in Figure 20), I asked two provocative questions: Why do classroom teachers want to punish children by removing them from PE classes? and How can we make PE something that is recognized and respected in this school? It was my first attempt to understand whether the teachers' attitudes would correspond with my intention of developing the project with them. They answered with several insights, which confirmed that they were hungry for CPD. Although I was happy with their answers, I did not know how to start something beyond that. I reflected on it with Missy and she supported me:

Figure 20 - First informal teachers' meeting



Source: Artifacts.

Missy: So what about, you have one scheme that you sent me, "How can we make physical education something that is recognized and respected in the school?" And physical education people they want to change the form, why not? If they said they want to change the form to discover the aim and discover what physical education means for students, and discover how to do the assessment, why not give that? You could give that back to them and say, "This is what you talked about last week. Do you want to start with any of this?"

So again, you have to take their ideas and say... They gave you four ideas here, and then ask them "Where do they want to start?" [...] You are not giving to them, but you always give them homework that allows them to talk about these things. So for example, lead them to what is important, but let them draw it together...

Luiza: So, just to check if I understood. Do you think I have to take this, just this part they talked with me, and start to ask them where they want to start?

Missy: Yes.

Luiza: And discuss with them about these topics.

Missy: Yes, because they identified this. They came up with this in this week, yes? So, they are saying it. They want physical education to be recognized. They had these ideas, "oh we need to change". How could we change it? Let them... Let it come from them. You have more knowledge sometimes than them, of research and literature. You know good things about how it could be changed, but they have to want the change and they want ... now you just help them. They may say... we want to be... take a different form, so you talked last week about your student, who was a teacher there and who was doing tactical sport or something like that [Pedro]. Yes? So maybe I want to learn how to do sport... so you may, someplace later, do a workshop for them or class, so they see what it looks like, but again, let it come from them. (Researchers' meeting 5)

Repeatedly, we used this strategy: pose questions, encourage them to talk about it and choose where they would like to go with the idea. I took notes about their speech, I organized their ideas, and afterwards, I brought the content back to them. This process produced another discussion by the group. This sequence of questions, discussion and choosing direction continued until the end of the project. It generated the teachers' reflections and self-recognition. As Simone said, "I am thinking about things I did not think anymore.[...] Because of it, sometimes we have to come back and study, because even we do not recognize what we do every day" (Teachers' meeting 2). Thus, I needed to give opportunities to the teachers for discussion and reflection processes. Previously, the teachers lacked this opportunity, and felt recognized when they had the chance to engage like this.

These opportunities also generated an autonomous way of thinking about physical education. In their meetings, they began to reflect on their own practice and relocate themselves in the school. They began to understand that investing in their work was also a way to be recognized. At our next meeting, I asked how we could act and they started to reflect about it:

Luiza: But here in physical education, what is our part? What do we have to do to solve our problems inside the school?

Simone: I think there are many things that should be solved.

Vitor: I think that more moments like now should happen [talking during meetings]. Because I do not desire to come here anymore.

André and Simone: Luiza could say to them what we are doing here. So, they would look and say "Oh f*, it is good!".

Luiza: Listen what Vitor said here Simone.

Vitor: I think we have to say... we have to achieve a high level of organization in physical education. Then, when they look here, they would say "Look, things are working there". Ronaldo would say "Hey guys, no one could talk about physical education because the things are working there. Their things are running, running, running so well. They are improving each day. You will not mess with them". (Teachers' meeting 1).

At the second informal meeting, I showed the figure 20, reviewed what they had produced in the previous meeting, and I asked them where they would like to start the debate. They talked about the problems in school. I did not interrupted the discussion, and later I asked them to focus on only physical education, but I noticed that it was hard for them "because, as they even said, one thing is related to the other" (Field notes 17). The school problems interfered in the physical education classes' development. However, at that moment, I knew that while it was important to show them that the group had time to talk about the school, they could not spend the whole meeting on these issues. Instead, they should look at their own practice. Then, when they looked at their practice, they started to understand that they were lost, and that identification of the aim of physical education would be a way to find themselves.

At the second meeting they discussed physical education at the school:

Luiza: So, today I would like to ask you, if you look just at this box [**pointing the figure 20**] because now we will try to talk just about it. Where do you think we should start? What is your interest?

Simone: By the aim, or by the curriculum organization as well, both are important.

Vitor: I think by the aim. With our aim, a clear aim, it would be a *Norte* (North) [a guiding principle] to us. We could put it in this curriculum.

André: What we have to work, the content.

Simone: When we did the course [Mining Company's course], what did they say to us? That the school would be selective. That just students who wanted to train in sports will come here. Then, on the last day, they said "This school will not be selective, it will be inclusive. We do not have to select anyone to study here". Then we were affected. Because we were doing the course, we were like... surprised. We said: What? [...] The mistake is since the beginning.

Luiza: So, do you think the mistake is that before we had one aim and now the aim is another? (Teachers' meeting 2).

Their recognition that the original aim of the school did not exist anymore was the first step to developing a plan of action. From that moment, they began to look at their practice and think about what they wanted for their students. However, the teachers had different perspectives on how to proceed.

Vitor was more emphatic in adopting a critical perspective of education. Vitor believed that during the training or in physical education classes they should focus on student education to develop their critical senses. He said, "the system does not want it for kids, being a critical

person. The student has to have the knowledge to look to something and say 'No I do not agree, it is not like that'. They have to be autonomous" (Teachers' meeting 2). Although the other teachers inside the group thought in different directions and they sometimes seemed not to understand their own beliefs, Vitor always pushed the group to think of physical education as a way to educate the students to be autonomous and independent. Initially, it seemed something of a contradiction, because Vitor was always the most severe teacher with students. On my first observation day in his class I wrote, "while he talked with the students he used harsh words, even threats. He was trying to explain to the students that if they did not copy in the correct time the classroom teacher said that she would punish them by taking away their physical education time" (Field notes 20). Later, I started to understand why he behaved in this way. He wanted the best for students, but he thought he should show them how life was hard and how the students should be alert to what the political system had been doing with them.

In this second meeting, I collected the opinions of all the teachers about the aims of physical education. They talked about what they were thinking, and more important than that, they had opportunities to listen to each other. I continued to push them to think more deeply. I asked them what they expected from their students, and what they thought was important for the students to take away from physical education classes. In general, they wanted to equip students with a broad vision about the "Body Culture of Movement" (outlined in figure 21), so students would know about the physical education content and practice these contents as well.

Even though these discussions had given the group an overall outline about their aim, it was still vague. They needed to understand that they could teach skills or knowledge about sports in different ways. As Missy said, "it is how I teach the skills that make all the difference in the world" (Researchers' meeting 7). They needed to figure out what they believed, what the purpose of education was to them.

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²² This expression became known in Brazil after the dictatorial movement, at the beginning of the 1990s, when different authors built new approaches to Physical Education. They were trying to rethink the aim of physical education and take it far from sportification in physical education classes. In the Brazilian orientation documents, based on some of these approaches, the "Body Culture of Movement" means the content of physical education such as dance, martial arts, sports, gymnastics, playing and games (BETTI et al., 2015).

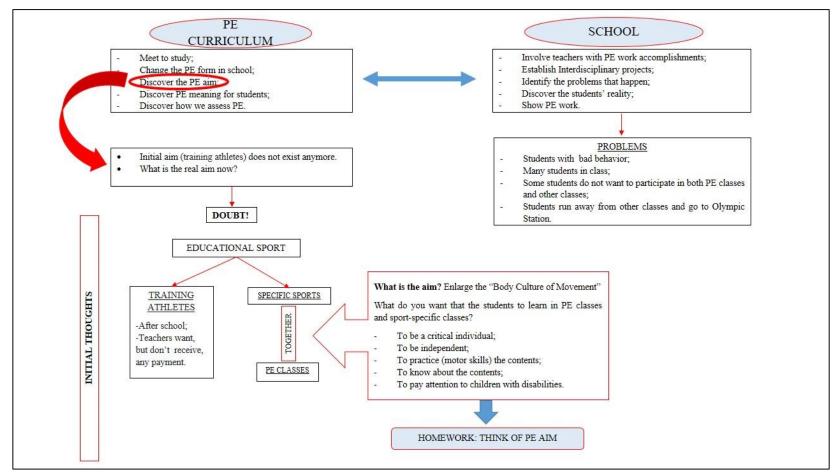


Figure 21 - Second informal teachers' meeting.

Source: Artifacts.

In the third meeting, I asked them if they would accept me inside the group. I started explaining that I was there for two months observing and talking with them, but if they desired it, together we could try to construct the physical education aim for the school. In my Field notes I indicated that I explained my role as a facilitator to them, including, "mediating the issues between them and the administration staff; supporting them about their classes and documentation" (Field notes 20). I made it clear that my role was to help them to achieve what they needed, and it was not only to research, since my willingness to help went beyond that. They accepted my presence with them. Each one gave his or her opinion about why my presence there would be important. Pedro and Jair arrived later, so I asked them as well, and they answered positively, as the other teachers had. Through their answers, I could confirm that they were professionally lost. Additionally, although each one believed and desired something different, they all had in common the willingness to change, to improve the role of physical education. I took notes of each teacher's reason to participate in the project. For example:

André thought it would be good, he thinks they might lose the *Centro de Esportes*, then, he wants to have everything ready for the next year; Rodrigo believes that the physical education group is not autonomous, and I would be there to help. He has the perception of a facilitator as a person to correct them and talk with them about what they should do; Simone believes that the school has big potential and it has to be exploited. She thought that together we could fight to build partnerships; Vitor has confidence that I could help to produce something for their work. I would pay attention to their reality. It could be possible if everyone helps. (Field notes 20)

After their agreement, in follow-up meetings the group invested in finding a direction, a *Norte* (North, as they called the physical education aim) for physical education. They were looking for some orientation for their work, something they could hold onto and believe in. As Vitor said: a guide for their work. Subsequently, they showed they truly needed this guidance. When I asked what the meaning of physical education was for them, Simone assumed, "maybe I do not understand... you are asking again... what is the meaning of physical education in this school? Maybe I do not understand... maybe I do not understand this school at all!" (Teachers' meeting 3). Vitor supported her by reminding her that the initial goals of the school did not exist anymore and, finally, she agreed with him:

Vitor: I think your question should be answered after we do what we must do here. The question now should be another: what would be the *Norte* of physical education in this school? And it would be what we said here, it should be what was built here. Who did the course here [**Mining Company's course**]? Simone and I were here, we know what the meaning of this school was, how this school should work, all structure... It was the answer that we should have. But it is not like that anymore. Then, we must build the meaning of physical education in this school now. **Luiza:** Yes, I agree.

Simone: Yes, I agree too. We must build the meaning now. (Teachers' meeting 3)

Afterwards, in the fourth meeting, they provided many ideas to the second thought-provoking question: "How can we create a meaning for physical education in this school?" (outlined in figure 22). Vitor said the group should find one approach to follow and combine this with teachers' experience. Pedro suggested that the group should look to students, what they needed and wanted. Simone talked about the biological foundations of physical education. I asked if they were agreed that the physical education meaning should be the biological paradigm. Most answered in the negative, and even Simone, after she listened to her colleagues, agreed that the meaning of physical education should not have only the biological perspective. By the end of the meeting, they were remembering the features of the approaches produced in the nineties. Through this brainstorming session, I noticed that they knew about these 1990s theories, but their knowledge was not organized and they confused many features of different approaches.

After this discussion, I realized that figuring out their world vision and what they desired for their students would be difficult to them. Moreover, the teachers needed theories connected to their practice. Learning theory was distant from the reality of their teaching, and because of this, an abstract learning was hard for them. They criticized the university focus on teaching only theory, and they struggled to connect this with their daily practice. They needed to know how they would "put all the theories in practice".

I was worried about this distance between what they learned during their physical education degree and what they needed during their teaching practice. I reported to Missy who tried to understand the Brazilian physical education teaching context and, at the same time, support me:

Missy: How useful are these theories?

Luiza: It is the problem. I think if you did a deep study about theories, you would know how to teach, to achieve critical teaching or to achieve a healthy curriculum. But, in university, they just passed on the theories and the university did not teach how to implement theories in classes, how to use these in practice. So, I thought about asking them if they wanted to study these but in a practice form. Like, "*Vamos*, we can try to study together and practice together".

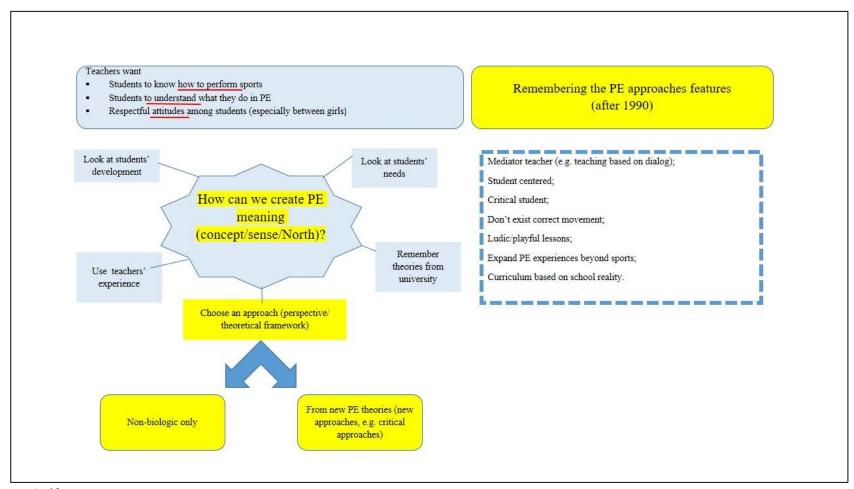
Missy: Yes, that could be exactly it, because it is the connecting of the theory and practice, which is difficult, and so one of this... What are the other theories? You have critical theory, fundamental skills theory, what else?

Luiza: Healthy theory, like curriculum for healthy, and cultural...

Missy: Cultural studies.

Luiza: We have more but I think I can work on these four groups.

Figure 22 - Fourth teachers' meeting.



Source: Artifacts.

Missy: [...]. And I think that would be... that exactly what I was talking about, make it very practical for them. Which one of these, if you are going to do this... we have critical students, participatory students, all these criteria right here, then "How can we look at this in practice?" They help students' development; looking at the students' needs; and sharing their experience... [reading the figure 22]. I think that is brilliant, but ask them, just like you said. To see them in practice.

Luiza: Because I think, they did the physical education purpose... "teachers want the students to know what to do and to understand" ... but what is the meaning of understanding? Like, understanding about movement or understanding about how this movement affects society... it is so different.

Missy: Exactly, so ask them. (Researchers' meeting 6)

In the sixth meeting, I proposed that the group revisit some approaches from the 1990s. We talked about studying these approaches through learning experiences of teaching. They were worried about choosing one approach and everybody being obligated to follow this. Pedro said, "if we restrict it, it could generate conflicts between us. For example 'lines', some people like, others do not. You can say line is a military practice, and walking together is more from the nineties" (Teachers' meeting 6). In addition, the teachers had other doubts. André for example, was concerned because he associated the teaching of skills with being a traditional teacher, while Rodrigo understood that if they used game play instead of skill repetitions then they could be teachers who used a critical approach in their teaching.

They began to negotiate these concerns. They understood the importance of finding a balance between respecting each other's freedom to teach and building a guide for the group to plan their teaching from. They also imagined different topics of lesson structures. They were rethinking their practice, and asking questions of themselves (outlined in figure 23). The group revisited their university learning about health, cultural and critical approaches and, at the same time, discussed their doubts about teaching. I used four workshops to facilitate this process and, to achieve, as Missy said, "let them start to see the difference between what is taught versus how it is taught" (Researchers' meeting 7).

During meetings seven to ten, the group participated in the workshops. First, the group studied the health approach. The teachers read a small text together and we discussed the main topics, and afterwards we did a learning experience in the field. I taught exercises in a military way and in sequence, then I split them into two groups. I asked them to teach the same content but using the teaching strategies suggested in the text they had read. At the end of the workshop, each group had to present its idea to the other group and we discussed about the purpose of the health approach.

How can we organize PE lessons? If I teach skills, Can the lesson structure be am I traditional teacher? the same for all content? Deep study: Health, Cultural & Critical approaches What does ludic mean? What is the world vision Can I teach sport in a of the PE group? Repeat or transform? ludic way?

Figure 23 - Sixth teachers' meeting.

Source: Artifacts.

Figure 24 - Picture of the teachers during the workshop day.





Source: Artifacts.

The following week, the group studied the cultural approach. We recalled our own physical education classes and the problems of physical education sportification in school. Then, I shared a report of one teacher from Sao Paulo who used the cultural approach to teach volleyball in a public school. They split in two groups again, with the task to transform the sportification lessons about soccer into cultural approach soccer lessons, and then to teach the other group. At the end of the workshop, we discussed the features of this approach.



Figure 25 - Picture of the teachers during the workshop day.

Source: Artifacts.

I always finished the meetings by asking two provocative questions. The first was about teaching strategies. As Missy advised me, it was important to make them reflect about their strategies, and I was trying to inspire this discussion. For example, "How many different ways could we teach this?" and, "What do you see here regarding teaching instruction?" (Researchers' meeting 7). The second set was about the world vision of that approach. I asked if that approach aimed to educate children looking forward to transforming the world, or just to

perpetuate the existing social order. I was trying to encourage them to consider what impact each approach could have on students, and what kind of students that theory aimed to develop.

In the beginning of the workshop sequence, they had difficulty understanding the difference between these two points – teaching strategies and teaching purpose. Yet, at the meeting when we studied the critical approach and I asked them to build a lesson that would match with this framework, they started to recognize what we were trying to do. I reported to Missy that Pedro said, "Nossa, now I understood what you wanted to explain. We have to choose a world vision and choose one or diverse approaches that will help us to achieve this vision" (Researchers' meeting 9). Through this insight, I noticed that the teachers were starting to reflect about their learning.



Figure 26 - Picture of the teachers during the workshop day.

Source: Artifacts.

We always used the beginning of each meeting to review what we learned from the previous meeting. I also asked them to explain what they had learned to the teachers who had missed the meeting. Slowly I noticed that their interest in learning was increasing. In the first workshop, they were silent and they said they did not like to read anything. The following week, I reported my impressions in my Field notes, "the meeting was excellent, we did not read any text, and I think they liked it better this way. It was hard to stop the discussion about culture. [...] It seems everybody understood the approach" (Field notes 39).

The last workshop was with an outside lecturer. She shared her experience about the model she had built and used in her Ph.D. with children in a socially vulnerable area²³. The group also experienced part of this model with the students, which was important because the teachers learned one way to realize the critical approach in their practice. They were very excited about listening to the students. However, in the following meeting when we discussed this model, they seemed worried about answering students' questions. I encouraged them to look at the big picture. The model was one possibility and one way of practicing the critical approach, but they should also look at our study trajectory and find what fit into the group's reality. This discussion showed how the teachers were impacted by everything that the group was learning.



Figure 27 - Picture of the teachers during the workshop day.



Source: Artifacts.

Additionally, it demonstrated that they were thinking differently from the school about education and they wanted something different for their students. Missy observed that they were, "saying what they believed in... they are saying where they want to go with the students. It is huge for them. That is absolutely huge" (Researchers' meeting 12). They wanted to assume a critical pedagogical position. Yet, at one meeting, it became clear that they were still afraid of diverging from the school's position about the purpose of the education:

Vitor: Having a critical perspective in physical education should mean having a critical perspective in school. Or, we have our perspective here, but they should know what we are doing here. In this way, after, anyone could arrive here and ask: What is that? [...].

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²³ LUGUETTI, C.N. et al. 'The life of crime does not pay; stop and think!': the process of coconstructing a prototype pedagogical model of sport for working with youth from socially vulnerable backgrounds. **Physical Education and Sport Pedagogy**, v. 22, n. 4, p. 329-348, 2017.

Pedro: What Vitor is saying is... for example, the boy who arrived by there [the grass], things like that. It is not about the physical education lesson from one perspective, but those are things... examples of autonomy that we give to the students. [...] Because what is correct for the school is having the students in line, students near us... students who do not have space for anything. So, we have to be careful. (Teachers' meeting 11).

It was July and the teachers had been working weekly together for four months. They were establishing their practice while discussing the physical education purpose. They were still excited to do something to organize the physical education and be recognized for their work. Moreover, they felt supported by me and, in some circumstances, by the administration staff who were giving them the space to keep working. Thus, their willingness to change was greater than their fear of the fight. Pedro summarized what the group believed regarding their teaching and I drew the last draft (Figure 28) of the physical education's purpose to show to them:

In this case, the world vision that will guide us is this - students... what we intend is the students who know the sport practice and they know about what they are practicing. We want that they help in the building process, giving their opinion, planning together, criticizing and overcoming challenges. I think this should be our vision, the idea of a protagonist²⁴ student. [...] an independent student, and a student who understands why he or she is practicing and not just practicing this because we are ordering them (Pedro, Teachers' meeting 12).

After showing them the final draft about physical education's aim, I put the question to them again, "Do you want a physical education perspective for social transformation? Is this what I am understanding?" (Teachers' meeting 12). All of them nodded their heads in a signal of positive agreement. It was our last meeting before July's holiday. We were planning the second semester and the teachers were anxious to implement changes in their classes. As Vitor said, it was important for them to, "dissect this entire sentence, regarding methodology, regarding everything" (Teachers' meeting 12). They were thinking about how the group could put the purpose they had built in practice, how they could organize their classes and how this aim would affect their teaching.

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²⁴ The word protagonist, which appears in some places in this dissertation, is a Brazilian expression to describe the students as agents of the education process. The teachers used this word because it is part of their routine. It is present in the official education documents, research papers and books in Brazil.

