



Dilemmas, Challenges and Strategies of Physical Education Teachers-Researchers to Combat Covid-19 (SARS-CoV-2) in Brazil

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This paper addresses the challenges presented by the coronavirus pandemic in Brazil, questioning the strategies and the dilemmas shown by teacher-researchers in Physical Education in tackling Covid-19 (SARS-CoV2). The Covid-19 pandemic has had significant social impacts, such as the sudden interruption of basic education activities in Brazil, due to the need for social isolation. Brazilian basic education comprehends schooling from early childhood education (similarly to kindergarten and preschool in other countries) and elementary school (1st–9th grades) to high school (10th–12th grades). Measures taken as precautions have demanded an overhaul of the teaching systems, pedagogical structures, and strategies for interaction, almost all of these being involved in a teaching process that is mediated by digital technologies. Therefore, one asks just how Physical Education teachers and their respective teaching networks get organized when faced with social isolation, with regard to work strategies for ways to relate to knowledge. The main objective of this article is analysing the pedagogical experiences of teacher-researchers–teachers from state-owned schools and university researchers–in four Brazilian states, namely Ceará, Pará, Rio Grande do Norte and São Paulo, in order to discuss the implications upon Physical Education in schools, as a way to tackle the pandemic through social isolation. This is an exploratory and descriptive study that makes use of narratives. It also includes a project for intervention. The design of this analysis is inspired by the methodological structures of pedagogical cases, which includes narrative accounts, the shared analysis of these accounts by different teachers and researchers, and the synthesis of the analyses in the form of a balance of experiences. There are three dimensions that are integrated into the relationship to knowledge–identity, social and epistemic dimensions–, that are essential for the Physical Education teachers who narrate the situations they have experienced. Here we consider that the educational process must not be reduced to a mere transmission of information through technological resources and digital platforms. One must also accept and acknowledge that complex teaching situations are inserted in the relationships to knowledge. As such, they must not be regarded as generic and fragmented. The purpose of the intervention project is to collaborate with the practices of Physical Education teachers seeking to prevent, identify,

and report on cases of Covid-19 among students and their family members. Social isolation has been the most efficient protective measure to reduce the impact of the spread of the virus, but it comes up against problems to be addressed in Brazil, such as subnotification of cases. In this regard, the project makes a significant contribution toward the fight against the SARS-CoV-2 pandemic. In a certain way, it connects public health actions and the development of communication aids, as well as applications for building of awareness of prevention of health risks, assistance to the most vulnerable and/or isolated people, prevention of the psychological impacts of the health crisis, and the tackling of violence against children during the confinement. Many are, and many shall be, the impacts of Covid-19 upon Brazil and upon the world as a whole. Apart from health and the economy, the pandemic we now face shall have an influence on our system of values and, hence, on our choices and our way of life. This link also becomes explicit when Paulo Freire views education as a political act, with the main intention of stimulating the potential of understanding reality, or in other words “reading the world”, a condition to take part in the organisation of this world. It would not be possible to take social action without taking sides, without making choices; and these choices are firmly anchored to a socially constructed system of values. According to Paulo Freire, this human action should be conscientious. The main role of the educational process should be that of constructing this awareness. Therefore, thinking over the values that guide us is of paramount importance. In current reality, faced with a health problem that interferes with our way of life and in the adoption of a given system of values, education should play a key role for the creation of opportunities to think over values and their reformulations.

Keywords: narratives, relationship to knowledge, teacher education, collaboration, educational technology

INTRODUCTION

Many are, and many will be, the impacts of Covid-19 in Brazil and in the world as a whole. Going well beyond health and economy issues, the fact is that the pandemic we now face shall have an influence on our system of values and, as a result, on our choices and way of life. The impact of social and economic conditions on the construction of the system of values of a certain society has been investigated by Inglehart (1971), Inglehart (1981), Inglehart (2008). According to this author, social organization is a key factor within the construction of a hierarchy of values. In studies carried out in different European countries, Inglehart (2008) noticed that there is a difference between the values taken up by new generations, more concerned with issues like autonomy, freedom of expression, and post-materialist values, while the former generations had, among their core values, physical and economic security, or materialistic values. Inglehart (2008) believes that the economic and political changes in these countries has been a key factor in establishing the difference between these two generations. He also believes that the system of values is formed with greater stability in the passage from adolescence to adulthood, and that, in this phase, the situation of the country will have significant effects for the adoption of materialist of post-materialist values. Agreeing with the author, Pereira et al. (2005) state that the source of the values taken up by the individual people is within the current ideological identity.