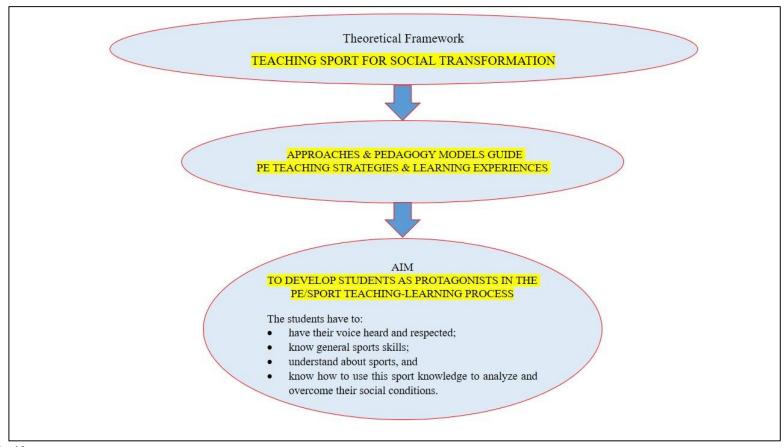


Figure 28 - Twelfth teachers' meeting.

Source: Artifacts.

"In this way, I could learn better!": teaching and learning in praxis

While the teachers were learning, they were changing their practice since the group began the workshops. Individually, the teachers were making the effort to change their physical education classes. As a group, they were trying to organize the overall physical education program. For example, they thought that one way to do it would be to have all teachers use the same physical education lessons structure. Furthermore, they wanted to make their efforts concrete. They needed to demonstrate to the school and to themselves that they were a group working to achieve the same aim. Thus, they were thinking about how to achieve this aim, and they needed to keep learning about physical education teaching strategies that would match with what they were building. Missy and I reflected how it was important for them have something concrete to build on:

Luiza: I think, what I put for you first here: talking about lesson's structures, I think this is the kind of thing the teachers want to work on first. Because in the last meeting of the first semester Pedro told us, "okay, we have to do this"... "we have to organize the classes"... "we have to do the same structure for all of us". So, I think we can start with this. What do you think?

Missy: I think it is a good place to start. It is easier. It gives them something that they can see that they have done. Structure, it gives them the beginning point. It is safer. We can make the structure the same. We have a circle, then explaining the task, then doing the assessment... I think it gives them something, in English, I would say very tangible. Do you know that word? **Luiza**: No.

Missy: Tangible means something I can hold on too. Okay. It does not take... It is not pushing me to teach the content I may not understand, or instructional strategies with difficult. This structure... but it is certainly a starting point. If I do not have a structure, I cannot teach content. So the structure... and when you come, seeing some of our models in autumn... we always tell the students structure or management has to come before content. If I cannot organize I cannot teach. So, I can organize without teaching, so it does not a guarantee that the teaching will occur, but at least gives them a structure and organization, and they can see progress, they can see they are doing something. That is safer for them. That is much safer. Because they talked about making progress. They know they have things to do, but this is one way to "Oh we can organize this way, then we have a start" and the Principal can see this, this organization, without understanding the content. (Researchers' meeting 15)

Talking about lesson structure was the first step the teachers made to implement their learning. As described in section 4.1, since I arrived at the school, I noticed the physical education classes were very different from each other in terms of organization and aims. The teachers were disconnected and each one worked based on what s/he assumed to be correct. Jair focused on the recreation and the good relationship with the students. Simone, André, and Rodrigo prioritized athletic training. Vitor and Pedro taught based on games practice. However,

over time, I perceived that teachers were introducing some small changes into their practice. Although it was not a deep change, it was a first step toward their ongoing change.

Simone was the most emphatic teacher in showing attempts to change. At the beginning of the year, she announced that she was tired of teaching the same things and she asked for my help to plan her unit. In my Field notes I wrote my perceptions, "Simone's view of physical education is totally about training, but she gave me signs of being worried about the other aspects of teaching, as students' behavior" (Field notes 19). I also took notes about her teaching in different periods of the year, which meant I could perceive her learning development. "she told me that she tried to use video records to teach about triple jump. We talked so much about this topic. We also talked about different types of assessment. I gave some ideas about this and she liked them" (Field notes 42). First, she started to understand the importance of having content development and learning outcomes for each lesson. Second, she experimented with different teaching strategies and she demonstrated interest in effective content assessment,

The other teachers seemed fulfilled with their teaching. At the beginning of the discussion about lesson's structure, André for example, pointed out that he already had been doing everything the group was building. However, he had many doubts about teaching skills. He argued that swimming was different from other content. He thought that he needed to teach skills all the time. We talked about this over the year, and during the meetings. Everyone tried to explain about the importance of "how" to teach swimming. Afterwards, without noticing, by the end of the first semester Rodrigo and André already had attempted to change their teaching skills. I perceived their changing during one Tuesday meeting:

Rodrigo: Yes, as we did in another day. The big swimming pool was empty, and then we used some games to teach floating. As you can see, we were using games to teach swimming. **Pedro:** Yes, it is a group task. As a competition game. You will swim until here and I will swim until there. (Teachers' meeting 6).

Vitor was proud of his teaching. He regularly talked about how he taught through games and how he managed his classes. I was observing his class when he said, "oh, all the time I am thinking of possibilities inside this game to teach handball. I am thinking of rules that I can include to teach something" (Field notes 27). For him, the discussion about lesson structure was a way to share what he has been doing with his colleagues.

Pedro too, was proud of his work as well, but he was worried about other colleagues' classes. Building a lesson structure would be one way to control them. When the group was in the middle of their discussion about the aim of physical education, the teachers expressed

concern about the lesson structure. Pedro said, "I think it is good, although each one has their own lesson, we have to have the same structure. [...] We were aware that this time is for this activity, other time for another, and we will finish with this" (Teachers' meeting 6). Subsequently, they started a negotiation about it. Since I always pushed them to think, during one meeting I said, "if we are creating a critical approach, the structure of the lessons should be in the same direction" (Teachers' meeting 15).

They argued about the moments of the lessons, the spaces to teach, and the sports equipment used. They decided that the lessons should start in the classroom, where the teacher would do the attendance and explain the learning outcomes of the lesson. After, the teachers would go to the *Centro de Esportes* and conduct the warm-up through playing games. At the end of the lesson, they would do an assessment of the learning outcomes, and lastly, the students would have recreational activity time. I also reminded them to arrange the students in a circle to talk to them. I reinforced, "if we are thinking in a critical approach, the circle gives everybody equal opportunity to speak" (Teachers' meeting 15). They agreed and included this strategy in their routines.

Interestingly, the group negotiated warm-up routines, and particularly about doing the warm-up collectively. There would be five teachers on the field and they thought it was a good moment for teachers and students to interact. Yet, the most important negotiation occurred when they discussed recreational time. It was a point when the teachers had to reveal their own thoughts about education in general. I reported to Missy this negotiation piece. I said, "they had to negotiate about recreation time at the end of the classes. Rodrigo, André, and Vitor understand the recreation as an award. Pedro believes that recreation is a learning opportunity. They reached a consensus!" (Researchers' meeting 16). They had to confront their own ideas with the principles that the group had determined previously. At the end of the discussion, they found a common point and all the teachers seemed satisfied with the conclusion. The recreation time, ten to fifteen minutes at the end of a 140 minute lesson would be used for students to play, drink water or take a shower if the students desired.

During discussion about lesson structure, I used these conflicts to raise provocative questions. I aimed to encourage the teachers to speak and listen to each other while they learned the physical education aim in praxis. They reflected about their practice and negotiated this in the meeting, as demonstrated in the following quote:

Rodrigo: As Pedro said, the play time that we give in swimming classes is because the class has earned it. [...] when they did not merit it, we teach, teach and teach. When the class ends everybody goes to the shower and it is the end.

[While Rodrigo spoke, Pedro did a sign with hands in a disagreement.]

André: This moment is not always. [...] If the class behaves in a good direction, and we achieve all the content, we give recreation time. [...]

Luiza: But, do you think that it makes the students participate more during the class or not? **André:** Of course. There are students that only participate because of the recreation time.

Luiza: So, I think we have to think about it. Because if the student participates only because of the recreation time, it means that this moment has been more interesting than the lesson.

André: Yes, but not for all students.

Rodrigo: Yes... on the other hand, there are students who use the recreation time to practice what he or she learned during the lesson.

Luiza: Yes, I understood your point. I think we should see the recreation time as an important learning moment and not an award to students.

Pedro: It is to socialize as well. [...]

Vitor: I saw it in the same way, but not as merit. [...]

Rodrigo: But the recreation time is a teacher decision. [...]. As Pedro said, today if the class flows or not, we do not have any obligation to give the recreation time.

Pedro: No, I did not mean that. I think it is an obligation. Because we are doing this agreement here.

Rodrigo: No, it was not what I meant. What I mean is, we do not need to talk about this with the students, it is a thing between teachers.

Vitor: If we agreed here. It has to be in this way.

Rodrigo: But if is it not possible to teach all the content of that day?

André: No, that is another issue.

[...] [Everybody talked at the same time, negotiating] (Teachers' meeting 15).

The teachers' comprehension of physical education issues were not mature, as it was a new challenge for them. For example, developing other forms of assessment than simple observation; planning content development; teaching strategies other than directive instruction; everything seemed a big change for them. However, they were determined to accomplish what the group decided. More than that, they were launching themselves into transforming their learning into practice. I always pushed them to discuss their experiences during the meetings because it could generate teachers' reflection about their learning:

Luiza: I would like to know if you thought about this during last week. Did you try something in the classes? Or, do you want to experiment with it this week? What do you think?

Pedro: Last week, after our meeting I started with my classes. I did it, I did the warm up [...] **André:** In truth, what we built here Rodrigo and I already had been doing. The warm up.

Pedro: There are things I had never done.

Simone: Warm up, for example.

Pedro: The assessment at the end of the class. I had never done.

Simone: Me neither. I started to do it after our studies here. [...] After the main activity we sat together, I made some questions. We talked about their difficulties with the equipment [...]. I think it has been interesting. (Teachers' meeting 16).

In August, besides working on lesson structure, the teachers also discussed teaching strategies. I was curious about their knowledge regarding this topic, thus I asked, "What are the teaching strategies that could contribute to learning with a critical approach?" (Teachers' meeting 16). Their answers revealed that the teachers were confused about what teaching strategies meant. They did not know how to ascribe names or terms to what they were doing, so it was our first discussion. Vitor and Pedro tried to help me in explaining to Simone what teaching strategies were. I asked, "One unique line of 30 students, each one practicing in the same way... Do you think this strategy could contribute to a critical approach?" Pedro answered, "No. Because it is just repeating" and Vitor helped, "I used to do games as a strategy for teaching" (Teachers' meeting 16). Yet, afterwards, they started to show their knowledge about teaching strategies, which they shared with the group. Vitor said, "I used to teach by games first, and after I go to a deep teaching skills part". Pedro completed, "I do it this way too. As I do not have material... [...] I teach through the games, 10 throw game for example". Rodrigo said he used peer tutoring. He explained, "Because while giving information about the skill, the student is memorizing the process" (Teachers' meeting 16). I emphasized that they had plenty of practical knowledge about teaching strategies, but the group needed to think more deeply about identifying teaching strategies that would correspond with the physical education aim.

Then I asked, "How can we figure out new teaching strategies?" (Teachers' meeting 16). They already had mentioned that they would like to learn with each other. Jair had pointed out, "during the observation of Rodrigo's class I learn many things that work for Vitor, for Simone, but I have never thought about it. So, it is professional learning, and it is in practice" (Teachers' meeting 4). During one meeting, my assumption about their preference to learn from each other was confirmed when they answered how they preferred to learn:

Vitor: Research. We can research, or we can get in touch with other professionals.

Pedro: Primarily with our colleagues from other municipal schools, or other teachers, friends. **Vitor:** For example, that girl you brought here, I forgot her name. Carla, yes. She brought some of her own methods. So, it is different from ours, we can use it or not. Then, we should make an assessment and analyze what is good or not for us. (Teachers' meeting 16)

The idea of holding workshops returned. Every teacher was excited about doing it. We built a calendar together where they would have four workshops. The aim was to improve the teachers' understanding of the contents and about the teaching strategies to teach these contents. They decided to learn about athletics, swimming, invasion games, and adventure sports (outlined in table 12). They chose to invite their own friends who they could call and ask to go to the school

and spend the meeting time with them. They decided that each teacher would be responsible for making invitations.

Table 12 - Workshop's calendar of the community.

DATE	THEMES	LECTURERS	RESPONSIBLE FOR INVITATION
04/09	Swimming	Rozana	Luiza/ Rodrigo
11/09	Adventures sports	João Batista	Vitor
18/09	Athletics	Marcos (João Paulo)	Pedro
25/09	Invasion games	Douglas	Simone

Source: Artifacts.

However, the teachers faced several challenges to realize the workshops. The school was experiencing difficulty with the consequences of the Mayor's strike and the teachers had to fight to accomplish the workshop plan. Additionally, the school always asked them to substitute for other teachers or did not allow them to go out of the school to attend the workshop. They organized themselves into two groups to experiment with the first workshop. The first group formed by André, Simone and Rodrigo went to a swimming club in the city. In describing the discussion about the workshop André said, "oh, I was amazed at her work [...]. It is a different teaching style than mine, but I was delighted with her classes". Interested in knowing more about it, Pedro asked, "But how are the classes?" (Teachers' meeting 20). They were starting to learn with and from one another. André, Simone, and Rodrigo shared their experience. The other teachers were paying attention and they discussed how they could apply the workshop learning to their own teaching.

This learning was dynamic and ongoing. At the end of the year, Simone sent me a message asking for the phone number of the swimming workshop teacher. She was looking to learn even more with this teacher during her vacation time. She explained, "I want to stay there with her, observing, taking notes, doing a kind of internship [....]. In this way, I could learn better. After, I can attend some courses about baby swimming classes" (Social media records 26). For the final interview, Simone and I met at this swimming club, where she was doing a swimming internship. Simone stated, "if I have to learn, I must do it with her". She expressed her the satisfaction of learning with a good professional. Moreover, Simone projected her professional development forward, "I have to wait because Tiago [her friend] offered me... I do not know what he will do yet, but he offered me to lend or rent his swimming pool" (Simone).

She had decided to become a swimming teacher, and she was contacting friends to help her with this new challenge.

The decision about (a) learning in-group to create a new physical education aim, and (b), organizing physical education classes through lesson structure and teaching strategies, made these teachers more autonomous. They were deciding about the physical education teaching. Beyond that, the teachers were deciding how to learn about their work and how to solve doubts regarding introducing the two themes into their own practice. The physical education teachers were organizing themselves as a strong area in school. They were aware of their role in school and limitations to realize it. These teachers faced several challenges to achieve it, and the group's autonomy was a work in progress. The more challenges they faced, the more their autonomy gave voice for them.

4.2.1.3 The voice of physical education group was made present in the school context and in political decisions

Discussing about the change of the physical education aim for the school, creating another purpose to their work and finally, trying to improve their teaching, was giving the teachers the self-confidence they needed to be empowered. Therefore, while they made these three points as their autonomous decisions, the teachers also faced the group's final goal, which was being listened to as a group in the school context while acting to survive in this context.

By the end of May, the teachers started to understand that they could, and perhaps more importantly, should have a unique group voice. Their routines required administration support and they had pre-existing expectations to be heard. They learned to negotiate between themselves and with the administration staff. After being successful in these attempts, the teachers became stronger.

Moreover, the teachers felt recognized because of their group actions. They were acting by themselves and putting their autonomy in practice. Alternatively, their independence could mean becoming the resistance voice inside the school. While some of them were already comfortable in this resistance position, others were still learning how to participate in the process of political discussion and decisions.

"We tried to do the same speech": the physical education voice in the school context

The teachers had several demands, for example, when Pedro and Jair argued about the number of classes split between them after Sara left, I suggested that they solve it inside the group. They were not comfortable with this situation and they decided to talk with the physical education group. The Principal agreed to attend the meeting. It was the first time that teachers would have the opportunity to talk with him as a group and to explain their needs. In the meeting, the Principal heard the teachers and the teachers paid attention to the Principal's conditions. The Principal was willing to honor his arrangement with the teachers. He said, "I will communicate everything to the Municipal Office [...]. And, I will see who is here. [....] I will take Sara's classes and give it to the boys to complete their timetable" (Teachers' meeting 5). They successfully negotiated their requests.

At the same meeting, the teachers took the opportunity to fight for an ongoing issue they brought forward from prior years. They complained that they always felt pressured to participate in the Municipal Sports Competition because the school was aimed at sport development. Nonetheless, this competition had criteria that obligated all schools to register in two individual sports and two collective sports. Otherwise, the school could not participate in the competition. Pedro confirmed this information during the meeting, he said, "yes, it is here [reading]. At least, the school has to register two individual and two collective sports in each age to participate" (Teachers' meeting 5).

The teachers complained about the conditions in which they had to prepare the students to participate in the municipal sport event. At *Clarice Lispector* School, they worked with swimming, athletics, martial arts, and soccer. They did not have a gymnasium to work with other kinds of sports and the competition did not offer soccer, only futsal (a kind of indoor soccer). Pedro remembered, "Guys, last year we took these kids and went to another school to train. [...] So, you have to go there at least twelve times; with a sufficient number of athletes, and you cannot have any walkovers" (Teachers' meeting 5). The teachers were looking at the reality of the students and the school as a whole. The children did not have the money to travel to the competition that occurred in the city center. Jair also questioned, "How would I do this? Would I put twelve kids on my motorcycle and take them away?". The teachers wanted the Municipal Sports Office to listen to their request. They desired to participate, but they wanted to give their suggestions to improve the competition and to meet students' needs. Jair continued to explain the teachers' point of view, "Do we have to lose the handball game by 70x0? Is that it? Did they impose it and we cannot make a counterproposal?' (Teachers' meeting 5). They

talked with the Principal and he agreed with them. They decided to write a letter explaining their situation and offering to help organize the athletics and swimming competitions.

However, they needed to show a willingness to listen as well. I was worried about it and I took notes of my perceptions, "I think their collective decision about not participating in the competition and the confrontation part was very interesting, but I told Pedro if we want to complain we have to participate even more. For example, nobody went to the assessment meeting last year" (Field notes 30). I was afraid of the consequences of this decision – not participate in municipal sport event. I questioned myself about their commitment to sustain this decision. However, they had strong convictions about creating the letter and sending it to the Municipal Sport Office and they started to write it during that meeting:

Simone: Let's go to do a letter draft. Ronaldo sends it. [...] **Jair:** The letter has to say that we are interested in participation. **Ronaldo:** But the conditions are not favorable to our participation. **André:** Only if it was just with individual sports. (Teachers' meeting, 5)

Slowly the teachers were showing their desire to be heard. They were surrounded by several occurrences that became concerns for them and convinced them they needed to fight for their rights. In the middle of June, teachers were surprised with the news that they must vacate their equipment room in the *Centro de Esportes*. Yet, instead of complaining, they wanted to act. Pedro said, "Simone and I were thinking of articulating something instead accepting it. First, we have to understand the details, and after, we have to express our point of view. Are we going to go down and upstairs with sports equipment every time?" (Teachers' meeting 9). At their ninth meeting, they made a list of things they would like to discuss with the Principal. That week, I talked with Ronaldo to present the teachers' requests such as for sports equipment; the letter to the Municipal Sport Office, and the sports games in school. Ronaldo and I started with simple things and finished with the teachers' main concern which was losing the *Centro de Esportes* space. I explained that the teachers were organizing themselves to talk with the Municipal Secretary. They required one answer from him. I registered their intentions in my Field notes after talking with André:

André came to talk with me. He demonstrated his concern about losing the *Centro de Esportes* space. He talked with Simone and he thought of building a portfolio where they can demonstrate everything that they had done in the school. They want to make an appointment for a meeting with the Municipal Secretary and show it. (Field notes 34)

Since this first informal chat between André and me, the teachers always came back to this issue. As Pedro said, they would like to have "peace to work" and the biggest part of their problems involved the *Centro de Esportes* space.

Therefore, at the end of the first semester, they were organizing themselves to act in any ways they could. André created the swimming portfolio. Pedro and Vitor pointed out that the school had done another portfolio that showed the work of all physical education teachers and they could use it during the meeting. They built an agenda for the meeting with the Secretary. The teachers also asked the Principal to book this meeting and lastly, they agreed about what and how they would talk with the secretary. Again, during their meeting they were negotiating their conditions between themselves and with the other physical education group outsiders:

André: What I think is... if he came here, we have to have a moment to sit and talk with him. Because if he came here and just walking around the school...

Vitor: Doing "politicking"...

André: Yes, in this way, it will not work.

Luiza: Yes, we have to have a moment to meet with him.

Pedro: Do you remember last year when he came here?

André: We have to take one Tuesday meeting, sitting everybody together and... [signing as "hard talk"]. Like, "People come here and say we will not be allowed to use the *Centro de Esportes*, is it true? Why?"

Simone: Yes, because one person arrives here and says one thing, others say a different thing.

Pedro: Guys, come on! This man will not come here to talk with us...

André: So, we go there!

Pedro: Yes, I am talking about it. This gossip that Ronaldo does not want us to go there... You must say to him Luiza... "Ronaldo, the teachers are sure that the Secretary will not come here". **André:** For a while, I have one suggestion. [...] You can use the room in the swimming pool area.

Pedro: André, it means giving in. If they will not use this space, we cannot ask why we have to get out of here. Finish with the meeting... with everything even if it will not have anything here. Why?

André: Yes... I think we have to talk to the Secretary to solve this problem with the sports equipment room and to understand what is going to happen with this school. (Teachers' meeting 9)

The way that they perceived the situation was changing. They were listening to each other and reconsidering their own opinions, desiring to create a group opinion. André transformed himself from a person who said, "I am here alone" (Field notes 5) to a different person who answered the administration personal with sentences such as: "Great idea Salen, but as we have been deciding everything as a group, we will talk with our colleagues and the group will make one proposal for the physical education competition" (Field notes 34).

Simone fluctuated between moments when she felt weak and others when she noticed the power of the group's voice. She and I were talking and Simone said, "I am a weak voice, if

the group does not come to the meetings we will not be heard". I tried to answer her, or at least, calm her down, but she already knew the answer. For example, one day we were talking and I said, "Simone, you can call me and we can talk more about it. And she said, no, we must talk about it with the group, during the next Tuesday meeting. Because like that we can see what everybody thinks" (Field notes 47). She, like many of them, noticed the importance of having a strong group's voice.

In this same sense, Pedro changed himself, and additionally, he was the first to notice that the group's voice could be stronger than the individual's voice. At the beginning of May, I took notes about one chat with him, "Pedro is a school defender, he fights to give his opinion. But he told me that he is unmotivated because nobody wants to do anything to improve the school" (Field notes 35). In June he was changing, and he already perceived that, "It is good to have this moment to talk, each one can talk about what they like or not. And this thing... we are here closed between ourselves, it helps. Later we have to make some important decisions here... more than studying" (Teachers' meeting 9). At the end of the year, he concluded, "we closed in this room to defend ourselves, and to defend each other. We tried to do the same speech, speak as one voice" (Teachers' meeting 21). He changed from an unmotivated person to someone who wanted to make collective decisions.

The teachers also wanted to be heard by me. They asked me to talk to the administration staff. As I reported to Missy, "they started to know what they wanted, but they were afraid: fighting with the administration could mean losing their jobs" (Researchers' meeting 12). Thus, I recognized that they needed my support. In response, I talked with the Principal, booked a meeting with him and one coordinator from the Municipal Education Office. In my Field notes I reported what happened in this meeting:

I did a presentation for them and we talked about the teachers' work. We also talked about their learning to work in-group. Everybody liked it. It was a moment to show the teachers' concerns regarding doing something new and not having the school's support. The coordinator asked me to book a meeting with the new Pedagogical Coordinator and advise her what she has to do to support the teachers. (Field notes 51)

The teachers understood that most of their requests were accepted. In addition, if they could not win all battles, at least they could become stronger together to face future issues. Furthermore, noticing their strength prepared them for the second semester when the school almost fell apart. They needed to act by themselves and be the resistant voice to survive and conclude that year.

"We are in control": The voice of physical education group in action

More than being heard, the teachers needed to act. By the end of August they were informed that the school calendar would finish early, they would teach only until the 30th of November, when originally they were scheduled to work until the 21st of December (Resolution n.7, 2018²⁵). The Municipal Office announced that they did not have enough money to pay the salaries. Therefore, with this calendar reduction, they would fire all contractual teachers in November and could save salary costs for December. The Secretary thought that he could save money and with this position, he hoped to be able to maintain the correct salary payments until the end of the year.

More than producing many concerns for the teachers, this situation generated many changes in the school. Many people from the staff were fired; the school combined classes and fired contractual teachers who taught just a few classes; other teachers had their timetables reduced; and lastly, the school worked on Saturdays to achieve two hundred school days as required by the Brazilian law (BRASIL, 1996). The teachers were worried and talked about these changes on our *WhatsApp* group:

Pedro: The school would work until midday; permanent teachers would teach 25 modules and part-time teachers 18 modules. The school would complete the timetable with contractual teachers. The specific classes would finish. I just heard this information from my friend. His Principal announced to his school.

Luiza: Really? It is so sad. When would these changes start?

Pedro: Now, on Monday. [...]

Simone: It is a huge tragedy. I have no words to explain. [...]

André: For now, we do not have any concrete information. It is just a guess. I heard that the classroom teachers would teach physical education to the elementary kids. If it happens, we will be f*****. Let's wait. [...]. Do you know some law that could forbid this Luiza? Classroom teachers could teach physical education. Because if it happens I will be the first person to criticize them. Look for this information for us, please. Let's go to look for this. (Social media records 4)

When these changes occurred, the physical education group was in the action phase of its development. They were working hard to build their lesson structure and learning more about new teaching strategies. Simone was worried about their work, and she indicated that, "she had planned the adventure tracking outside the school on Wednesday and they would bring the advertisement to parents tomorrow" (Field notes 59). With the system changes, the teachers

²⁵ Resolution published in Governador Valadares (2018) official newspaper. See the website http://www.valadares.mg.gov.br/abrir_arquivo.aspx?cdLocal=12&arquivo=%7B8560DD07-CE70-CEE7-CB1E-2360ACD7DBE0%7D.pdf

noticed the possibility of having their work paralyzed. At that moment, the teachers had two options: they could give up, or they could continue to invest in their professional development. They chose to keep working. However, to progress, they had to act by themselves and be a resistant voice inside the school.

They started acting by themselves regarding the workshops, starting with the swimming workshop. They agreed that they would go to the club during Tuesday meetings. However, they were worried about the time, because Vitor and Pedro taught at 8.40a.m and the workshop would finish at 8.30a.m. They asked the school to get a substitute teacher for them just in case of their delay. The school denied their request. Thus, as Pedro said, "I saw they were not willing to help. So, I think we should solve the things between ourselves" (Teachers' meeting 19). The teachers were convinced that they should organize themselves to keep learning. Pedro continued to explain his strategy:

Anyways, I think we should choose half of the group who has more interest in this area. The swimming teachers and, who else? [...] So, we have to do it, one teacher supports the other. Regardless of the day he or she needs. If the workshop teacher says... I just can on Wednesday, we are going to do something at the university... so, we are here to support those who teach athletics to go there. (Teachers' meeting 19)

Subsequently, they acted on his idea. The first group formed by Simone, André and Rodrigo went to the swimming workshop. The second group, Pedro and Vitor, would go to the same place the following week, but unfortunately, they could not go because of the situation at the school. As Pedro explained, the school was requiring them to teach often. He messaged the group, "they sent me a message now. Tomorrow I must go to the school earlier in the morning because many teachers will be missing from the school" (Social Media records 20).

Yet, they continued to act in other ways. The raffle organized by André and Rodrigo was another example. The swimming teachers shared their strategy with the group during the meeting:

André: So Luiza, to avoid being without classes until the end of the year, two or three months without classes, Rodrigo and I are doing this raffle. The aim is to buy cleaning products.

Luiza: And what are you going to sell?

André: One chocolate basket to elementary and another to middle school.

Luiza: And who will buy the chocolate?
Simone: The teachers will donate it.
André: No, with the raffle money.
Rodrigo: Yes, with the raffle money.
Pedro: How much do you want to receive?

Rodrigo: 1,500 reais [Brazilian currency]

André: We made it clear to the students, the aim of the raffle is to have class, at least. [...]. I made it so clear to them, "Do you want to use the pool, then you should mobilize inside the school. Let's make it happen". After we will count how much we collect, we will make the raffle giveaways and on the same Friday, we will buy the products. (Teachers' meeting 20).

The swimming teachers were successful in this action and they were proud of it. They sent a picture to the school *WhatsApp* group (Figure 29). Rodrigo said, "*Here is the result of the group effort*", and Simone applauded the work, "*Well done Rodrigo and André! You mobilized everybody and we went with you!*" (*Social Media records 24*). Other teachers also recognized their effort. Everybody was happy because, at least one pool was cleaned, and the swimming teachers could work again.



Figure 29 - Picture of the teacher and some students cleaning the swimming pool.

Source: Social media records.

Beyond trying to organize the workshops and mobilizing the school to keep teaching, the teachers saw their autonomy and voice being consolidated in regards to the Saturday classes. In order to giving some rest to the teachers, the Principal split them into two groups. One group formed by the nine physical education teachers and the other group with all other classroom teachers. Each group would work once a fortnight. Thus, the physical education teachers had to plan two Saturday classes each month. Their task was hard and at minimum, unfair. Pedro explained, "this issue of one group being formed by 33 teachers and the other just with 9... it is wrong!" (Teachers' meeting 19). Although they were angry about this situation, they accomplished the requirement, and they were satisfied with their actions. Pedro and Simone demonstrated it during the meeting:

Pedro: One thing I am paying attention also is our Saturdays. We arrive here tired, but the Saturdays, not in relation to the things that we teach at the *Centro de Esportes*, but we have excellent moments with the students, we made meetings where we talked about many situations, voluntarily. There was one day when Simone and Rodrigo, for example... we talked and after we just decided, "so, look, do you know what we are going to do? We are going to clean the whole patio". There was not an exception, each student stood up and went. At the following Saturday at that moment when we say good morning to students, the Principal said, you can go there, you are accustomed to doing this. In our Saturday, for example, we are...

Simone: We are in control.

Pedro: Yes, we organized all Saturdays, producing, speaking. (Teachers' meeting 22).

Even though physical education was not seen as a subject matter in school, as Vitor said, "here we are just teachers without content. There are the content teachers and 'us' [quotation sign with hands]" (Teachers' meeting 22); they acted by themselves and, at the end of the year, they were recognized for their work. They managed the Saturdays, they showed that they knew how to organize themselves and achieve good work. Simone recognized it during the final interview:

Simone: And we had the Saturday classes. The group was together to make it work. The Saturday content class teachers worked with 8 or 6 students... maximum of 30 students in the whole school. Our Saturdays were with 115 or 120 students [...] we were just a few teachers, then we must make it work. The students did not dirty the school; we split the groups correctly, the swimming and the field groups; at lunchtime the students took care of the cleaning. We had the moment of prayer; the civic moment; and we did a day's agenda with them before going to the *Centro de Esportes*.

Luiza: Thus, was it a group production?

Simone: Yes, a group production.

Luiza: Do you believe everything was right?

Simone: Yes, it worked. Because everybody was sad about coming here to work on Saturdays. After, when we have seen what has happened everybody was... [relieved signal]. Yes, everything was good, 120 students and it was all right. (Simone).

It is important to highlight that during this period, doing good work did not mean teaching well. As Pedro said, it was not about producing something related to physical education. It involved surviving in the best way they could. They talked with students and cleaned the school with them, although they were meant to educate those students. They were without sports equipment, they would be fired and would not receive salary for December, and they were working on Saturdays. Thus, talking with children and attempting to make them conscious about their reality was the only thing that teachers thought they could do at that moment. Moreover, the teachers were proud of this work. They were the voice of resistance in the school, and defended themselves and the children. I reported this perception to Missy and we started to see other moments when the teachers were the voice of resistance in the school:

Missy: They wanted to survive, they wanted to be able to teach... And these are the kinds of things we need to survive and teach. If I did not have students, I could not teach. If they do not have students, the curriculum does not make any sense.

Luiza: More than that, [...] they learned to be a resistance group. Pedro and Simone said it, "Oh yes, do we have to sign it?", for example, one document where the Pedagogical Coordinator said that they made some mistake. "Okay, I have to sign but I do not agree because..." So, they put their voice, they learned how to resist. [...] Through their learning, they understood that the school might not be a good place for them. They had to change. So, they were empowered enough to reflect..." I have to fight for something better for me." (Researchers' meeting 19).

The teachers recognized the top-down actions by which the school overwhelmed them and they did not accept them anymore.

Simone was able to analyze the big picture of Brazilian education, when she said, "if the federal and municipal education system was not responsible for us, the administration of the school should support us a little bit". After, she reflected on their situation inside the school, "then, do we have to stand here just listening to the Coordinator's complaining? As if we did not make anything. As if we did not know anything. Is she the owner of the knowledge?"(Teachers' meeting 22). She was thinking critically about their situation.

Pedro observed the benefits of being a resistance voice inside the school, "I feel the strength we have when they ask us simple daily things. They are thinking twice before asking something of us, before saying something, before imposing something on us. Now they know there is a resistance on the other side" (Teachers' meeting 22). In the end, the group had concerns about their role in that school. Some of them were convinced that they were doing exactly what they should be doing. Simone, although she was aware about what was happening, still had some concerns about being the resistance voice in the school context:

Luiza: what I am trying to say is this. We don't need to be waiting for someone. As a group, you know how to organize yourselves. You know your needs and you are able to walk by yourselves. I think it is one idea.

Vitor: But I think that this is the problem. Our independence. They do not want autonomous people here.

Simone: Nobody wants it. They want us like that: "if you want me to stand up, I stand up. If you want me to sit down, I sit down".

Luiza: But... is everything okay in being an autonomous person? Is everything okay in being the voice which will confront them? Is everything okay in being the resistance voice?

Vitor: For me, it is okay... I want more than that!

Simone: [shook her head in neutral signal]

Pedro: I will say the same thing as Vitor. It is the most important moment... maybe it is not a bad side... maybe it is the correct side. And if you do not agree, you do not need to make a huge force to be with us. Just respect, but maintain your position. Sometimes we are very worried about doing this or doing that... I, for example, when I had the opportunity to be the opposition voice here, saying what I was thinking about, I did it. And it was not a problem. I was far from

some discussions because I thought they would not produce anything, but... I think, when you hide yourself it is easier for the person exploiting you. (Teachers' meeting 22)

I took this opportunity to ask if they thought the school was recognizing them as a group in action. After all, since the beginning of the project the teachers wanted to be recognized by the school. It was this purpose that motivated the beginning of the project. Their answer was positive. The teachers were aware of their recognition and felt it as well. Vitor stated, "they can try to pretend they don't know what we are doing, but they are seeing it. Then, they know we are here. I do not know if the correct word is "producing" or "disturbing"... or both. Our production is disturbing them" (Teachers' meeting 22). Pedro also perceived that the classroom teachers recognized their effort, "we were envied by the other teachers in school. There were many teachers there, as Jessica for example, she said she desired to talk, to study like us" (Pedro). Being listened to by the other teachers was a way of getting recognized.

The group was successful in a number of ways. Firstly, in organizing and solving the physical education needs; secondly, in making autonomous decisions to build their aim, to unify their classes, and to show their physical education work; and thirdly, in having their voice heard by the school and municipal administration. All of action gave the group the voice to strength and to empower the teachers. These achievements formed by the teachers' needs, decisions and voice was a big step proceeding to foster their community. They built their practice while supporting each other and were supported by me. It was a situated learning towards surviving and teachers' learning for change.

4.2.2 Theme 2: Three critical elements led to a successful CPD through community development.

The discussion above demonstrates what was achieved by this community, in the context of teachers' needs, decisions and voice. However, the intention of this second theme is to show what inspired this community's production, and how was the process that facilitated the community's nurturing and development. With Missy's support, I determined three critical elements that contributed to this community development: (a) the physical education group built their own practice; (b) physical education teachers supported each other; (c) the physical education group had a democratic facilitator.

The first element refers to the importance of the teachers building their own practice. The research reveals that while the group fought to be recognized, they constructed their own professional development based on their reality and problems. The teachers learned to negotiate

between themselves and decide what was important for them. After a long time of merely accepting external expectations, the teachers rediscovered the physical education aim at their school. Acting autonomously, and based on a critical pedagogy approach, might have given these teachers guidance for their growth and empowered them to defend what they needed. They acted to protect the children and to promote the community's own professional development.

The second critical element that contributed to the community's cultivation and development was the support that these teachers received from and offered to their colleagues and friends. It gave the community strength to face the ugly moments that the teachers lived at that school. They also learned together about physical education. Independently, they organized themselves to keep learning and to decide the group's direction. They felt comfortable sharing their reality with those who lived in the same situation, recognized their struggles and shared similar problems. They learned how to build trust among each other. They also felt supported by me, someone who was learning to be a leader.

Thus, the third critical element was to have a democratic leader. They already had several facilitators who did not help foster their community. It was necessary having someone who was a democratic leader to create spaces for the teachers' learning for change. During this hard process of becoming a leader, I discovered that having a good relationship with the teachers, respecting their voice and space, demonstrating my feelings and truly involving with their reality were important steps to become the leader that they needed.

Being part of this community affected me as researcher and as individual. I shared difficult moments with these teachers. Thus, I chose to describe the process that fostered the community by revealing some critical incidents that occurred during 2018. Of course, the reader may be impacted by other aspects of the teachers' situations, but these three incidents are what best helped me to explain the community's development process. Three critical moments defined this process: first, fighting against the "Plano de Vingança" helped them to build their own practice; second, understanding that a colleague metaphorically held a "hoe" to defend another, which facilitated belief in the importance of being supported by someone else; and third, analyzing the "Curriculum Case" was my way to understand and respect the teachers' voice and needs.

4.2.2.1 Physical Education group built their own practice

During the 2018 school year, the physical education teachers were building their practice. It was not a linear pathway. They moved forwards and backwards many times. They climbed big hills of hope and fell from them as well. They also had to reinvent this trail until the last moment of the school year. Although they had changed the group focus, they never gave up on their work. They were convinced that they could accomplish their obligations to their own satisfaction and for the children's education.

Missy and I tried to understand their practice and its meaning. At the end of the year, we could understand that the teachers' practice was everything that they had shared and produced during the Tuesday meetings. In addition, we also noticed that the domain, the purpose, of this practice had changed along with the pace of the group's development. Additionally, as an independent and autonomous group, they decided to keep some distance from their teaching issues so they could concentrate on defending themselves and the students from the precarious circumstances that they faced. They needed to survive and finish the year.

Using the Tuesday meetings to fight against the "Plano de Vingança"

Luiza: This week I felt that my world was falling apart. They had the first general teachers' meeting in school. It was on Tuesday and the teachers were talking about the rules in school. I was just silent when one Portuguese teacher presented to the other teachers a *Plano de Vingança* "Revenge Plan".

Missy: Say again, please.

Luiza: Revenge.
Missy: Revenge?

Luiza: Yes. A *Plano de Vingança* against one class where the students are very messy. The teachers are thinking about punishing these students by not allowing their physical education classes. Everybody would be in the classroom doing his or her homework. Many teachers agreed with this. Even some physical education teachers agreed. I just thought, "Oh my goodness, I cannot believe that it is happening". (Researchers' meeting 4)

Although I described this episode in section 4.1., here it is important to present in more detail how this critical incident stimulated the teachers to build their own practice. Their desire to be recognized made them build it. The *Plano de Vingança* was the catalyst for teachers' desire to improve their practice. Feeling isolated, pressured, without support and immersed in a conflicted environment, the teachers saw the opportunity to fight against lack of recognition of their work. This development process changed the teachers as well. They learned to create routines for the physical education group. Negotiating between themselves, they formed one

voice to communicate their beliefs and actions, they became autonomous authors of their own practice.

At the end of the first semester, while they were participating in the workshops, I could see that they already had their routines, their own "ways to do things" necessitated by their reality. They talked with the Principal to point out their requests, such as giving up participation in the municipal sport event; buying sports equipment; maintaining the *Centro de Esportes* and so on. I noted, "They have been creating agreements between themselves, particular 'ways to do things' of the community. For example, they have been organizing themselves to talk with the Principal, or to act about the sports equipment" (Field notes 42). After facing many challenges during the year, the teachers agreed that they had created their own routines, created something that was unique to their group.

Pedro commented about the Tuesday meetings. For him, it was important for the teachers to, "have this moment to study and to talk" (Pedro). After, André added, "This time is when we let off steam. Because it is hard, then at this time we say our things, we became together" (Teachers' meeting 21). Because of such opportunities in the Tuesday meetings, the teachers became closer and they formed a united voice. André pointed out, "After we became united, everybody started to speak the same language [...]. Everybody with the same aim to teach a good lesson, everybody was learning with their colleagues' experience" (André). Simone revealed what led them to speak with one voice. For her, "[...] everybody was in the same boat, everybody had the same feeling, and the perception that one had, the others had as well" (Simone). They were together in that difficult situation and they were trying to build something. They were sharing important moments with people who truly could understand them.

Simone too pointed out that the Tuesday meetings were essential for the group, but she commented that this moment also made the teachers become closer at other times during the week. "At the breaks between classes, we were always together. The sports team was always together, to talk about something" (Simone). Rodrigo gave examples of how they created this routine of sharing experiences:

Besides our daily classes, what happened... when we sat at the teachers' room... we began to sit together around only one table and said, "Hey guy, how was your class?". And the person answered, "Oh, today I did this, the student B, who has never participated, did it". Then, we spent more time talking... lots of talking about the changes we were making in our classes. (Rodrigo)

They might not have noticed, but they were negotiating their practice. They used the same language, negotiated what this practice was and how they would build it. I commented to Missy, moments where I noticed they were risking themselves in doing it. I reported to her, "I think it was the first meeting that they were really free to say, 'Okay I agree with this; I don't agree with that'. They felt comfortable to say anything to their colleagues and to me" (Researchers' meeting 12). However, when I asked if they had previously negotiated each day, their answer was in the negative. They did not have the words to explain how they felt about the process of negotiating. In their understanding, negotiating meant fighting, however, since the group had been harmonic during the year, they did not recognize the negotiation moments by this name. Afterwards, they revealed how, even if they did not know this, they negotiated their practice. Simone said, "Each one thought in a different way, but it was to the benefit of physical education. I think here was the first place I have worked where everybody wanted to achieve one unique aim" (Simone). André also gave another example of negotiation:

The interesting part of this group is... I think it is very interesting... the group had moments when you had one idea and the group arrived and said 'Oh André, do you think you could do it like that? It would be more interesting.' Then, we could listen to different opinions and it makes the practice better. (André)

Being together and learning to negotiate their practice lead them to reconstruct the physical education aim, which was a big step towards building the group's practice. The teachers faced huge challenges in doing this. They had to deconstruct everything they knew, and reconstruct another direction for their work.