The school is one of the social institutions responsible for the dissemination of the values of a society, bringing about the interaction between different agents (Menin, 2002; Thornberg,

2008). To think about the educational process and its impact on the setting up of the system of social values, we feel it is essential to seek support from the pedagogical concept defended by Freire (1996). The link between education and values is strongly evident in Freire (1996), and appears, for example, when the author argues that education is a political act, with the ultimate aim of instilling in the student an understanding of the reality in which he or she is inserted, thereby allowing the “reading of the world”. This reading is essential so that the student can see himself or herself as someone who also “writes the world”, takes a stand and makes choices; these choices are anchored to a socially constructed system of values. According to Freire (1996), this human action must be conscientious. It is up to the school, and to the educational process, to make this awareness building happen. Therefore, thought about the values that guide us is in fact essential. In current reality, faced with a health problem that interferes with our lifestyle and with the adoption of a certain system of values, the school must have a key role in the creation of opportunities for thought with regard to the values and their reformulations.

The Covid-19 Pandemic and Education in Brazil

About a century ago, we perceived the first arguments about a revolution in education, triggered by the use of technologies in scholastic spaces. Enthusiasts of cinema and radio, television and computers, among others, started to defend a technological

revolution that did not materialize within the school unit. At moments of radicalization, we even noticed positions that announced the demise of the scholastic institution or even the emergence of a “society without schools” (Buckingham, 2010, p. 38).

Verily wise remarks about such waves were drawn up by educational historian Cuban (1986), Cuban (2001) and taken up again by Buckingham (2010) to reconsider the place of the school within this “game of disputes” between tradition, upheld in the scholastic institution, and the social and cultural calls made by a society mediated by technology. This latter author defends the non-disappearance of the school as an institution, but first stresses the need to bring the concepts of teaching, communication and culture into alignment, going well beyond the absorption of technological terms and devices.

In Brazil, the intersection between communication and education has already been the result of a variety of legal provisions and projects, even if these may have presented themselves in a fragmented manner. This confirms that the progressive growth of technological media and the inroads it has made into the scholastic environment have not had significant effects upon the institutionalized pedagogical practices. Among the many reasons that have played a part in this fact, it is worth mentioning that this issue has been insufficiently addressed as part of initial teacher education (Fantin and Rivoltella, 2012). Looking specifically at the initial and ongoing education of Physical Education teachers, this aspect is also noted, according to statements made by the teachers themselves, who mentioned feeble involvement with the issues of technology and media (Souza Júnior, 2018).

The confirmation of this fact does not allow Physical Education teachers, among others, to feel confident to debate and to use digital technology in their lessons. In general, they cast doubt on whether technology would fit in with their very own philosophies for the teaching-learning process; whether they are actually prepared to invest time and practice to use it; or even how they would use it to enhance the way in which the teachers teach and the students learn (Burne et al., 2018).

In these days marked by the fight against the pandemic of SARS-CoV-2 (also known as Covid-19/corona virus disease 2019), the procedures known as “social isolation” and “social distancing” have been the most effective protective measures to reduce the impact of the spread and contagiousness of this virus (European Centre for Disease Prevention and Control, 2020). It has been used in many countries, including Brazil, where these measures have been in place since March this year.

Among the social impacts that this pandemic has brought, the sudden stoppage of activities in Brazilian basic education—especially the lessons—caused by the need to implement social isolation has demanded a complete overhaul of the teaching systems, the pedagogical structures and interaction strategies, nearly all of these being involved in a teaching process that is strongly mediated by digital technologies. However, the issue is much wider than this, as there are structural inequalities within society, which means that millions of Brazilians have only a precarious access to technologies.