When this school initially opened in 2014, the teachers were confident that they were doing exactly what they should be doing. Pedro said, "The studying, the meetings, everything flowed. We asked for sports equipment, it arrived new [...]. Then, there was a lot of sports equipment and a lot of things to do" (Pedro). At another meeting, he concluded, "Whoever is here a long time knows, we already did plenty of things here. We already had better years here. We shook up the school, we produced much more" (Teachers' meeting 21). As a result, Missy and I noticed that the teachers believed the earlier times they had worked in school were the best for them. They did not realize that it had been an undemocratic and authoritarian process. They were able to look only at the concrete things, such as sports equipment, events, and so on. In 2018, they did not have such good conditions, and more than that, they did not know what to do because they were not taught how to think independently. Missy and I discussed the differences:

Missy: Yes, disempowered... And now, your notion of empowerment came back until the creation of their own learning resources and their own lessons. But that is tough, that is your really main point Luiza. Because this is a tough transition, you know, we never talked about it before, because I did not realize that...

Luiza: Yes, It is so difficult to understand...

Missy: I did not realize that they used to have money and now they do not have money and... but it explains a lot. [...] Because they thought these resources were wonderful, but in reality, this disempowered them or disempowered their ability to think or to have their own work. And now they are operating in these silos where "I do not know what to do, but I will not tell anyone I do not know what to do." But everybody did not know what to do. "I am too scared to say I do not know what to do." And your group started to come back together, and it is okay to start to talk about that, but also to create their own resources rather than to depend on somebody else.

Luiza: And I think now they have to think, they have to find what the purpose of the school is. Because for example, in that Mining Company time, the purpose was training, they did not have physical education classes, for example, they had just swimming, athletics, dance...you know? The sport specific classes. But now they have physical education, and they have sport specific classes but they do not know what they should do with both...

Missy: That is a huge, huge point. Yes... In their good times actually ... even though they thought they were in good times. (Researchers' meeting 18)

The empowerment issue started to appear during the community's development. They were acting to defend their interests and their rights, as Freire (2005b) mentioned, that enable a true empowerment. With the physical education aim developed by themselves, the teachers could feel strong to act and to reflect about their reality. When the group was discussing how it could create meaningful physical education, André responded to Sara, "Bringing some outsider does not make any sense, because this person does not know anything about our school. Do you think about bringing somebody outside the school to talk with our students? About our school? Our reality?" Sara, who had given this idea, sat in silence while Vitor just completed André's speech, "Yes, this could be any one of us. Could be you [Luiza], could be any one of us" (Teachers' meeting 3). They were changing from people who only waited to be spoon-feed their tasks to people who decided to be authors of their own practice.

Developing the new physical education aim was a long process, which gave them the guidance for their work. Vitor said, "I understood that it was starting to build guidance for us. To know where we are walking, what we are doing, what is our aim. And, mainly, what we understand about physical education, what we should be teaching" (Teachers' meeting 21). More than being a guide, it was their security as well. Vitor continued to explain what he was feeling regarding the community's project:

I looked at it kindly because it was what I was looking for all during my college. We needed this. [...] When we define things correctly, we feel more secure. This security gives us wellbeing, gives us the calm to do the correct thing. We are sure that we are doing the best to contribute to the students' education. We are contributing in the way we should contribute. (Teachers' meeting 21)

They chose to build their practice according to critical pedagogy. It was evident that they did not understand completely what it could mean, or how they would put this into practice. However, if it was not present in their classes, it could still be noticed in how their concept of education changed. They understood that their aim conflicted with the school aim. For example, Vitor said, "Inside the school, the agreement was to make a line with the students, then okay, let's go to make the line. But after that gate, I let my kids free, because I do not agree with lines" (Teachers' meeting 11). The gate did not just physically separate the school from the Centro de Esportes, but also divided the educational concepts practiced in these two separate spaces.

I reported to Missy the teachers' concerns about these different educational conceptions and she helped me to understand what they were feeling.

Luiza: Pedro explained, "The problem that I see here is: I am a good teacher because kids respect me and they are silent in my class. People do not want to see my class. However, they only care about the kids being silent. This fact demotivated me". [...]

Missy: Basically he said... what I get from what he said is, the people think he is a good teacher because his kids respect him and they are quiet. Everything is good... No one is in trouble. However, he is saying that silence is exactly what he does not want in his class... Because they only care if the kids are silent, he does not want them to be silent. So there is this tension between what people think of is good teaching and Pedro thinks is good teaching. That is a beautiful, beautiful statement. Absolutely. (Researchers' meeting 13)

Equally, they missed the comfort of tangible things. The physical education aim seemed too abstract for them. Consequently, practical steps such as participating in workshops, fixing the swimming pool, planning events, developing the class structure and organizing the Saturday classes were very important steps for them. Their practice was everything they did during what they called the "Tuesday meetings". At the end of the school year, they were proud of their development and they wanted people from the school to see it. Simone gave the group one idea, "I think we could make some PowerPoint presentations, take some pictures. We have to talk about the work that has been done here, our classes, our meetings, and our cleaned and tidy room" (Teachers' meeting 9). They had fought against the Plano de Vingança by discovering their own practice.

While I wanted to guide them to discover their practice through studying theoretical frameworks - which was important in certain moments - they pushed me to reconsider their need to build their practice grounded in their daily problems. Finally, they built their practice independently based on concrete actions that taught them surviving, demonstrating to the whole school what they could build, and revealing their practice.

"My brother, inside this gate you will have to fight against me as well": in truth, what was this practice about?

Through undertaking analysis of the teachers' practice, it became clear that self- and peer-recognition was the first step to unite the group. They created plenty of elements that composed this practice. Nevertheless, I kept investigating the teachers' motivation to continue their work. They were dealing with an unexpected difficult situation - the early end of the school calendar - and merely being recognized by the school no longer held as much significance as it had earlier. Teachers showed that they did not care about the school anymore. Thus, this second part of subtheme 1 intends to answer the questions, what did they care about? Why did they want to keep building their practice even though their world was falling apart? To answer these questions, I had to go back, to compare the teachers' actions at the beginning and at the end of the research.

When I started this project, I asked the teachers if I could participate in the meetings as I sought to build the physical education curriculum with them, their answer was in the positive. Although they did not know what "building the physical education curriculum" might mean, they knew that they had to do something to improve their work. My proposal seemed to meet their desires. At least they had someone to talk to them instead of being forgotten in the teachers' room. During the ninth meeting, I conducted small reflection with few questions to the teachers to gain a better understanding of what they were thinking about the project. They showed that even though some of them such as Pedro Simone and André, were willing to participate, other teachers were initially not very excited by it. For example, Vitor said laughing, "I think we do not need to do this. Let us sleep until later" (Teachers' meeting 9).

However, at the end of the first semester, they already demonstrated that their production was meaningful for them. I explained to Missy that I had noticed their willingness to keep working. I said, "They are very excited! I noticed they are very ...like... 'Okay, Let's do this in the second semester... we can do like this, we can plan like that' do you know, Missy? A lot of ideas". Missy and I were also excited, and she said, "Yes, it is very good. So, you can talk to me every week and you have to make a plan to talk to them every week. You should be very happy" (Researchers' meeting 13). The teachers and I were committed to the project. We planned to create lesson structure, to organize the upcoming sports events, and to study teaching strategies.

By the end of August, they also planned workshops with their friends. This idea was wonderful, but it came at the same time as the worst news they could receive; something that

might have their world falling apart. The Mayor's strike, followed by the reduced classes and the introduction of Saturday classes, along with the expected end of the FTS project, disrupted the school and affected their feelings about their own professional progress. At our 18th meeting, the teachers seemed discouraged again. I felt that all their previous motivation to learn had been reduced, almost depleted.

Luiza: Then, I would ask you, what did you feel? What are you talking... thinking?

Pedro: [...] This week was so tense. To tell the truth, it affected all the school. We could see just the gossip in the halls. Everybody was sad. In the teachers' room, there were a few conversations. [...].

Luiza: Yes, I understood. But what are you thinking, should we come back to work?

Pedro: Yeah, we have to keep going as if they said that nothing changed. **Vitor:** Hey guys, are we going to come back to work? Nobody is answering!

Pedro: She is talking with you Rodrigo, Jair and André.

Rodrigo: Hiii...

Luiza: I asked if we should keep going with the physical education work.

Vitor: Yes or no?

Rodrigo: Yes... we go (laughing).

Everybody: (laughing)

André: Hum... we are demotivated now...

Pedro: Hey, vamos!

Vitor: I am demotivated with this city, and when we arrive here, at school, it is hell...

Luiza: Hey André, can you talk? You seem so sad...

Vitor: Everybody is so apprehensive. This news has damaged the group. We will continue because it is good for our professional growth. But, the group is not believing in... As you can see, we are talking here and everybody is talking about other things. (Teachers' meeting 18)

Thus far, they recognized that they were building something. They were proud of their work and they did not want to stop. I was very worried about their situation and with the general situation of the FTS project in Governador Valadares. I wanted to give them the freedom to decide what they wanted to do at that moment. I said, "You can say anything. I am with you, but I want to listen to each one. Why should we continue this or not? What are you feeling about this?" (Teachers' meeting 18). Their answers indicated a desire to continue the building of their practice.

Rodrigo: [...] I posted one video yesterday, then people can see that we are continuing. If it suddenly finishes, it will not be a problem. We did our work until the last minute.

Vitor: [...] Let's go to do our work because I just believe in it. Vamos!

Pedro: No. I will do it for myself and for my kids and I am done. It is important because we are going to improve our classes, it will be a *Norte*, and everything will be fine. [...] I would say it. It is so good standing here quiet, working. So, let's do it. [...] Let's do this for the kids. Because of it, we have to keep going. [...] I am like Vitor. I am working for me and for my kids and it is the endpoint.

Simone: I will say by myself, nobody knows what I am doing in my class. [...] Maybe just you [Luiza] know what I am doing and, my physical education colleagues, who understand me. Here I do not need to justify anything to any teacher.

André: My speech is the same as Pedro, it is about our personal satisfaction of teaching a good class. This moment here, it is so important because of it. We are looking for good outcomes with our students. But now... we should forget what is happening in school and keep going, inside the group. *Vamos*, because it is helping us so much.

Jair: We are making a difference in our students' lives. Some of these students could be something in the future because of one class I taught well... So, I think we should keep our work. [...]. (Teachers' meeting 18)

Two points motivated the teachers to keep working together. First, they perceived their practice to be useful in their own lives. Second, they acted because of their students. The teachers recognized that their work was genuine. André resented the impact of the supposed end of the FTS project in that school, "I asked to change to another school, [...] which is very sad for me, because I developed my work here. Rodrigo too [...]. The swimming work will die. Pedro will not come back here, so the soccer will die. Simone, the same" (Teachers' meeting 21). They had built something and they were disappointed to lose it.

Regarding the workshops that unfortunately they could not continue, Simone said, "It made me sad, we could have done it. And it could open doors for us" (Teachers' meeting 21). Alternatively, even though their concrete outcomes were being reduced at this chaotic time, she saw their production as effective in their lives "Maybe this time here, Tuesday meetings, they are not so much a moment for this school. Maybe they are for our lives. Wherever I go, Pedro goes, André goes... we are going to use it" (Teachers' meeting 21).

The teachers also demonstrated that they felt engaged in improving their practice. It was a pleasure for them to notice that what they had created was working. Pedro commented, "Someday I looked at the field and everybody was there doing, or at least trying to do something. After some Tuesday meetings, everybody was teaching there. Then, I felt even more excited about teaching, seeing that it was working" (Pedro). Simone demonstrated how she was sad about the school situation, yet, she was feeling fulfilled with her teaching work. Repeatedly she sent me pictures from her classes. On one of these occasions, she was using a game to teach Javelin (outlined in figure 30) and we talked about it:

Luiza: Oh, it is so nice Simone. I am proud of you. You are changing your lessons, you are not giving up on the students. It makes me very happy. As I said today, you are brave warriors. Even in these conditions, you are able to teach. More than that... you endeavor to teach well.

Simone: Thanks Luiza, I need to do my best and the lessons are the only thing that makes me happy now. (Social media records15)

Figure 30 - Simone's picture of her learning activity.



Source: Social media records.

As they explained, they acted because of the children, but it was not only through the physical education classes. Although Simone and other teachers such as Rodrigo, tried to attempt their physical education lessons, they declared that they were there only, "waiting for November", which meant not investing in their teaching any more. They were there only taking care of the children. Vitor admitted, "At the very end, we let the kids play because of the terrible conditions, but everybody was there looking after them. It was not a lesson, exactly. Some days we taught and other days we let the kids play" (Vitor).

However, they were always worried about the students' education as a whole. Pedro recounted the Saturdays classes when they, "had excellent moments with the kids. We did meetings with them and talked with them about conflicts at school... voluntarily" (Teachers' meeting 22). They were also apprehensive about the students' lives. They acted as though they were defending the children in their dangerous lives. Rodrigo described an episode when the teenagers outside the school invaded the swimming pool to fight with one student from the 14-year-olds' class. Rodrigo reported what happened, "I said: 'My brother, inside this gate you will have to fight against me as well. [...] If you want to hit one of these athletes, you will have to hit me'" (Rodrigo). Even after the end of the year, they continued to talk about the students. They deplored the students' difficult lives:

Pedro: Do you remember this student? Here is his brother [sending the picture].

André: Yes, Edison died early. This other boy I did not know.

Rodrigo: The crime world does not forgive. [...]

Pedro: Do you remember this girl? She is pregnant from the boy who died. Just the wrong

choices. My goodness!

Rodrigo: Where life should be born, there is death. It is the end! Very sad.

Simone: It is the same case as Bruno, that boy from the 10-year-olds' class. [...] I remember this girl. Oh my goodness, just crazy things. Taking care of one kid and giving them a good life is so difficult. (Social Media records 37)

Missy and I recognized that the teachers were involved with the students' lives. Through building their practice, they took on the role of defending themselves and defending the students. Their motivation to keep working was not just for the school or for our project; instead, they took care of their colleagues, and of their students. They believed that it was their work. Rodrigo stated, "I am here defending my work. Unfortunately, it is not the children's fault. I will do it for the kids until the end. It is about the kids. It is not about the school [...]" (Rodrigo). Missy and I reflected about the teachers' attitude regarding the students:

Missy: Interesting... It keeps coming back... "It is about the kids". And you made comments earlier on... in the first section, I think in the long run we can come back to that. Yes, in the first subtheme "I am very sad about the students"... For these teachers, I would call... deplorable, do you know that word? Terrible, awful situations, their concern is about the kids, and all these kids growing up in this kind of situation, in this kind of vulnerability, this kind of... what is amazing because they are in the same situation...

Luiza: Yes. One day I was at school and I could feel what Pedro was saying in this sentence. For example, one child just arrived and said, "Pedro today the class was amazing". Pedro looked at me ... his eyes full of tears, Missy, and he said, "Okay, it is because of this". (Researchers' meeting 19).

In same sense, the teachers were always demonstrating their concern about the students. It was as important for them as their own development.

The teachers always understood that the pace of their development would be slow. In the second observation week, André said to the Pedagogical Coordinator, "No, it would be something that we have to think about this year, but it will become real next year". He continued, "This is a seed, but we need to cultivate it this year" (Field notes 8). At the very end, Vitor too showed that they were aware of this pace. However, as a permanent teacher in the school, who would probably be the only one to return in 2019, Vitor was also worried about how they could continue to build their practice. He reflected:

Because what we wanted to do here, it is not a fast thing. It is not from one year to another. The actions that we determined here, everybody is doing it. Yet, the feedback will be slow, gradual. We will see it happen for a long time ahead. The problem is "continuing"! How can we continue? There is this disappointment. This year is finishing in November. Everyone is negative about how things will happen. They (teachers) will not come back here. (Teachers' meeting 21)

Although they had been trying to keep working, the purpose of their group had changed. Missy and I realized that while we initially thought that this group was teaching better through building a physical education curriculum, what actually maintained group unity was more than just organizing physical education, planning workshops, improving classes, running sports events, etc. They showed us that what maintained the group was the support that they received from each other. It made them survive until the end of the year. Missy and I reflected:

Missy: We wanted the "domain" to be a change in their teaching. You wanted to see a change in their teaching, and how they work with kids, and it became about survival, and to be able to think about teaching kids. [...]

Luiza: The "domain" changed.

Missy: Yes, because changes in the curriculum cannot come if they cannot survive. They created their domain... You wanted the curriculum, they said they would go on with you... but they wanted a pool, a clean equipment room, a clean bathroom, a good place for kids, they have students, they have a timetable, they wanted to survive. They cannot do that... the curriculum is... [...]. They wanted to survive, they wanted to be able to teach... And these are the kinds of things we need to survive and teach. If I did not have students, I could not teach. If they do not have students, the curriculum does not make any sense. (Researchers' meeting 19)

However, the challenges they faced were more powerful than their willingness to fight. The system was bigger than them; they could not fight any more to win this war. The consequences of the municipal education cuts done after the Mayor's strike, such as: number of classes being cut, the school year ending earlier, the lack of money to buy sports equipment and to maintain the pools were things that they could not act against. They were aware of the limited time that they had to accomplish their aims, but they did not expect that they would face all of these challenges and struggles. They began to believe that they had not achieved anything during our year together. As Vitor said, the "self-esteem is very low. It is making us think that we did nothing [...], but we know very well that we did something, we fought, we continued to try" (Teachers' meeting 22). I found I had to show them my analysis of our trajectory with them. At the last meeting, I made a presentation to them showing the timeline of the group's accomplishments. After this, everybody recognized what the group had achieved, what it could have done and why participating in that group was so important. Participating in the group caused them to be supportive and supported, and as a result, to be resilient, resistant and better able to survive their precarious conditions.

4.2.2.2 Physical Education teachers supported each other

Even though the teachers were living in a chaotic context, they did not want to give up on this group or the project that the group was building. Immersed with them, I too wanted to find a solution to their problems, but I did not want to force or pressure them even more given the number of problems they already had. Thus, my solution was to give them the freedom to decide whether or not to continue, even though I was sure that the best option would be finish the project. Much to my surprise, the teachers found a way to continue working and building their practice. Missy and I already had discovered why the teachers did not want to give up. They understood that participating in this group was good for their professional development. Additionally, they were worried about the students. Therefore, improving their work was a way to educate these children in diverse ways. They thought it was their job and they felt fulfilled when they achieved it.

Nevertheless, it was necessary to understand what gave the teachers the strength to keep working since it was clear that their situation was very difficult. They spent their days trying to teach without sports equipment, working every second Saturday, knowing that they would be fired at the end of the year or they would have to find work at other schools. Thus, I wondered, what did give them the power to survive? With the passing of time, I discovered that the group was the only thing that they were sure that they could count on, that they had in that situation. The "Hoe Incident" highlighted how being together as a community supported them in facing challenges.

The "Hoe Incident": the teachers joined a community to support each other.

We were at the pool with the students, then I asked, 'André, what is that group there, man? [...] *Vamos*, let's find out what's happening before they come to the pool'. The students who were with us saw the mess. Pedro was cleaning the field with his students before the athletics festival. So, Pedro arrived holding a hoe. He saw André and me surrounded by a group of twenty boys. They would attack our students inside the pool, Luiza! Then, Pedro came and banged the hoe on the floor. The boys saw that there was another big guy with us. (Rodrigo)

In this critical incident, Rodrigo was in a dangerous situation. He was facing almost twenty boys who wanted to invade the school to beat one student who was in the pool. More than that, the boys could also attack Rodrigo. Pedro tried to show that he had a big hoe and he would use it to fight if necessary. Rodrigo was a middle-aged and short-statured man, but he was brave. He acted to defend the children. In addition, he was convinced that in that situation

he could count on those two big younger men, André and Pedro. He would not consider Pedro his personal friend, but he knew that at difficult moments Pedro, or any other physical education teacher there, would appear holding a tool to defend him. Rodrigo stated, "In conclusion, there were moments when the group united a lot, to defend the students or defend the lessons, to buy sports equipment, etc. A lot of moments, I cannot count these moments over the year, there were many" (Rodrigo).

Although Rodrigo was not able to name these moments, I recognized the group's attitudes that constructed their mutual support. They supported each other through their learning, they decided to learn independently, and they changed together to support each other. I reported this entire scenario to Missy:

Luiza: So they are very disappointed, very... But I cannot understand what happened. I just arrived and said, "Okay I understand if you want to stop, or to change the planning or do something else. I am here to help you. What do you want?" Only Pedro, Simone, and Vitor were in the last meeting because André's wife had a baby so he is away from school 15 days, and Rodrigo was helping to clean the pool because the Principal fired the staff who did it and now Rodrigo has to do it. But these three said to me "No Luiza, we want to continue. And if the school doesn't want to help us... (Because the school just said 'No, you cannot go out of the school to do any course'), we will help each other. In this workshop (because they decided to do workshops to learn more about the contents), André, Rodrigo and Simone go, and Vitor o and I will stay here with their classes. For the other workshop, for example invasion games, Vitor and I go, and André and Rodrigo will stay with our classes... And we will help each other, we will learn, we will continue" ...

Missy: Oh... It is amazing.

Luiza: Yes, I told them "I cannot understand you, you are very brave, even in this situation you decide to continue. I value this so much. So I am so happy with you"... And they were... "Okay, the school is not our problem anymore. We do not care about school, but we care about what we are doing here". (Researchers' meeting 17)

We understood that, though they had been building support for a long time, the first demonstration of the teachers support for each other was when they decided to organize themselves to keep learning.

In addition to continuing with their learning, they decided to do it independently. I offered many ideas about how they could learn teaching strategies. They did not simply accept any possibilities that I suggested. They chose to learn in a way that they felt safe. They organized themselves to create workshops with their friends. In that way, they could learn without exposing what they did not know. Moreover, they would learn through the learning method that they preferred, by learning experiences. They were also drawing a path where they could walk and feel safe conducting the lessons. Doing this gave them the strength that they needed. As Missy said, safe learning supported them:

So, I can organize without teaching, so it is not a guarantee, but at least it gives them structure and organization. They can see progress, they can see they are doing something. That it is safer for them. That it is much safer. Because they talked about making progress. They know they have things to do, but this is one way... "Oh we can organize this way, then we have a start". (Missy, Researchers' meeting 15)

The teachers understood that they needed to change the group together. They needed to unite themselves to survive. When their world fell apart, the teachers changed the direction of their meetings. Survival took priority over their teaching and learning. They were there to support their colleagues and they could do it by listening to each other's problems. André said, "Because each one here works on his or her own content. Pedro is at the soccer field, he does not know what is happening at the pool. So, at this moment we are together" (Teachers' meeting 21). The teachers started to perceive themselves as a community where people lived similar problems, knew their reality, shared their difficulties and had mutual trust.

Simone realized that her colleagues were the only ones who could understand her. "If I want to teach, you will know, but if I want to just let the kids play, only you can tell the difference" (Teachers' meeting 11). Rodrigo also agreed that they only had each other for support. He said, "We have to maintain our work [...]. If they want to be jealous, okay let them be jealous. [...] And when they come to fight with one of us, they will have to fight against all of us" (Teachers' meeting 11). Slowly they noticed that they had more strength when they were together. This community supported the teachers' in their hard decisions. I reported to Missy that Pedro was the first to notice it:

Missy: And Pedro had most to say.

Luiza: Pedro was amazing... I think now, I can see some transformation inside the group. I can see some transformation as "Okay, now we are a group, and now we have to..., we can do things in group", you know, it is important.

Missy: It is! And that is a big change from what they were accustomed to. It is very different from how the educational system works there. So you are really creating like a change in values and Pedro kind of... got that. It is changing values which can support them. And that is a big change, a big change.

Luiza: Yes. It is. (Researchers' meeting 11)

Yet, it was not always in this way. It took the teachers time to build this trust and support. When I arrived at the school, I thought this physical education group was new there. I had gone to the school twice before, but I did not understand their connection with the place or even between themselves, compared to how long they had known each other. After I had spent one year with the teachers, I noticed that people were there a few years and they had a history together, especially Pedro and Simone. As explained previously, Simone and Pedro were at the

school since the beginning, in 2014. André, Ronaldo (Principal), and Vitor arrived in 2016. Jair, though he had participated in the initial course and worked there in 2015, only returned to the school in 2018. Similarly, Rodrigo arrived at the same time, although he was not familiar with the school or the people working there. Over the years, with the arrivals and departures of many individuals, the core physical education group had a history of achievements and conflicts. The group had memories about experiences they had lived together. They knew each other, but 2018 gave them opportunities to change their perceptions about their colleagues and to build mutual trust between each other.

As demonstrated before, Pedro was critical in this group's history of conflict. He declared that he had argued with André, Simone, and Ronaldo, and in 2018, I was present when he disagreed with Jair. Nevertheless, when at the end of the year I asked the teachers if their perceptions of their colleagues had changed, they confirmed what I had perceived. Facing challenges as a group made these teachers know each other more closely. André said, "But Pedro ... with me... he was always suspicious about me [...]. Yet, this year it was calmer. In this crazy situation, everybody bonded to finish the year". Simone also recognized this change, she said, "There was some conflicts in other periods because this group was together for four years. Then, yes I noticed some changes. Especially about me. [...] Then, I perceived that everybody was in the same boat, had the same feeling". Moreover, Pedro also reflected about his change regarding his relationship with André and Simone:

For me, it was better than for everybody else. Do you know why? Because I had many conflicts with the previous groups. [...]. With Simone, I did not have a good relationship with her, we spent one year ignoring each other, without saying good morning. Now I finished the year with her... she is the closest person to me today. [...]. André also, our relationship improved a lot. [...]André and Simone were two people... they were a good surprise for me. I do not know if they changed, maybe I changed. I was open to the group and them too. They were two people with who I could have good dialogs. Even chats, gossips, plans... even this we did. Before it was impossible. (Pedro)

Despite being a new worker at the school, Rodrigo knew to analyze the relationships inside the group. He recognized each one characteristic and concluded, "Even though we had our particularities, there was a good bond as well. Pedro had a problem at the field and he told us 'oh guys, today it is hard...' and we said 'calm down Pedro'" (Rodrigo). In these small daily situations, the group supported each other. Furthermore, they knew that they were people who had different beliefs and behaviors in the face of diverse situations, but, as Rodrigo said, "The people started to live together and learned to respect each other. Each one has his or her own way".

After the Mayor's strike and the resulting consequences, the group did not accomplish its meetings every week. Since September, the group started to meet once or twice a month. The teachers needed this time to "catch their breath back", organizing their personal lives, planning strategies to survive until November. However, like any close family, they knew that they could be a bit distant but, as Missy said, "They can come to this group for help if they need it" (Researchers' meeting 26). The "Hoe Case" described earlier in this section was an example through which can be perceived how the teachers felt supported by their colleagues. They felt supported not only by their physical education colleagues but also by their new friends.

André and Rodrigo demonstrate a case of friendship built inside the group. They learned with each other and they understood their different ways of thinking and acting. Yet, they found in each other's personality the balance that they needed. Rodrigo said, "André taught me so much. Despite being younger than me... I told him, 'you are a friend that I made here'. I arrived here so excited... He just looked at me and said 'Calm down Rodrigo, you will learn...'. Similarly, André confirmed, "We did not have sports equipment, money for the classes, then I had to learn cleaning the pool. Rodrigo taught me so much. I learned some things I had never imagined". They were complementing each other in a new partnership.

I could see that they changed individually and their relationships had changed as well. They learned to put themselves in their colleagues' places. Vitor declared that he had never liked when teachers complained during the meeting, but he understood that it was important in that difficult time. He said about the contractual teachers, "I changed my mind because it was necessary. [...] They are my colleagues and I see their suffering". (Teachers' meeting 21). In another example, Rodrigo told me about the day when André arrived wearing shorts and said, "It is enough Rodrigo. I cannot watch you working alone. I came here to help you to clean the pool" (Rodrigo). Since this day, Rodrigo and André were not participating in the meetings anymore because they only had the Tuesdays without classes to clean the pool. As a permanent teacher, André did not need to have a good assessment or to participate in the hiring process. He had the option to abandon the pool, to explain to the students that it was not his fault and to stop the swimming classes. Yet, since he knew that Rodrigo would never give up, abandoning his friend was not an option for him anymore. They trusted each other and André could not break Rodrigo's trust.

During the Brazilian truckers' strike in May and June, 2018, I reported to Missy how the teachers changed their relationships and became closer sharing their personal lives:

Luiza: The country stopped because our roads were blocked, and we don't have... we have a little water, and food, and... The things can't arrive in cities. So medicines are very hard now... we don't have class today. I don't know when the classes will return. It is a problem. So we were talking about it, and talking about our personal lives, I noticed, 'Oh my God the teachers want to sit together and talk'.

Missy: Yes, but it is what starts to make... so you are not talking about school, you are talking about your personal lives, the situation, the truckers... [...]. I know a little bit more about you and that those kinds of conversations are what makes CoP start to work because now we are close, not as teachers, but as friends. Does that make sense? I am very excited...

Luiza: Me too. My friend in USP advised me... In Brazil, sometimes, people can be very selfish. I think... in a situation like ours. Do you know? In a poor country, teachers think of their own survival. For example, that time when Pedro wanted more classes to earn more money. So, my friend told me, "Oh Luiza, teachers are very selfish..." Okay, they are, but sometimes I think they are learning to be less selfish. To look for other teachers, and "okay, we have the problem with swimming, and swimming is a different lesson, different class. What can we do?" I am very excited! (Researchers' meeting 9)

Although friendships had emerged and they were closer than before, Simone remembered that this group was not about being friends together. They had little interaction outside the school. She said, "This is a professional group. Although we have personal discussions, sometimes we talk a bit about family or something intimate, it is restricted to our time in school" (Simone). They talked sometimes about having barbecues or going out for a drink, but the group met only a few times socially outside the school and there was always somebody missing. Even Simone tried to organize a physical education group party, "Hey guys, we could do something, just us from sports department [...] Rodrigo offered to host a barbecue" (Teachers' meeting 22). Everybody agreed, but in the end, some of them had to travel and just André with his family, some teachers who worked at the school previously, Rodrigo and I were there. Rodrigo sent a message with his picture to Vitor. Vitor answered complaining about missing it and Rodrigo said, "How could we do it without you Vitor?" (Social media records 37). Nevertheless, it seemed that this lack of interaction outside of school did not disturb their connection inside the school.

This group appeared to help them to face their struggles. Pedro explained that this group was a community that learned to bond in hard situations. André explained, they were united to, "talk about what was happening and each one helps the other teacher. If it was not at this time, even this would not be occurring" (André, teachers' meeting 21). Pedro also highlighted,

In all groups that I participated, this was where I needed my colleagues the most. [...]. This group was where we discussed, where we could lament our problems. This is the difference in this group. It was a group where we united to defend ourselves, to face our struggles. (Pedro)

Over time, the strong connection between them was repeatedly demonstrated. André, as a permanent teacher, had the option to move to another school, which he availed of. Even though he was now removed from the school, he kept telling the group about job vacancies in other places. He was worried about the job problems that his colleagues had. He said, "Let' go to study folks. Then you do not have this worry about hiring processes every year". Pedro answered, "Yes, It is true. I cannot maintain it anymore" (Social media records 37).

After the year ended, they continued talking on *WhatsApp* about the hiring process for 2019.

Simone: Hi guys, good night. What is this information? Will the hiring process be tomorrow at 8 a.m.? Is it true?

Pedro: Yes. There were just ten job vacancies. Only two full-time positions.

Simone: Okay. So, tomorrow at 8 a.m. Yes?

Pedro: Yes.

André: Here in my school there is a job vacancy for a part-time teacher. The hiring process is tomorrow. [...] I wish good luck to everybody tomorrow. Send a message here to tell us what happened. Oh, more information, the physical education teacher here is almost retired. Then, another job vacancy should emerge soon. I will let you know when it happens.

[...]

Simone: Thanks, Pedro. Monday we will be there again. There is a job vacancy for Martial Arts in a school near my house. I worked there for six years. It is a great place. But Martial Arts is so difficult for me...

Pedro: Simone, you have to work. You have the capacity to do it. I am sure you are able to do it.

Simone: Yes, it is in God's hands. Thank you, Pedro.

[...]

Simone: Hi guys, I got the job. Martial Arts in another school near my house. It will be a big challenge. But I will be able to walk to work.

Pedro: Congratulations! **André:** Congratulations!

Simone: See you someday, guys! (Social Media records 38)

In this way, Simone, Pedro, and Rodrigo always posted information about courses or other jobs to physical education teachers in the city. They were worried about each other's destiny. They spent two weeks talking about the hiring process. The teachers supported each other until everybody had a place to work and could safely continue their professional life. I reported this chat to Missy and she stated, "I think they may be spread, like a family, [...] but still have something holding them together. They are still going to be each other's friends and colleagues even if they don't see each other every day" (Researchers' meeting 26).

In the final interview, I asked the teachers what they had learned from the experience of participating in the group. The teachers highlighted the values that they had learned while working in the group. Pedro stated, "Listening to each other; reinforcing as a group; hearing

more than speaking" (Pedro). The group was important to him, especially because of his history of conflicts. Vitor pointed out, "Learning to listen to each other; working as a group; being respected" (Vitor) made the difference for him because he was very tense and had a short temper. Rodrigo confirmed that he learned how to, "calm down; I learned how to deal with differences. I learned about respect" (Rodrigo).

More than just highlighting their learning, which had contributed to the group, they also noticed their individual contributions to the group's functioning. They demonstrated that they had learned to work collectively through combining their individual qualities while building the community. They indicated that Vitor brought his, "experiences in teaching; knowledge about theoretical frameworks that came from universities"; Pedro, his leadership, when he, "represented the teachers' voice"; Simone, her organizational skills, when she "informed the teachers about what was necessary"; André, his security that came from his position as a permanent full-time teacher; and Rodrigo as a "helpful person", his willingness to make the things happen (Final interviews). Every teacher contributed to build a unique physical education community.

By the end of 2018, the community had separated physically; the teachers went to different schools and other work places. As occurs in emergent and dangerous occasions, this community was quickly built, but effective and intense. They spent more time together than they would with their friends or other communities in which they were involved. In an attempt to be recognized by the school, and to find the importance of physical education there, these teachers learned to unite by looking forward to surviving the hardships in their professional situation. However, before survival, this group had to learn to be a collective. Missy and I discussed this process, while attempting to understand the teachers:

Luiza: Do you mean that it is important first to learn how to be with a group and after, go on to other things?

Missy: Yes, even if the group falls apart...the relationship aspect...that is what they are taking away from it. And the importance of that in teaching. So they saw they could do other things. They started to build the curriculum, but the relationships, this working as a group, this being, you now... that seems to be the most important thing to their learning.

Luiza: Yes, I think yes.

Missy: What is very clear to me... we have already said it... but it is very fascinating in this group, and it is very very clear. So I think that it is part of the empowerment, and really it's learning to trust others, to be with others, to work with others...

Luiza: And to feel stronger. They repeated it. They get power, they get strength from each other. **Missy:** Because they trust each other. And you cannot get power from each other unless you trust that group. They can be a group, but if you don't trust that group you cannot feel the power. So if you are from my group and I don't trust you then I will be always wondering if you are going to go against me, even if we are from the same group. So trust and building a relationship has been huge and then they can go to all kind of places with it. (Researchers' meeting 26)

Finally, they understood that if they were part of community, supported by their colleagues, they could achieve anything. They could build a curriculum or confront systemic challenges. Missy and I realized that learning to live in a community gave strength to these teachers and created spaces for them to do whatever they desired. Learning to trust in each other, to be supported by everybody and to work collectively, was part of their development. It helped them to be resilient and face their struggles.

4.2.2.3 "Be calm, go slowly": learning to be a democratic facilitator

I learned my role at the school through Missy's support and guidance. For this, I had to have a good relationship with the teachers, to listen to their voices, to understand the group's knowledge, and to respect the learning pace of the group. I also recognized the importance of the balance between talking and listening, and between pushing the group's discussions and giving space to the teachers. I spent almost one year trying to find a leader for that group. In the end of the project, I realized that I was part of that community. While each one was discovering his or her contributions to the group, I discovered my own role. I became more than a facilitator. My contribution was to be the group's democratic leader.

"Curriculum, how so?": the long task to become a democratic leader

Then I asked, "Maybe we need some way to organize the school... Who knows... Do we need the physical education curriculum to organize physical education in school?" And Simone said, "No, curriculum, how so?... How could it be the curriculum?" I answered that the curriculum also involves the organization of the school, of the classes. So, they started to give a lot of ideas [...]. They started to see one possibility to improve their work. I think it might be the group catalyst. It might be one reason to be together. Trying to manage, organize, and build the physical education curriculum. (Field notes 5)

This critical incident demonstrates how my learning trajectory began with the physical education community. What I called "building the physical education curriculum", was what they simply called "organization of daily work". Simone tried to advise me about my misunderstanding, but initially my desire to build something with them, something that I thought that could improve their lives, was bigger than my ability to listen to the teachers' voices. They had already had several facilitators. The Pedagogical Coordinators in school, Pedro, Ronaldo, and then previously in the Mining Company period, they had had several people telling them what they must do. Yet, to build a physical education community with them,

which projected learning for change, I could not be an autocratic facilitator. I needed to become a democratic leader and I did not know how to do it.

My first step was to build a good relationship with them. The teachers taught me that without trust, building a community would be impossible. I had to be accepted by them and by the school. To achieve these goals, I had to deconstruct the teachers' perceptions of me. I had already met with these teachers; they knew that I came from a university environment. Thus, they saw me as a person who would just correct them or tell them what they "should have done". During the second observation day, I took notes when Rodrigo, "asked me what I was doing there, what I was researching. If I was observing the students or the teachers" (Field notes 2). It was difficult to break this perception of me as the observer. I had to learn to respect the school pace which is different from university. Things in school happen in their own time, so I had to be patient to observe and to see how things came to be solved. Missy's constant advice for me was, "Luiza be calm; go slowly." (Researchers' meeting 2).

I also had to live their lives, to get closer to the teachers, and to understand them, to get them to change their view of me. At that time, I helped them with their classes, I had lunch with them, and I cleaned and organized the equipment room with them. I became so involved with the group that I was in doubt about my doctorate studies. I did not listen to Missy. I was in such a rush and the pacing of the school made me more anxious. I took notes on my personal journey:

I am afraid about going to Ireland in July. I would like to spend more time here at the school. On the other hand, I know it is important to my Ph.D. The things at the school are so slow. In addition, we faced the truckers' strike, so the lecturer came to the city but could not offer the workshop. After, there will be the CONIPE²⁶ Conference and so we will not have the meeting... Finally, [there was] a sequence of events that left me worried about getting out of the school earlier. (Researcher's journey May/2018)

In the same month, I told Missy that I was thinking of giving up the internship in Ireland to stay with the teachers in school. "Missy, I know it will be problematic for me but now my heart wants to stay at the school and I want to help everybody. Yet, my head says, 'No Luiza, you have to finish your PhD'" (Researchers' meeting 7). After laughing and telling me that she knew that it could happen, Missy recognized the importance of this strong relationship that the teachers and I were building. She also highlighted the trust in me that they demonstrated when I talked with the teachers about the Plano de Vingança.

²⁶ I attended a Sport Pedagogy International Congress (CONIPE) at Campinas, SP, June, 2018.

Luiza: I don't know what happened and teachers started to talk about the problem with *Plano de Vingança* against the 14-year-olds'class.I thought, "Okay, I have to take this opportunity and start to talk with them about it". So, it happened!

Missy: So, you know that what you are telling me Luiza is, that the time you spent in school, in the last 3 weeks has paid off. Because they trust you, and you made it a social situation. Even if you were getting materials or you were doing other things. It was not like real meetings, it was an informal kind of environment, an easy environment to talk, because you are doing things at the same time. It is like having many people in your kitchen and you make food and talk at the same time. That is what you did there. It happened maybe by chance, but it happened, and it was very good. And that is the start.

Luiza: And I think the teachers recognize it, because in the end the teachers talked, "Okay, now we have a meeting, now we start something". André and Vitor repeated this many times, "All meetings have to happen like this"... (Researchers' meeting 5).

Slowly our relationship became even closer. They trusted me, especially after I had advocated in their favor. They asked me to help them with meeting the Principal, and other requests. They understood that my role there could be to mediate meetings. Vitor used a soccer sentence to translate my function, "Luiza is here just like a midfielder player, only receiving the ball and passing it" (Teachers' meeting 8). On another day, Pedro and I were talking about how the municipal office personnel saw me at the school. They wanted me to force the teachers to meet requirements such as participating in an online CPD activity, or attending the municipal sport project. Then Pedro said, "No, it is not your work. Your work here is to be a facilitator" (Field notes 25).

I created a strong connection with them. Sometimes they offered to give me a lift in their cars and motorcycles. When we had break time, we talked about our personal lives. At these moments, Simone was the person with whom I had more intimacy. We always chatted about daily things such as: marital lives, clothes, gymnastics, hair and other topics. She asked me to help her to plan her classes. Even at the end of the year, she continued to call me, asking about people that I knew who could help her with the swimming classes she desired to teach. Simone invited me to her daughter's birthday and I attended it. When I arrived there, she told me, "Oh, I must be an important person. You came here!" (Researcher's journey). In conclusion, this data demonstrates that the teachers continued to see me as a person different from them.

It was necessary to show them that they had important knowledge, teachers' knowledge. Thus, I had to listen, respect, and value their voice. Missy helped me to understand how important it was to let the willingness for change come from them. She explained, "You have more knowledge sometimes than them, of research and literature. You know good things about how it could be changed, but they have to want the change and they want [...]. So, let it came from them" (Researchers' meeting 5). If the teachers did not feel respected and heard the

process would be the same as in previous years, I would be just another outsider that was there to tell them what to do. However, I noticed that it was necessary to develop the project from teachers' needs, teachers' reality, and so on. Nevertheless, it was hard. I said to Missy that I had understood but I kept reproducing the same directive process. We reflected:

Luiza: Yes, because I am doing an agenda for the first meeting and I will send it to you and you could help me. What do you think?

Missy: Now, do they want an agenda? [Emphasizing]. Did they ask you to do this? Does their meeting generally have this agenda? I would be careful of making it too formal. Don't make like when you and I go to a meeting, it has one, two, three, four... maybe get into informal: "These were the things I heard last week... Which one of these do you really want talk about?" Almost like an e-mail. Don't make it so formal that it scares them. Because André said, all meetings must be like this. Part of that was the topic in the... "Get into the materials..." just happened. You want to promote that, not press it down.

Luiza: In truth, the teachers told me in interviews, they want meetings organized, you know? They want to do a meeting in a meeting room. They want an agenda, they want... but I understand what you said.

Missy: Where is the median, where is the compromise? Here is an agenda, but not so formal, that it takes away... the kind of (constructive) use, kind of socialness, kind of flow of it. Some... just don't make it... you know. Let's talk about these things. Where we start, where we will go with this. (Researchers' meeting 5)

Therefore, I understood that the teachers had lived this directive process and because they were accustomed to it, they asked me to respond with direct formality all the time.

As a person who wanted to promote the teachers' voice and participation, I learned to build with them rather than build for them. The meeting agenda was an example of this building process. I returned to the teachers' interviews, the previous meetings with them and the meetings with Missy. I studied about better ways to build an agenda with them. Then, I talked to them at the meeting and explained, "So, you can see that she built it alone. It is not the idea here. The idea here is we build it together. We are going to include what we want to do, which structure we desire for the meeting" (Teachers' meeting 3). Slowly I was learning how to create spaces for the teachers' voice.

Asking questions instead of giving answers was the way that I found to create these spaces. During all workshops, I invited them to reflect on the theoretical frames and their daily reality. I also paid attention to how the teachers preferred to learn, and I tried to direct their learning accordingly. Unfortunately, I was stubborn. For example, Missy had advised me teachers usually do not like to read, they feel like students in school. Yet, what did I do? In the first workshop, I brought a text to the teachers. Still, I knew to recognize my mistakes, and in the following meeting I did not bring any text. André recognized the change, "Oh, now it is wonderful!" (Teachers' meeting 8). The teachers were guiding me towards the way that they

preferred to learn. Looking forward to understanding these learning processes, I constantly questioned myself and them about what they needed and I assessed whether the meetings were satisfying their expectations. For example:

Luiza: Then, I would like to know what are you thinking about... what are you feeling? What are you thinking about the meeting? Do you think we should change something? [...] **Pedro:** No, when you asked us a long time ago I suggested in this same way. You asked: "How do you believe that the meeting should progress?", then I answered, "You should give us a time to 'cry about the week'". And we are always doing it here, we always cry about our week. (Teachers' meeting 9)

I was learning to balance between pushing the group's discussion and giving space for the teachers to breathe. Pedro analyzed, "I believe that in some moments you should have crumpled your sheet. In other moments you got to talk, especially when you were here" (Pedro). He was referencing the moments when they talked a lot about the school problems. Vitor also recognized that I was trying to give them time to breathe. He said, "You are learning how to listen, too" (Teachers' meeting 11).

However, giving this time and space to the teachers was difficult. Sometimes they responded well to my questions, and we could make some modifications and keep working. Other times, they just complained about everything. At these times, I had to act more directly, reminding them of our trajectory and targets. Of course, in their difficult lives it was natural that on some days they thought of giving up or became weak, as Vitor said, from low self-esteem. In these moments, I believed that my role was to offer security for them. Yet, I believe that sometimes I acted too forcefully. At one meeting I talked to them:

We have millions of problems. [...] This is a teacher's life. Then, either you make your life hell and look only at the problems, or you think about doing something. What I proposed was to make something with you... we should think of solutions. And I think we are progressing. (Luiza, Teachers' meeting 11)

I did not want to pressure them even more. Thus, after reflecting about that meeting, I reported to Missy that I should apologize. I said, "I do not know if I forced them to decide, but I noticed that they were losing themselves". I also told her that I tried to recognize their efforts to change their practice by telling them about AIESEP²⁷ presentation in July. I explained, "I showed them what we already had achieved through our collective work. I do not know if I have to apologize, but I did what I though was necessary in that moment" (Researchers' meeting 12).

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 $^{^{\}rm 27}$ I presented part of the results in the AIESEP conference. Edinburgh, 2018.

Undertaking this analysis, I noticed that already I had moved closer to being a democratic leader. If it had occurred at the start of the year, I would not care about prescribing plans of actions and ideas *for* the teachers. I would have thought that such authoritarian actions would be my role. However, at that moment I did not want to overwhelm them by looking forward to outcomes. Thus, I apologized and they took this opportunity to reflect about their actions. André said, "We do not have only the negative side, we have the positive as well [...] And the only time that we have the opportunity to do meetings is here, with you" (Teachers' meeting 12). They had understood that I wanted to promote their autonomy rather than impinge on it.

Although sometimes I acted according to my heart and feelings, open to the group changes and acting with security about the group direction, other times I felt insecure, lost and desperate. I did not know how many times I cried with Missy about teachers' situations and destinies. I reflected, "I am in this vacuum with the teachers", and she responded, "Yes, I liked the piece in the lecturer's letter where it said, 'in that moment I realized that Luiza is part of the group, she is an insider hoping for change'" (Researchers' meeting 12). Missy had to give me support but she also had to make me an autonomous facilitator. I wrote of my researcher's journey about my feelings when she told me that I should have acted more independently:

I am calmer now. I am confident that we can keep going with the project. The FTS will continue. Yet, today, Missy told me that I have to be more independent now. As she explained, "The same as you are doing with the teachers, I have to do with you". I am a little bit afraid, because I have never built a curriculum. But she told me that I should follow my feelings and if I have some doubts, I can talk to her. (Researcher's journey August, 2018)

My autonomy came simultaneously by learning regarding to the teachers' voice, and their decisions about their own learning. For example, for workshop organization, I gave them many options about how we could learn, then they created and decided their own way. As Missy did with me, I did with the teachers. I gave them support in their decisions and doubts. Yet, as I described at the start of the section, the "Curriculum case" represented the main issue regarding respecting the teachers' voice and decisions. They had to teach me what was truly important for them.

We learned together that solving daily problems, coming together to survive difficult schedules, doing what was possible to improve their work, and learning together while looking forward to taking this knowledge away with us, were more urgent than building a physical education curriculum for that school. At the beginning of the year, Missy advised me, "And if you don't get as far as curriculum, that is okay! It is a heavy task. I might have dreams of doing

that, but I have more basic needs. Then the basic needs have to come first" (Researchers' meeting 6). However, in silence, I continued with this idea. I believed that the dream was not only theirs, but it was also mine.

Nevertheless, this dream lasted until the Mayor's strike, when I realized the depth of the teachers' difficult situation. Vitor remembered that I forgot the curriculum issue. I was just worried about them. He said, "After the bombs exploded you were looking for the group to know more about us. Pedro and Simone said that everybody here was so sad, so worried [...] We arrived there, and you asked us, then we just let off steam" (Teachers' meeting 21). They were devastated and I wanted to comfort them. Definitely, I had understood that what was important for me did not matter; rather, the main point for me was what mattered for them. Missy and I reflected:

Missy: It is fine... It is not the issue. They want to learn, and they are learning about something they really want to learn about, whatever what is... Which may be more a true community than the curriculum part. They now found themselves, what is really important to them, and it is learning. They had to find what learning was about....

Luiza: Yes, what is really important for them... not for me...

Missy: But they make the decision about what learning is about now. And whatever they are doing and absorbing, they make the decisions... Maybe more a community now than before, because now this is what we want to learn. It is true, in their voice now.

Luiza: I listened again to some meetings, the first one... I think I introduced the curriculum. I think they did not know what curriculum is. So I came there and just said, okay curriculum is this... It was more my voice than...

Missy: I wanna agree... Because of that when I listened to you I just said be calm... Don't push... (Researchers' meeting 17)

Although I drew my learning trajectory with "Ups and Downs" as the teachers did, I had never given up on them. These teachers were abandoned many times during their professional lives. As a physical education teacher, I know that physical education is a forgotten aspect in many schools, and André confirmed, "The only school where we have the chance to speak and discuss is here. In other schools, physical education teachers are nothing, we do not have voice" (Teachers' meeting 12). I could not abandon them. In addition, I was one of them. I was not able to give up a community that I was part of and knew the relevance of. They recognized my willingness to never abandon them as the most important characteristic of a facilitator. Pedro said, "We have to say thank you. It is not because we are in front of you, but many times we talked about your commitment to us, your willingness to help us. It helped us so much, helped us to be stronger". (Teachers' meeting 21).

When the group changed direction and they spent two months making meetings to talk about their hard reality, I knew that I had done my job. The teachers were acting independently

while I was giving them support. They were trying to organize and attend the workshops. Simone was improving her classes; Rodrigo and André were taking care of the pool; Vitor and Pedro continued with their classes, and even planned events. They were accomplishing the Saturday classes and all the school recognized this work. Pedro summarized it while talking about my trip to Ireland, "I think we got the group so united, even with you so far away" (Pedro). When I listened to this, I knew that while they might miss my presence, they were strong enough to keep adhering to their trajectory.

Rodrigo confirmed that when I left for Ireland and we started to attend the meetings by *Skype*, the group's functioning changed in some ways but, as he affirmed, "[...] it gave us the motivation to keep working. Because of you and your willingness to help our professional development" (Rodrigo). I could see that having someone with them who had never abandoned them truly pushed them forward. Beyond that, this group had the feature of being united in difficult moments. Then, losing me was only one more difficult moment for them. André, explained:

André: [...] In August, everything started to get worse. We had that cut in our classes and so on. I would not say that it was because you left, but everything was happening at the same time.

Luiza: And, do you believe that the group's functioning changed when I left?

André: I think we became more united. Because we started to lose many things. Then, the group became more united. (Final interview)

This group developed from a passive and silent group to an empowered and active community. Through this developing process, I am sure that I was not the best leader for them, but I was the best leader that I could be. I was as immersed in the learning process as they were. I had "Ups and Downs" as they had. Many times I felt pressured, lost and guilty because of my internship in the University of Limerick. I felt I was abandoning them to their difficult lives to live the best experience of my life. It sounded selfish and I did not want to do it to them. I wanted to share their struggles with them.

Alternatively, I had my own problems. Being far away from them, without knowing exactly what was happening and if the project would continue, were challenges that I experienced in the second semester. Moreover, I had my personal feelings. I had been a teacher in one FTS in Governador Valadares, I had friends who were working at other schools there. I studied the FTS project for my Master's degree. That was the city where I was born. Finally, those teachers became my friends. Seeing the possibility of the FTS project finishing at that school, and in the city as a whole, was also difficult for me.

At that moment, I had to reflect on and analyze my perceptions; I needed to do a balance between positive and negative outcomes of 2018. I had to understand what that group had achieved even while losing so much. After the final interviews, I understood that I had empowered myself while teachers lived the same process. I believed even more in collective work because I had lived it with them. I had learned to listen to their voice and helped them to act in their challenging situations. They had invested in their professional development and I had an influence on this. Even during the "worst year of their lives at FTS" (their speech), I understood I had contributed to making their lives a little less difficult, as well as, participating in that community had contributed to my life.

5 DISCUSSION

The purpose of this study was to explore the continuing professional development (CPD) of physical education teachers in one full-time Brazilian school. Specifically, it aimed at understanding how physical education teachers developed as professionals at that school and how a professional learning community (PLC) or a community of practice (CoP) could support their development. It is acknowledged that teachers' CPD should prioritize pedagogical improvement, with the focus on student's learning (e.g. CORDINGLEY et al., 2015; PARKER; PATTON, 2017; TIMPERLEY et al. 2007). However, after undertaking the data analysis, we understood that while teachers' learning regarding teaching knowledge was important, the fighting for better professional conditions was as, or even more, important as achieving the former aim. In this present research, teachers collectively learned both pedagogical knowledge and transformation of their micro context, while they were trying to survive their difficult reality.

This section discusses some of the investigation results. First, it considers the teachers' precarious situation and the undemocratic CPD that they experienced. Second, it presents the analysis about how the PLC was developed, what was produced by the PLC, and which features of the newly-developed CoP were observed through the investigation. Third, it argues about the focus of this CoP occurred in precarious contexts. Additionally, it addresses the challenges that myself, as a facilitator, faced while learning how to lead this PLC process.

5.1 PRECARIOUS SITUATION AND TEACHERS' CPD

According to Kirk (2019, p. 11), "[...] precarity is widely used in the social sciences and humanities to refer to life situations or indeed lifestyles that are precarious: uncertain, unstable, risky and hazardous". While in Global North countries precarity is associated with insecure employment, sense of alienation, and anomie, unfulfilled expectations and hopelessness; in countries where "this notion of stability and expectation of a good life no longer apply" (KIRK, 2019, p. 20) as in Brazil, precarity may have different associations. For example, Millar (2014) argued that in the Brazilian scenario there may be "multiple forms of insecurity that destabilize daily life: health vulnerabilities, makeshift housing, environmental hazards, debt, incarceration, and crime and violence" (MILLAR, 2014, p. 34-35).

In this present study, it was described the precarious context in which the teachers were immersed. We understood that these precarious conditions had multiple forms. It was present

in their personal and professional lives, the school situation, and Brazilian education as a whole. These unstable situations might have interfered in their development as professionals.

Equally, like most teachers in Brazil (GATTI, 2008; GATTI; BARRETO; ANDRÉ, 2011), the participants in our study received a low salary and divided themselves into diverse jobs to raise their earnings. However, even working two or three jobs, they were not assured a comfortable life. Most of the teachers did not have stability in their jobs and participated in the yearly hiring process. The small number of permanent job positions, combined with the hiring process adopted, might have caused the lack of teacher stability in that school. We noticed that in previous years the teachers demonstrated a desire to keep coming back to the school investigated; they seemed accustomed to the yearly possibility of having to look for another job every January.

Likewise, their instability was not only yearly, since they also did not have daily stability. They did not have a continuous timetable and a predictable routine; there were always problems to be solved "Here and Now". The incessant change of teachers from one school to another caused many changes in the general school timetable. Sometimes the teachers arrived at the school without knowing which class they would teach; they just were informed about their timetable when they arrived at school for the first time, or on one day before. Nunes and Oliveira (2017) reported that because of precarious characteristics of teachers' work conditions such as these, routinely teachers in Brazil are not able to get involved in collective work. As we discovered, the teachers only could invest in their professional development if it was offered during their timetable in the school. Therefore, the school needed to change its structure to give the opportunity for teachers' CPD, as described by previous studies (DUNCUMBE; ARMOUR, 2004; O'SULLIVAN, 2007).

We understood that full-time schools (FTS) demonstrated an opportunity for teachers to exclusively dedicate 40 hours to be in one school, which could offer them guaranteed time and space for CPD activities during teachers' timetables. Thus, although a FTS structure could have helped to relieve the teachers' precarious conditions in their work, it was not what happened. The teachers had their CPD time assured in their timetable, but it did not generate a meaningful CPD moment for those teachers. This present study reinforced that time and space only, is not enough to develop significant CPD. As pointed out by different authors (O'SULLIVAN; DEGLAU, 2006; DUNCOMBE; ARMOUR, 2004), it was necessary to organize the teachers' CPD, and moreover, to create opportunity for an ongoing CPD, contextualized by teachers' needs and reality. Additionally, it was necessary to arrange a meaningful space where the teachers could feel comfortable; for them this space was in their sports equipment room.

Certifying time and space as part of the teachers' essential needs became the first step toward organizing their CPD. Like recommended in the literature (TOOLE; LOUIS, 2002; STOLL et al., 2006), only after this first step addressed the teachers' CPD could results through PLC start to emerge.

Similarly, the school and the educational system needed to support teachers' CPD (DAY, 1999; DUNCOMBE; ARMOUR, 2004; HARGREAVES, 1994). Nevertheless, as in other studies (AHN, 2017; ROSSI; SIRNA, 2008), the school researched did not have a culture of collaboration, and the educational system did not give opportunities for democratic CPD. The teachers only associated meaningful and collaborative CPD to memories of the past. They reported joining in a specific physical education group to study and discuss their own practice, in a time and space guaranteed by the system. Their statements confirmed that CPD focused on specific physical education knowledge (ARMOUR; YELLING, 2004), school-based, and held during teachers' timetable (O'SULLIVAN; DEGLAU, 2006), are important to teachers' development.

Unfortunately, the participants reported experiencing a managerial and top-down CPD that served to de-professionalize the teachers (BOLAM; MCMAHON, 2004; DAY, 1999; SACHS, 2001, 2016). For example, the teachers were participating in an individual and decontextualized CPD that focused on administrative activities such as students' profile, assessment, and attendance. As Day and Sachs (2004) explained, CPD is political; it serves better the interests of some groups more than others. We understood that participating in a managerial, top-down CPD might serve a banking ideal of education (FREIRE, 2005a). The teachers were perceived as vessels to be filled with external knowledge; a place for people in charge of municipal education to deposit the knowledge and the educational concepts they desired.

The undemocratic CPD the teachers experienced might have as a consequence the teachers' isolation and marginalization. They claimed to feel different from other teachers, being perceived as teachers without pedagogical programs in that school. Parker, Patton and Tannehill (2012) also reported the status of physical education as a roadblock to teachers' development. They demonstrated that the school misunderstood the pedagogical purpose of physical education programs confusing this with sports training. In our study, besides this misunderstanding, the teachers also did not know what they were working in. Thus, these teachers were lost in their own purpose and feeling ignored by administrators of all levels, from their own school to the municipal education staff.

Fiorentini (2013), investigating the development of one teacher who participated in a PLC, reported that the school setting did not support professionals who wanted to improve their teaching through collective inquiry work. The author concluded that many times this kind of invested teacher leaves the public school to work in another institution like private schools or universities. Similarly, in our study, while remaining to work in public school environments, the teachers were also looking for other job opportunities. Echoing Fiorentini (2013), we might assume that the precarious context of public schools in Brazil forces teachers to look for another job, in search of better work conditions.

Additionally, the conception of education was also a problem for these teachers. When the teachers joined PLC, it became evident for them that the gate they always mentioned not only separated the sports facilities from the school. They understood that their conception of education was the opposite of what the whole school believed in and sought. As Wenger (1998b, p. 141) pointed out, communities can sometimes, "organize their competence against the knowledge proposed by institutional curriculum". Schaap et al. (2018) experienced the same contradiction - community conceptualization of education different from school conceptualization of education - which, according to the author and confirmed by our study, generated more tensions in the community.

In its turn, the school also lived within its own precarious conditions. It was tied to an immobile educational system that limited its decisions and, at the same time, demanded its results. The school administrative staff often attributed the impossibility to solve some problems to municipal administration laws. They also demonstrated that many times the highest municipal educational levels worried only about students' final outcomes, while the school or teachers' work conditions received less attention. Hargreaves (1994) had suggested an empowered school as important to teachers' development; unlikely, the school was not an empowered place where teachers felt respected and valued. Instead, the school and the teachers felt pressured to respond the external requirements regarding students' outcomes.

As a consequence, these teachers were not finding fertile soil to develop as PLC. As Wenger (1998b) warned, institutional arrangements contribute to members' non-participation in their learning communities. The strike by the municipal administration brought consequences to teachers' development, for example: the school calendar finished earlier, the teachers had to work on Saturdays, the school timetable changed and one teacher left the group, the contractual teachers did not earn their December salary, some staff personal were fired and the teachers still had to accomplish their work. The teachers were disappointed and worried about their

professional futures. In this situation, they could not focus on the pedagogical improvement of an institution when they did not even know what could happen there.

Nevertheless, Atencio, Jess and Dewar (2012) pointed out that the turbulent situation could also work as a compelling force to cultivating the PLCs. Turbulent situations stimulate people to be creative, and in community, they can debate and contribute to new understandings about that situation. In our study, we also felt that this turbulent situation pushed people to be together. We noticed that despite all the barriers that the research participants faced during the year, the precarious conditions might have made the teachers struggle with their learning regarding physical education. And in addition to this, this situation also might have given them the opportunity to learn more about how to organize and unite themselves in a PLC toward surviving in this situation.

5.2 NURTURING A PROFESSIONAL LEARNING COMMUNITY

According the literature, PLC refers to a group of people who reflect and critically analyze their practice, learning and improving this practice continually (BOLAM et al., 2005; TOOLE; LOUIS, 2002; VESCIO; ROSS; ADAMS, 2008). We understand that through this action research, the teachers' development was supported by a PLC fostered throughout a dynamic and ongoing learning process. Three elements might have contributed to nurturing this PLC: the teachers were (a) building their own practice; (b) supporting each other; and, (c) having the support and the leadership of a facilitator.

The teachers were learning together about their practice, while simultaneously they were building it. In previous years (since 2014), they formed a group which worked together, yet the teachers acted individually to achieve the youth sports training program. They did not perceive the work situation of the other teachers, the problems they faced and the success they had. They argued only looking at their individual problems. However, studies reported that participating in the process of reflection about teachers' reality might contribute to fostering PLC (AHN, 2017; GOODYEAR; CASEY, 2015; PARKER; PATTON; SINCLAIR, 2015). In our research, we noticed that the teachers were reflecting on their practice, but primarily, they were working to re-create this practice. They could have different understandings about physical education, but the PLC had one purpose, which became, improving physical education in that school. Reflection and collective action also might have contributed to initiating their PLC.

Goodyear and Casey (2015) complemented the literature arguing that participating in PLC could also support teachers in a pedagogic innovation process through learning a new

pedagogic model. In our study, there was not a model to be learned. However, the PLC equally supported the teachers' attempts to implement pedagogic innovations that emerged from the community's own reflection.

Additionally, as mentioned by Tannehill and MacPhail (2017), the PLC is a place where teachers could feel comfortable in risk-taking to learn with their colleagues. Our participants also declared that they felt supported by the community's members during their learning process. They pointed out that only the PLC members could understand what they were doing. Thus, similar to what Hunuk, Ince and Tannehill (2013) found in their research, in our investigation, it became clear that joined in community, the teachers were adventurous in learning about teaching physical education. Nevertheless, the support received from their PLC colleagues was not only related to learning about physical education issues. It was also about feeling supported by someone who would defend them, or in advance, act together to defend the PLC. They were together to face dangerous and violent fights against the neighborhood, to struggle with the administration's mandatory decisions, to comfort and listen to each other, and even to clean bathrooms. In the precarious conditions they faced, the teachers felt that the PLC was a safe place for risk-taking, not only in pedagogical situations but in survivals situations as well.

Finally, as studies have pointed out (GOODYEAR; CASEY, 2015; PARKER et al., 2010), having a facilitator that contributes to the PLC by creating opportunities for teachers' learning is an important condition to foster a PLC that supports teachers' development. Patton, Parker and Pratt (2013) have suggested that the facilitator should encourage teachers' learning by doing, trying, and sharing. During the research period, some of these orientations were followed, however, the investigation demonstrated that in the teachers' context, other facilitator actions might have been as important as those enacted. They needed someone who would never abandon them, who acted with solidarity, and struggled with them. Freire (2005a) highlighted the importance of having a leader that fights on the teachers' side. For him, it is an act of love regarding people and education; something that could contribute to revealing the situation of the oppressed and their subsequent liberation (FREIRE, 2005a).

Through the process of cultivating the PLC, three main products were generated: the (a) teachers' needs, (b) decisions, and (c) voice. First, the teachers' essential needs were addressed. Tannehill and MacPhail (2017), working with teachers from disadvantaged schools, reported the importance of addressing teachers' needs to improve their engagement in PLCs and consequent professional development. In our study, attending to teachers' needs was related to organizing the physical education teachers' CPD, as well as physical education as a whole, in

that school. Echoing this previous research (TANNEHILL; MACPHAIL, 2017), attending to teachers' needs made the teachers felt recognized and valued by these actions. The participants mentioned that from the beginning of the project, they raised their desire to invest in their CPD as a meaningful period in their routine.

Second, in this present research, to re-create their practice, the teachers had to act regarding teaching strategies, lesson structure, and workshops. Moreover, they had to understand how to negotiate the group's purpose. Similar to research reported in the literature, while participating in a PLC, the teachers were able to make decisions about physical education teaching and its position in the school (DEGLAU; O'SULLIVAN, 2006; TANNEHILL; MACPHAIL, 2017). Furthermore, they felt confident to invest in and to change their practice (PARKER et al., 2010), reflecting and acting on this practice continually. However, this PLC acted autonomously. The teachers decided how they would prefer to learn, what they needed to learn, and the pathway that they needed to travel to achieve this learning. We understand that this autonomous learning might have given teachers the opportunity to have their voice heard, which was the third result produced though the PLC development.

We noticed that the teachers' voice was heard by the school, not individually, but as the PLC's voice. For example, the PLC created its own language to report their demands and requirements. More than this, the teachers felt recognized when they had some of their demands addressed. Being heard might have supported the PLC to have the teachers keep acting from their precarious situation. This result also reinforced previous studies (ATENCIO; JESS; DEWAR, 2012; TANNEHILL; MACPHAIL, 2017) that have already reported the complex association between PLC and teachers' autonomy and independence to lead their own development and the PLC pathway.

After analyzing the development process and products of the PLC, it was understood that PLC might support physical education teachers' CPD. However, there remained a doubt: Did this PLC present the CoP features pointed out by the theoretical framework adopted in this dissertation? The literature review supported the understanding that there are different models of PLC (BOLAM et al., 2005; GORE et al., 2017; KENNEDY, 2014a, 2014b). In this present dissertation, we were supported by the Situated Learning theory through CoP as a theoretical framework (LAVE; WENGER, 1991; WENGER, 1998b). It suggests that CoP is a learning community (WENGER, 1998b), yet, at the same time, it implies some features that distinguish the CoP from other PLC models because of its theoretical foundations. Thus, the next section discusses some features of a CoP identified by this analysis.

5.2.1 The newly-developed community of practice

Wenger (1998b) explained that the community of practice is a different kind of community. It is built around and because of the participants' practice. The practice of a community has three dimensions: (a) mutual engagement, (b) joint enterprise, and (c) shared repertoire (WENGER, 1998b). We could notice some signs of these three dimensions in the newly-developed CoP we investigated. First, the teachers were mutually engaged in changing their reality. Whether or not the CPD was compulsory for them, they would be "hungry for a CPD" that brought meaning to their practice in that school. Being engaged as a community might have strengthened the teachers' action to change their practice. Together as a community, the teachers could learn and act for their individual and collaborative learning.

However, it is important to reaffirm that they lived their practice not only during CPD meetings. The teachers reported that as a community, they were closer to their colleagues, and talked about the CoP's problems and sharing their thoughts about how to solve them. More than that, they were worried about their colleagues' professional problems. As they reflected, being protected in their space, the sports equipment room, might have given them the intimacy, freedom, and strength to build a strong membership. They did not know about Wenger's theory, but they talked as members of a community. Interestingly, they always greeted themselves with a Brazilian samba's expression²⁸ "Alô Comunidade!" (Hi Community!).

Additionally, they learned how to behave inside this community. Some authors have pointed out that learning to trust and respect each other are important actions to cultivate a community (WHITCOMB; BORKO; LISTON, 2009). We understand that in this research, each person was learning during moments of hearing, speaking, planning and acting. The teachers reported these latter features as the most important learning to them. As Hargreaves and O'Connor, (2017) highlighted, it is essential to learn how to be a collective, a community. While doing this, our participants were creating and sharing the same language in favor of physical education and the CoP's development. They were mutually engaged in creating their community.

The second dimension is to have a joint enterprise. Wenger (1998b) argued that having a joint enterprise is associated with reaching a common domain of interest. Although each teacher had an individual purpose to be engaged in that CoP, they also understood what together

²⁸ The *favelas* (slums) in Brazil generally are referred to as communities. During carnival party, the samba singers use this expression before their presentation to refer to where their Samba School is based.

they were dedicated to and how they could negotiate to achieve their common domain. At the beginning of the year, the group was focused on physical education teaching issues. However, after the problems with municipal education, the community discovered another reason to be together. It was not only about physical education, but it was also about the teachers' lives. As Parker, Patton and Tannehill (2012) reported, a CoP could define its purpose internally. These teachers aimed at investing in strategies to survive the hard reality they faced. Whereas the teachers together felt stressed, marginalized, hopelessness, and afraid, the CoP gave support to the teachers' survival. They decided autonomously and internally the true reason to be in a CoP, their common enterprise.

Additionally, they knew that their community colleagues would be with them, struggling with and listening to them. They were not simply conversation spaces that did not challenge the teachers to try new ideas, a form of PLC considered to be a weak form of PLC participation (TOOLE; LOUIS, 2002; TIMPERLEY et al., 2007). Instead, they considered the CoP as a place to share their challenges in living their practice. Freire (2005a, 2005b) suggested that teachers should construct their knowledge through their inquiry. We noticed that while participating in this CoP, the teachers were building their praxis, which was generated continuously by the teachers' action to transform their micro context.

The third dimension is the shared repertoire. The study results demonstrated that the teachers built their repertoire, their practice. According to Wenger (1998b), the practice is the propriety of the community. In our study, the Tuesday meetings and everything that was developed from the meetings was the practice of the community. Likewise, as Wenger highlighted, sometimes the boundaries of a community can be reified by "explicit markers of membership" (WENGER, 1998b, p. 104). In this present research, the Tuesday meetings drew the boundary of the CoP. In other words, people who participated were part of the CoP. The shared repertoire was related to the community's "ways of doing", the products of community discussion and action, the understandings about the political-economic school situation, and the artifacts the community developed to improve the physical education in that school. As Lave and Wenger (1991, p. 95) affirmed, "An extended period of legitimate peripherality provides learners with opportunities to make the culture of practice theirs". The members of the community engaged in actively participating in the process of building this practice, reproducing and transforming it while they experienced it.

The CoP boundary can also be the connection of that CoP with other communities (WENGER, 1998b). It can connect the local and the global context where the CoP is located, which blurs the internal and external learning. What the teachers were learning inside the

community through the process of legitimate peripheral participation, was also expressed in the school context. They were questioning education concepts and methods, which moreover, was related to their daily lives. They engaged in different short-courses and demonstrated satisfaction about their learning while participating in the CoP. They also were trying to use their learning to find other job opportunities or engage in other physical education areas. As argued by authors (LAVE; WENGER, 1991; WENGER, 1998b) teachers' learning was social; they learned with each other and with the situation that surrounded them. In this sense, they were not an isolated CoP.

However, in another sense, it was an isolated CoP. Following the CPD review of literature, and the teachers' initial thoughts - that have declared that a content specific CPD would be better for their learning - the boundary of this community was built around the space and time reserved exclusively for physical education teachers. It did not promote spaces where this community could specifically interact with the other teachers in school. This CoP isolation might have reduced the CoP's potential power because being with the other teachers or other groups could support the physical education teachers even more. It could have diminished their feelings of isolation and marginalization that remained even after the CoP's development. Nevertheless, despite their isolation, the physical education CoP was developing at what seemed to be a slow pace. Wenger (1998b) reinforced that in the process of building their practice, it is necessary for members to negotiate the community's beliefs and "ways of doing". We noticed that in our community, the members were creating their ways of thinking and doing through the community's negotiation process. Some of the teachers had critical perceptions about physical education in that school, while others sometimes did not perceive what was behind administrative decisions. Through the CoP's development, and their many debates about these issues, they started to distinguish their positions as professionals in that school. They were questioning the power of the administration and imposing themselves into school decisions. Additionally, regarding physical education pedagogical decisions, the CoP had to confront teachers' individual beliefs about teaching strategies and lesson structure, until they achieved the new physical education purpose in their school. In this process of negotiation, the CoP understood what was meaningful and useful for the teachers in their reality.

Gradually, we were cultivating a newly-developed CoP. Even though the members have spent extensive time together (21 Tuesday meetings and nine months working together five days a week), we were discovering progressively what fostering a CoP could have meant for us. We understand that the term community does not necessarily imply "co-presence, a well-defined, identifiable group, or socially visible boundaries" (LAVE; WENGER, 1991, p. 98).

Yet, some features might help us to contrast the theoretical framework from what was accomplished during the research. In this sense, who were the newcomers and old-timers? In which stage of development was this CoP? Did it have strength enough to survive in a new school year?

Maybe the data collected during this research and the academic time required to develop this project would not be enough to respond to all of these questions. However, we can make some inferences from what occurred during the research time. First, it is important to understand that these teachers were a group of people who worked together for about four years. Wenger, McDermott and Snyder (2002) emphasized the CoP usually starts with an extant group of people who, by different reasons, become interesting in a common topic. For example, Pedro might have been the old-timer of the group. Everybody asked him how to proceed in specific situations, organize events, and assess students. Even the students' parents and the administration of the school referred to him as the master of that group. He knew how the physical education group should have run in that school. However, the school project had changed, as well as, the federal and municipal education policies. Teaching physical education in that school was not the same as in the previous years. Thus, "everyone can to some degree be considered a 'newcomer' to the future of a changing community" (LAVE; WENGER, 1991, p. 117). From this context, everybody was learning together about how to teach physical education in that context and how to behave in the newly-developed CoP.

Additionally, with my arrival, the teachers changed their leadership reference. I might have become the master of the group. Some reasons lead us to interpret why I assumed the leadership role in the community. First, their previous leadership brought several conflicts to the group. I could represent the "new" for them, the hope that their CPD could be a better moment for them than the past years. Second, I came from the university environment, and as they were accustomed to a managerial and top-down CPD, in their interpretation, I would represent the "correct to be done"²⁹. I would bring what authors called "knowledge-for-practice" (COCHRAN-SMITH; LYTLE, 1999; 2001) for them and they could just respond to it. Third, like the teachers, in the beginning I also believed that I should bring the knowledge produced in the university for the teachers. Freire (2005b) highlighted that the leader should act with teachers instead for them. Yet, it took a long time for me to learn this difference. Even though it is known that the role of the leader in a CoP is to organize the structure for participants'

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²⁹ The teachers repeated this expression during many situations in the project. It can represent that, in their interpretation, there still is an idea of the "right/correct" knowledge, which comes from the university environment instead of being produced by teachers in school.

learning (LAVE; WENGER, 1991), I was learning it slowly. Unfortunately, my initial misconception about CPD led me to engage in a directive style of leadership at the beginning of the project.

Alternatively, over time we learned together. As Lave and Wenger (1991) pointed out, the CoP is a place where people learn with their peers. In this case for example, Rodrigo, who might have been represented a newcomer in that group, was learning how the school and the municipal systems run. At the same time, he was teaching the old members to never give up their work, even in the worst moments. The community was being renewed with his willingness to change their reality. "Newcomers' legitimate peripherality provides them with more than an 'observational' lookout post: It crucially involves *participation* as a way of learning – of both observing and being absorbed in – the 'culture of practice'" (LAVE; WENGER, 1991, p. 95, authors' emphasis). The legitimate peripheral participant included Rodrigo in the CoP in a centripetal movement.

Parker et al. (2010) reinforced the importance of a catalyst to encourage development of the physical education CoP. Lave and Wenger (1991) affirmed that newcomers might have an essential role in the communities' development cycle, but in this case, we might predict that the newcomer arrival was only one among several catalysts to the CoP's nurturing. Three other incidents valued by the teachers might have also stimulated the CoP's stages of development. First, my presence encouraged the teachers to try something new toward changing their hard reality. Second, the *Plano de Vingança* (Revenge Plan), which might have moved the teachers in the direction of building their own practice and responding to the importance of physical education to students' lives. Third, the municipal administration's precarious condition made us understand the real purpose of that CoP. While we understood that my presence and the *Plano de Vingança* led the CoP to its potential phase, we believed that the precarious conditions moved the CoP to its active phase. Comparing the stages of development described by Wenger (1998a) with physical education CoPs identified by O'Sullivan (2007), the table 13 is presented. It outlines each stage of the investigated CoP's development, its description and the results discovered in our research.

Table 13 - Actions of physical education CoP investigated in each stage of its development.

STAGES	DESCRIPTION		
	GENERAL CoP (WENGER, 1998a)	PHYSICAL EDUCATION CoP (O'SULLIVAN, 2007)	STUDY CoP
Potential	People face similar situations without the benefit of a shared practice.	Teachers find each other and discover their commonalities.	Teachers: did not feel recognized in the school; did not know the purpose of the school and of their work in that context; faced a managerial and top-down CPD; wanted to change their reality and improve physical education; repudiated the municipal education requests; presented passion in teaching physical education and care about their students' learning and lives.
Coalescing	Members come together and recognize their potential.	Exploring connectedness, defining joint enterprise and negotiating how they will proceed with action.	Teachers: recognized their common concerns; were hungry for a meaningful CPD; understood the problems of each other (problems in the pools and with sport equipment); understood they could learn from each other; preferred to take collective decisions (they responded to administrative staff after debating in Tuesday meetings); assumed small tasks (organizing their meetings, space to teach, and sports equipment).
Active	Members engage in developing practice.	Engaging activities, creating resources or other artifacts, developing commitment to tasks.	Teachers: engaged in the workshops; requested meetings with the Principal and Secretary of municipal education; wrote a letter requesting their guidelines to participate in municipal sport events; formed the final CoP (Pedro, Simone, Rodrigo, André, Vitor and the facilitator); organized workshops by themselves; built lesson structure and teaching strategies; found their true domain (being together to survive the consequences of Mayor's strike); realized meetings to support each other and to develop strategies for the CoP's survival (cleaning the pool; attending workshops; improving physical education lessons; questioning the administrative staff requests; organizing the Saturday classes).
Dispersed	Members no longer engage very intensely, but the community is still alive as a force and a center of knowledge.	Staying in touch, calling for advice, communicating.	Teachers: kept in touch in the CoP's <i>WhatsApp</i> group (talking about students' lives, indicating job vacancies to each other, sharing pictures and video records about their new teaching strategies in their new jobs, asking questions about physical education short-courses, debating the school and municipal education future).
Memorable	The community is no longer central, but people still remember it as a significant part of their identities.	No longer had central but remembered as a significant part of their identities.	Not applied

Source: Author's source.

Wenger, McDermott and Snyder (2002) highlighted that each CoP can be different, and these stages are only indicative of this CoP's development. Thus, we can only point out some observations about these stages from our research. At the potential stage, the teachers demonstrated their connections by the precarious reality that they faced and by the past experiences of the physical education teachers in that school. As O'Sullivan (2007) identified, in this stage, physical education teachers recognize their commonalities. At the first informal meeting, they began to understand that not being recognized by the school was a common feeling among them. Similarly, and emphasized as typical in this stage (O'SULLIVAN, 2007; WENGER, 1998a; WENGER, MCDERMOTT; SNYDER, 2002), they started to understand that the CoP could bring together something they valued - physical education improvement - and something that could be useful in their reality - being recognized in that school.

While the Tuesday meetings were progressing, the teachers started to present some features of the coalescing stage. The common concerns and problems they faced daily coalesced them. Not being recognized in that school was the most significant aspect of the common ground among them. They spent a lot of energy discussing this issue. As a consequence, the group was identifying the initial domain - being recognized in the school through physical education improvement, which could join them together in a CoP and the potential impact of that CoP in their lives - supporting them to face their daily challenges.

Although the common concerns might have been important to coalesce this group in a CoP, we understand that the trust and the members' awareness of the importance of CoP only came with the crisis they faced due to the administration's actions to reduce expenditures. "It often takes time for a community to develop to the point that people genuinely trust each other, share knowledge that is truly useful, and believe the community provides enough value that it has a good chance to survive" (WENGER, MCDERMOTT; SNYDER, 2002, p. 82). The process of learning to negotiate in the CoP and the individual actions demonstrated while facing difficult situations together, helped the CoP's members to build trust and support among themselves.

According to Wenger, McDermott and Snyder (2002), the initial domain is not something in its final shape. The purpose of the first domain, which would work as a case for action, is to engage people on a common ground. In our research, we believe that the first domain was not completely abandoned during the year; it still kept contributing to maintaining the teachers' coalescence. Yet, the participants declared during the final interviews that they valued the CoP for the support that it gave to them to face and to survive their challenges, and which became during the active stage, the real CoP domain.

It is known that the active stage can be divided into mature, stewardship and transformation sub-stage (WENGER, MCDERMOTT; SNYDER, 2002). During the mature stage, the community begins to act more collectively, then the members gain more influence in the organization. We interpret that the mature stage occurred when the CoP's voice began to be heard by the school organization. In some sense, the teachers' work in the organizations and coordination of the Saturday classes was recognized by the administrative staff.

However, the education system might have not contributed to the development of the mature or stewardship stage of the CoP. The Tuesday meetings became infrequent or declined, the teachers were disappointed with their situation and afraid about their future. Although the CoP participants were able to identify and act to solve its roadblocks, likewise reported by Parker, Patton and Tannehill (2012), many times there was a point or limit reached, where the CoP was no longer capable of solving its own problems. The teachers tried to act, managing their workshops, doing a raffle to collect money; investing in their lessons, and organizing sports events and Saturday classes. Yet, the political-economic school situation was heavier than the CoP could support. Consequently, it might have led the CoP to its demise before its time.

Wenger, McDermott and Snyder (2002) warned that the CoP's premature decline is possible in places where the community is not recognized or valued by its members. For example, factors such as the lack of the organization's recognition can influence the decrease of members' participation (WENGER, 1998b). In the case of this CoP, two factors might have contributed to the premature demise of the community. First, the crisis in municipal education intensified the teachers' precarious condition. Second, the lack of teachers' stability in one school, which forced the teachers to participate in the hiring process each year. Due to this, we may predict that the education system might have pushed the CoP to the marginality, preventing the CoP's participation and its influence in the institution.

Wenger (1998b, p. 166) highlighted that marginality is "a form of non-participation that prevents full participation". It may happen in situations where the institutional arrangement expels the CoP, dispersing the participants and creating barriers to their re-engagement. Similarly, in our research, the teachers were spread around other schools in the city, and the end of the school year might have represented the modification of the community to what was identified as the dispersed stage (WENGER, 1998a).

Although the teachers kept communicating by the CoP's *WhatsApp* group until we collected the data, it is not possible to predict if the teachers will recognize it as worthwhile to be together again, or if they will proceed in the direction of a memorable stage. Maybe, this

CoP was like a group of soldiers that join themselves together to face small battles during a war, and after this, confront different challenges with another group. Alternatively, as Wenger (1998b) reported, maybe their marginality position, being a mix of participation and non-participation - a constant struggle with the educational system - can contribute to their coalescing again. Likewise pointed by the authors (WENGER, MCDERMOTT; SNYDER, 2002), whether their physical distance will represent the demise of the community, or if they will renew and reinvent their form of participation, only the members can judge.

5.3 PHYSICAL EDUCATION TEACHERS' COMMUNITY OF PRACTICE IN PRECARIOUS SITUATIONS

There is a major conception that a collaborative CPD through mainly PLC, is effective if it addresses teachers' learning and the improvement of students' outcomes (CORDINGLEY et al., 2015; PARKER; PATTON, 2017; TIMPERLEY et al. 2007). Conscious of the Armour et al. (2017) observations that suggested CPD is ongoing and dynamic and based on teachers' practice, this present research can contribute by adding that a CoP model that followed these latter features might have been an effective teachers' CPD strategy. However, the meaning of effective CPD might be different depending on the situation experienced.

In a reinforcement of Freire's (2005b) claim that in precarious situations teachers have to work on two things in parallel tracks: their own learning for teaching and their fighting for better professional conditions; in our research, we could notice that these two purposes influenced and were dependent on each other. Although the teachers wanted to learn, they could not focus on their learning nor students' outcomes until taking care of some situations in that school. Because of this, the focus of the CoP might have been teachers' survival and simultaneously their learning.

Additionally, the teachers evolved while learning, but the meaning of their learning was also different in that context. As emphasized by different authors (COCHRAN-SMITH, 2009; LAVE; WENGER, 1991) the learning should involve the whole aspect of people lives. In this study, the teachers learned about their own practice. This practice referred to a teaching practice and an activist (SACHS, 2001, 2016; COCHRAN-SMITH, 2009) or progressive (FREIRE, 2005b) practice. It collectively addressed how to improve their pedagogical knowledge about physical education; how to behave in and act as a CoP; and how to struggle for better professional conditions.

Their learning about their teaching practice blurred the division between thinking and acting, as pointed out by Lave and Wenger (1991). The teachers were experiencing the process while understanding and reflecting on it. Some teachers reported difficulty in understanding the community pedagogical discussion, yet, not understanding did not prevent them from trying new strategies. Some of them acted to change their practice, always experimenting with different teaching strategies, sharing with their colleagues their results or doubts about it, listening to suggestions and trying again.

During their activist practice, the teachers demonstrated their worries about the students, which aligns with Cochran-Smith's (2009) idea that activist teachers who act as agents of social change, can influence students' learning and lives. This learning does not always include academic skills, rather, it is a wide range of social, emotional, civic and life skills (COCHRAN-SMITH, 2009). Sometimes the teachers used the space of Saturdays to talk with students regarding their conscientização (awareness) about the social world. The teachers reported that they had a conversation with students about the school as a public space that needs care. The students also experienced moments when the teachers acted to defend them, for example in the "Hoe Case". As suggested by Freire (1998, 2005a, 2005b), in some ways they were progressive teachers that acted with solidarity and love, and intended to educate their students as conscious, critical learners. Therefore, a CoP in precarious contexts should tackle both teachers' precarious conditions and their learning through a democratic CPD. As authors suggested, a democratic CPD could create opportunities for teachers' participation and action as long-life learners (SACHS, 2001, 2016) and the pursuit of social change and justice (COCHRAN-SMITH, 2009).

The participants' learning drove this CoP. It was the learning curriculum "viewed from the perspective of learners" (LAVE; WENGER, 1991, p. 97, authors' emphasis). Even though I tried to push their learning in one direction, they decided what they needed to learn. In that precarious condition, they needed to learn how to face that situation and keep learning about pedagogical issues. In this sense, their knowledge to accomplish both was generated through their praxis. They contrasted what they produced with the external (Municipal Education Office orientation) and academic knowledge (theories learned in university); they reflected in community about their situation and thinking in action. It was what Cochran-Smith and Lytle, (1999, 2001) referred to as teachers' "knowledge-of-practice"; a knowledge generated from the teachers' reality and needs.

Three expressions might have represented the CoP actions in their precarious context: resistance, resilience, and struggle. Echoing some studies, our research demonstrated that being joined in a CoP might have given strength to teachers to face their difficult situation

(TANNEHILL; MACPHAIL, 2017) or a decontextualized (ARMOUR; YELLING, 2007) and managerial CPD (SACHS, 2001, 2016) that they confronted daily. Thus, as Lave and Wenger (1991) emphasized, the CoP may involve power issues since it represents the resistance of the members regarding their "coercive workplace" (LAVE; WENGER, 1991, p. 64). In our investigation, besides facing an undemocratic CPD, the teachers complained about the municipal, administrative decisions that prevented their action. Yet, they were using the CoP's voice to fight against coercive actions. For example, they heard that the school would lose the right to use the sports facilities, then they composed a letter requesting a meeting with the Secretary of Education to express their rights regarding understanding the situation.

In this sense, the CoP also meant resilience. Wenger (1998b, p. 233) emphasized that in some situations, a CoP can "reconstitute itself in the face of new events". As the teachers said, in the worst moments their reaction was to unite even more to defend themselves and to defend their students from the social vulnerability that they were immersed in. Armour and Yelling (2007) reported that when teachers face structural and contextual barriers to their learning in their institutions, the PLC can be valuable to overcome these barriers and achieve a meaningful CPD. In our study, the teachers, even though disappointed and working in deplorable conditions, kept fighting to learn and improve their practice.

Authors emphasized that treating workers as people who will be instructed, "rather than as peripheral participants in a community" can inhibit their learning (LAVE; WENGER, 1991, p. 76). These teachers were struggling to tackle school structure and culture that inhibited teachers' professional development. However, as has been suggested, sometimes gaining legitimacy can be a problem for the participants of the community (LAVE; WENGER, 1991). In the case of our study, we noticed that the teachers participated in a CPD that aimed at instructing teachers rather promoting their learning. Nonetheless, when the physical education community in the school started to be nurtured, we might have noticed the beginning of a shift from teachers who accepted the managerial CPD to those who were deciding to fight for a democratic CPD. When asked if they were comfortable in being the resistance voice inside the school, they answered that it was, the "correct to be done" Echoing Freire (2005b), the teachers in this present research were understanding that fighting, while still teaching, was their unique choice to change their micro context while improving public education.

³⁰ The "right/correct" used in this situation was not related to the external way of proceeding. The teachers were creating their way to solve the problems of their practice.

The teachers' resistance, resilience and struggling about their professional development and students' lives leads us to discuss the teachers' empowerment that might have emerged during the research period. It is known that in the physical education research field, teachers' empowerment is a frequent issue investigated in CoP studies (ATENCIO; JESS; DEWAR, 2012; PARKER et al. 2010; PARKER; PATTON; TANNEHILL, 2012; TANNEHILL; MACPHAIL, 2017). In these investigations, teachers' empowerment is often associated with teachers driving their own growth and development.

Although CoPs may address issues of power, because of the continuous participants' negotiation and tensions regarding their positionality in the community (LAVE; WENGER, 1991; WENGER, 1998b), in our study, we do not intend to make a direct correlation between CoP development and teachers' empowerment. Indeed, we believe that many other factors, which we did not investigate, might have interfered in the teachers' actions, for example, the teachers' personal motivations or the political period of the country.

Alternatively, we can discuss some issues that begin to elucidate our empowerment interpretation. For example, authors pointed out that in a group of teachers, to be successful means gaining new ideas, while in a CoP, success is focused on accomplishing objectives and being empowered (PARKER; PATTON, TANNEHILL, 2012). It was an interesting point in our research. It is known that there are tensions in participating in a PLC, and it can be personal and context-dependent (SCHAAP et al., 2018). However, while in developed countries PLC was studied regarding the pressure to improve teachers themselves and pupils' learning (SCHAAP et al., 2018), in this present context, CoP was related to the influence of the deplorable work conditions in teachers' perception of improvement. When the meetings finished, the teachers identified their low self-esteem and feelings of doing nothing. They were disappointed with the school conditions and afraid about their future destinations. They could not understand what they had accomplished there. It is argued that teachers' perceptions of learning are evidence-bound, commonly associated with the notion of students' learning (GOODYEAR; CASEY, 2015). Yet, as suggested by Freire (2005a), after talking with - instead of talking to - the teachers in the two final meetings, they started to notice some results of the CoP, but their perception of learning was still a weak point in that CoP. It might suggest that in precarious situations, where the CoP existence is threatened all the time, teachers struggle to notice their own learning and CoP success, even when it is not associated directly with students' learning. Thus, not noticing their learning might have decreased their feeling of empowerment.

Other points made us reflect on empowerment issues. First, the community's autonomous decisions and voice that occurred simultaneously with the CoP's development may

be an indicator that the community's empowerment might have emerged. Second, we noticed that this promising empowerment was not related to teachers individually acting and driving their growth to achieve students' learning. It was not an individual enterprise, the teachers alone did not have strength, and they did not act by themselves. Freire (2005b) indicated that the school should be a place for teachers' empowerment. In its turn, the empowerment entails the fight for teachers' interests and rights. The signs of empowerment noted in this research indicated collective and constant struggling. The teachers' learning that was occurring through the CoP during their CPD was informed by a political clarity to achieve better professional conditions and the teachers' interests and rights to keep this learning.

It is important to highlight that as Cochran-Smith (2009, p. 457) underlined, "There is no assumption here that teachers alone, whether through individual or group efforts, can substantially fix the schools or alter the life chances of students", however, they can join to keep fighting in a movement for change (COCHRAN-SMITH, 2009). Additionally, as Lave and Wenger (1991) emphasized in the meat cutters ethnography, the organization of a social group can inhibit the members' learning rather instructing them. Thus, a CoP with a managerial view of CPD could have been developed in that context. We could have maintained the top-down facilitation, avoiding listening to teachers' voice, and just transmitting external knowledge. At the beginning of the year, we noticed that teachers were accustomed to this. Freire (2005b) debated that as a result of banking style of education, the teachers can be passive regarding their role in their CPD. We understand that these teachers were passive individuals, they just waited to be spoon-fed by the administration staff.

Therefore, controversially, as some authors pointed out (TOOLE; LOUIS, 2002; VESCIO; ROSS; ADAMS, 2008), we are not certain that empowering values are inherent in learning communities. Instead, it has to be addressed. In our study, the CoP assumed a democratic view as a CPD pathway through a dialogical process whereby the teachers were no longer passive. They might have started to act as activist professionals, as identified by Sachs (2001, 2016) and Cochran-Smith (2009), or progressive teachers, as claimed by Freire (2005b); people who were reflecting and acting to change their micro context.

To summarize, we understood that some factors led us to analyze teachers' development as a dialogical process that might have encouraged a democratic CPD through a CoP. First, the turbulent and precarious situation required action from the teachers. Second, the teachers were building their own practice through their praxis. Third, they were a community that gave support to its members and acted toward changing their reality. Fourth, they had a leader who

fought for the teachers' voice as their right to be heard. While the first three points have already been discussed in the present text, the role of facilitator deserves more attention.

5.3.1 The facilitator's role in a democratic CPD

The literature about facilitators presents some suggestions of how the CPD actions can be facilitated and led in learning communities (ARMOUR; YELLING, 2007; PARKER et al., 2010; PARKER; PATTON; PRATT, 2013). However, more than follow these orientations, we believe that while facing a precarious context there was the necessity to be a facilitator who seeks a democratic CPD. Instead of being conscious about my role in this action research, I was learning how to be a democratic leader. Three main points represented my actions toward becoming this leader. (a) The horizontal relationship that the CoP created; (b) the respect of the teachers' context; and (c) the struggling with teachers in their harsh reality. Although these three points might have contributed to creating a democratic CPD, at the same time, it presented constant challenges to me and to my *critical friend*.

To build a horizontal relationship with the teachers I had to deconstruct teachers' perceptions about me. Then I engaged in their routine, completing their obligations with them, cleaning spaces and sports equipment, having lunch together and sharing the challenges of their daily lives. Likewise, as Freire (2005b) pointed out, I understand that the teachers and I were building empathy and mutual commitment, we were equal actors fighting for mutual liberation through communication.

Freire (2005a) highlighted that the role of oppressed people is to liberate the oppressor. It seems to be that there might be reciprocal liberation in the CoP's development. While I was helping them liberate themselves, I understood that the teachers were liberating me from an oppressor position. Before this project, I was the person who would go to the school to deliver the knowledge that the university produces. Initially, my intention was to go there and explain to them the best way to teach physical education. Through the process of living with them, getting in contact with the facilitator's literature, Freire's ideas about democratic education and, with the support of Missy as my *critical friend*, I became the person who understood the difference between build *with* them instead *for* them. The teachers and the process of CoP development taught me how to join our voices in cooperation to change that reality. Similar to what Freire (2005a) argued, the teachers and I fought side by side in a horizontal relationship, in an equal relation.

Additionally, I also should respect the teachers' context. As Freire (2005b) pointed out, the first step to organize a CPD program is to understand teachers' reality and base the program on this reality. Yet, since I came from the university environment, primarily I tended to force university pacing on the school, controlling the teachers' learning pacing. It took a long time to notice the influence of the teachers' precarious situation in their learning and to comprehend my role as member of that CoP. As the authors emphasized (LAVE; WENGER, 1991), in a CoP the learning curriculum is driven from the perspective of the learners. Becoming the leader of that CoP required me to know how to structure the CoP, to create spaces for the members' learning, instead of conducting their learning.

The last point that might have contributed to creating a democratic CPD was to be a leader who was struggling with the teachers in their reality. Equally with the teachers, I was an insider hoping for change. Even without noticing, I was acting with solidarity with them and their conditions. I was fighting on their side. The teachers recognized that I was learning to listen to them and to share their challenges. When we received the news about the possible FTS ending, I had the same feeling as the teachers. A feeling of disappointment, as if we had done nothing. My *critical friend*, who has already taught me to be a skilled facilitator, had to learn how to support me in a socially vulnerable condition that even I knew. I with my critical friend learned with humility, dealing with a context that was unexpected for us. Freire (1998) said that people in charge of education are always being formed and re-formed while living in the education process. I understand that fighting with the teachers under Missy's support made me learn about the facilitation process while living it.

When addressing the complexities of being a democratic facilitator in a socially vulnerable situation in Brazil, it was obvious that underlying needs must be addressed before focusing on more secondary concerns. These teachers faced difficult conditions and harsh realities in their professional lives. As a result, the CPD primarily built a democratic space based on dialogue, solidarity and respect, where the teachers' community could name, critique and negotiate the barriers they faced. As Freire (2005b) affirmed, it is urgent that teachers act to defend their rights for better conditions for pedagogical work. It seems that such action is a pre-condition to focusing on students' learning.

6 CONCLUSION

There is always something to be learned when a team is struggling to win a game. Analogous to players who are learning how to keep playing when losing a match against a stronger team, participants of this research learned how to keep fighting to improve as physical education professionals in a precarious context. At the end of this project, like at the end of the match, we understood that the result is not only a matter of the teachers' development, but also more importantly it was the situated and collective process of learning that taught us how to develop in that scenario.

The results of this research demonstrated that the teachers experienced a managerial and top-down CPD during their routine as professionals in their context. However, this study emphasized that a professional learning community (PLC) can support the teachers' continuing professional development (CPD). This support was originated (a) by the process of the teachers building their own practice, and (b) being supported by their peers and (c) their facilitator, while they joined in a newly-developed CoP. These three elements, conducted through a dialogical process, might have created opportunities for a democratic CPD that seeks teachers' situated learning and micro-social change simultaneously.

These results also point to future directions for other investigations. I keep in contact with the teachers, our *WhatsApp* group is still active. The teachers use it frequently to share new teaching strategies, talk about political problems in the city, and indicate job positions or short-courses to each other. They also began to talk about the CoP as the best moment in their professional careers, which could indicate features of a memorable stage. We understand that possibilities are opened up, such as investigating this CoP's stages of development; the teachers' identity; and the meaning of this experience for their professional trajectory. We also believe that other contexts in Brazil should be investigated. Brazil is a large country that symbolizes different realities depending on the regions or the political systems adopted by the cities or schools.

We also understand that the discussion about full-time schools (FTS) must be investigated deeply. While this research supported the notion that time is not enough for a meaningful CPD, we believe that without this time assured in the teachers' timetable, a CPD that defends teachers professional rights may become difficult. Moreover, the debate about the school as a place of social protection in precarious context (SANTOS, 2019), and the discussion about integral education in full-time schools (CAVALIERE, 2002; COELHO, 2009) should be urgently addressed in the CPD research field due to their inter-relationship.

Besides the positive findings of this research, we demonstrated that at the end of the year, the unstable context influenced teachers' development. The school and municipal administration conditions dissolved the physical education CoP. Facing this situation, the borderlines CoPs (CRECCI; FIORENTINI, 2018; FIORENTINE, 2013), or boundary spanner CoPs, as named by Goodyear, Casey and Kirk (2014), appear as an alternative. These borderlines CoPs might have their boundaries blurred in different aspects. They could join people with different backgrounds, such as teachers from school, pre-service teachers, graduate students, administration staff and lecturers from university, in an assured and protected place; where people could share their challenges and ideas without the pressure to respond to external impositions. We understand that this borderlines CoP advocacy is twofold. Whether on the one hand the teachers would have seek their CPD autonomously and without the CPD time assured in their school timetables, on the other hand, borderlines communities can be an opportunity to unite themselves and fight to better public schools and work conditions. Although this idea is not yet clear and needs more investigation, it could initially create spaces to discuss teachers' precarious conditions. In conclusion, the university-school partnership, where the borderlines communities can be nurtured, seems to be a possible alternative for teachers' CPD change.

We began this research with an investigation based on an ethnographic method. By doing this, we could understand the teachers' context, concerns, barriers, and challenges. In addition, we could understand the history of that group; the experiences that they had lived together since the beginning of the school. Then, we have assumed that, in any attempt to foster CoP, mainly in this or any situation, it is necessary to begin with a deep comprehension about who the teachers are and their professional conditions. In this way, the facilitator could create trust, intimacy, and respect with the teachers.

In a second moment of the research, the attempts to realize action research occurred in cycles of plan-act-observe-reflect. These cycles were based on the problems and challenges that the teachers experienced, and we had discovered in the ethnographic phase. However, we understand that the action research cycles did not systematically address teaching practice in this research, rather the teachers' actions related to the improvement of their work conditions and lives. In this process, the cycles of planning-acting-observing-reflecting were concentrated with the *critical friend* helping the facilitator to support the teachers in their action. Nevertheless, future studies could emphasize more extended periods of action research when the teachers could be involved in systematic change in their teaching practice, when they could perform a deep researcher role of their practices, acting substantially as co-participants of the action research.

In spite of, we noticed that the collaboration between insiders and outsiders became true when the borderline between them was blurred due to the outsider participation in the community. I became a community insider, learning and developing with the teachers. Thus, the issue of insiders/outsiders deserves to be better investigated in future studies about CoP. It is not clear in the extent to which these roles are proximal or distant from each other in a CoP.

Analyzing the research trajectory, we recognize other limitations of this investigation. First, in some sense, the teachers were an isolated community inside the school. However, we will never be certain whether being an isolated community was a necessary initial action or a limitation of the study. Being an isolated community might have meant the first step in teachers' strengthening and learning. Though, it could have reinforced the separation that already existed in that school, on one side the physical education group and on the other the classroom teachers - the sports facilities and the school building, the sport and the subject matter, the *to do* and the *to think*... For a while, unfortunately, we understood that the common sense of a dichotomized human being was maintained, if not, strengthened, in the research context.

The other limitation of the research was related to my role as a facilitator. The teachers already knew me. I had studied at the same university as them, played handball with some of them, developed a short-course with them in that school in 2016. This relationship might have helped my interaction with the teachers or pressured them in some sense. Moreover, the interviews were conducted by me, and many times the teachers referred to our past experiences together. This could also have influenced their sense of loss when I physically left the CoP to go to Ireland. Although we can understand that this distance might have brought to the teachers more autonomy, both, the teachers and I felt this distance as something that limited our relationship and the development of the project. What reinforced that deep studies about insider/outsider relations should be addressed in the context of CoP.

Finally, the lack of financial support to carry out the research was an important limitation of the study. For example, the teachers were struggling in a tenuous situation regarding their professional lives, the school declared funding problems, and the Municipal Education Office claimed the absence of money from the state government. The country was living a general crisis as well. Strikes were happening in many parts of the country, the presidency was changing, cuts to education funds were done; everything was contributing to and emphasizing the precarious situation of the country. Moreover, without grants to carry out this research, I funded all the necessary duties, from transportation to go to the school to collect the data until the proofreading of the dissertation. Everybody that was involved in this project faced the same problems related to the lack of investment in education in our country.

Nevertheless, we did not give up fighting. There still was motivation to dedicate to education in Brazil. While I was analyzing the data, I kept coming back to the transcription of the meetings. Thus, I found a note to myself that reminded me of the true sense of this research. This note was below a CoP member's picture and it said, "This is not about a Ph.D., a degree, or a sheet. This is about persons. Persons who transform themselves and the world that surrounds them, through education. This is about persons who care about the death of children, the hunger of children, the children who lost their families. This is about persons who struggle to survive, but who want to survive with the other, with the oppressed". In the Portuguese language it says:

Isto tem pouca coisa a ver com doutorado, com título, com papel. Isto tem a ver com gente. Gente que se transforma e transforma o mundo a sua volta através da educação. Isto tem a ver com gente que se importa com crianças que morrem, que passam fome, que perdem famílias. Isto tem a ver com gente que luta para sobreviver, mas que quer sobreviver com o outro, com o oprimido.

I think that this quote summarizes what this research was about. Whether, as Freire (2005b) affirmed, the teachers in Brazil have much more to teach than content knowledge, then their CPD should not be only about content knowledge. Teachers' CPD also should always be about how to struggle with the precarious reality that the teachers, the students, and the public schools lived in. When teachers have the option of facing this reality to transform it (FREIRE, 2005b), then their CPD also has to address learning to do so.

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APPENDIX

A - Initial Individual Teachers' interview

Introduction

<u>I know I have been here for the first few weeks of school, but can you tell me a bit more about vourself?</u>

How long have you been working as a physical education teacher?

Where did you receive your physical education degree?

After you completed your undergraduate course, how have you continued to study?

Can you give me some examples?

What kind of schools (public, private...) have you worked?

What kind of content have you taught??

<u>School</u>

When and how did you come to work here? Tell me about this process.

Why did you choose this school?

What do you teach here?

Tell me about your routine in this school.

What problems do you face here every day? What solutions do you think to these problems? What do you want for the school and for students?

<u>Meetings</u>

Tell me about professional development at the school since you started to work in municipals schools in Governador Valadares.

Is the CPD in this school similar or different to other schools you have been in? How? How not? Tell me about the better time you had with CPD in schools you already worked.

In the last year, how was the weekly meeting in school?

What was the purpose?

Who planned it?

Who was the leader of it?

What was the agenda?

Future meetings

What do you need in terms of CPD?

How do you learn best?

What do you want achieve with the meeting?

What could be the challenges and enablers in these meetings?

How could these meetings be structured to help you in your needs?

And to help the school?

What kind of help can I give to you?

What kind of help do you need to do this?

B - Final Individual Teachers' interview

Group interaction and engagement

- What did mean for you being with this group?
- Did your perception change about your colleagues?
- In what ways is this group differ from others that you are part?
- Give me examples of moments that you felt engaged with the group?
- Can you believe that there were people less engaged than you?
- At what points did you feel your involvement mattered to you group?
- What roles and responsibilities did you experience in the group?
- What did you produce together this year?
- What routines and ways of doing things are common practices in the group?
- What happened when I went away?
- How did the function of the group change when I left?

Learning

- What did you learn during your participation in this group?
- In five years, what will you take away of this group?

Negotiability

- How did you negotiate with the group?
- What did you have to negotiate?
- What instances resulted in you having to negotiate possible decisions with your peers?
- Did people have differing beliefs on what to do in the group?