Many school networks around the country have decided to stop in-person activities, preferring to use remote activities or distance learning, with the approval of the Brazilian Ministry for Education. However, the strategies, the actions and the working conditions vary enormously and, in this regard, we see reorganization of teaching activities in many subjects, including Physical Education. The teachers now feel coerced into making use of technology as a condition to press on with their remote teaching activities. Under normal conditions, as confirmed in one of the state-owned networks we have looked into (Torres et al., 2016), many teachers do not even use a computer in their classes; even those who do refrain from using the computer very often throughout the scholastic year.

There are conjectures stating that in the post-pandemic period there shall be greater interest in distance learning, on the part of the students, as learning through digital screens would be more motivating and more efficient. Indeed, according to Betti (2020), scholastic education is largely out of touch with globalization, social media, explosion of time and space, and so on; however, in the current situation, amid the pandemic, we already see the budding of feelings of “hiraeth with regard to the school” and a refusal to take part in remote educational activities. In addition, it is an urgent demand that the state-run school provide the teachers with conditions that encourage a critical and transformative teaching style, with the support of technology. This requirement, in turn, leads to a need for formative opportunities so that the teachers may deal with the growing demands of schooling, demands that were not met during the Physical Education Teacher Education (PETE) degree course (Oliveira and Pesce, 2020).

To establish special programmes for teacher education, it is essential that the teachers be heard and that they understand what challenges they have faced to carry out their roles as teachers in the current scenario. Because of this, the purpose of this paper is to look into the pedagogical experiences of teachers in the state school networks of the Brazilian states of Rio Grande do Norte, Ceará, São Paulo and Pará, with a view to questioning the effects upon Physical Education in schools, considering the fight against the pandemic resorting to the strategy of social isolation. On analysing these educational experiences, we seek to get to know the viewpoints and perceptions of these teachers, with regard to these experiences.

METHODS

This is an exploratory study, descriptive in nature, which makes use of the narrative accounts made by three teachers at state-owned schools in the states of Rio Grande do Norte and Ceará. The design of this analysis is inspired by the methodological structure of pedagogical cases (Armour, 2014), consisting of: 1) narrative statements, in the first person, as stated by teachers who report on the use of digital technology in their lessons, highlighting the opportunities and the challenges of the experience; 2) analysis of narratives by different researchers immersed in the same context yet with different theoretical approaches; and 3) a synthesis of the analyses, as carried out

by a researcher in the PETE field, different from the first two, who makes a general presentation of the experiences and analyses. Regarding the narrative statements (stage 1), the teachers are all coauthors of this study and agreed to collaborate in its conception and analytical development. Ethically, we have discussed the idiosyncratic implications of conducting this study in collaboration and identifying ourselves as coauthors. During the analysis (stages 2 and 3), we have confronted our descriptions twice to avoid bias. Firstly, two researchers acquainted with the teacher's background analysed the report to describe its embedded framework. Then, secondly, another researcher—not acquainted with such background—provided feedback on the descriptions.

In this article, we work with reports submitted by five Higher Education researchers and three full-time Basic Education teachers of the municipal and state school networks of the cities of Belém (one case from the state of Pará), Fortaleza (one case from the state of Ceará), Natal (two cases from the state of Rio Grande do Norte) and Vinhedo (one case from the state of São Paulo). We have supported our descriptions with the collaborative perception of being teachers-researchers who, in the specificities of their research issues—relationship to knowledge, teacher education practices through collaboration between university and school teachers, and digital technology—seek to make a joint analysis of the pedagogical implications of the reports. We believe that the sharing of the reports, different perspectives of analysis and synthesis, as well as resumptions for further thought, strengthen the formation of collaboration networks (Borges and Sanches-Neto, 2014; Venâncio et al., 2017) for the area with qualitative reverberations, to have no hierarchy of knowledge between teacher(s) and researcher(s). So, let us move on to the reports! We organized five accounts to describe the different contexts.

ACCOUNTS

Although the number of teachers who participated in this study might be understood as a limitation, the diversity of realities faced by them during their daily work provides complex qualitative insights. They all work in public schools, located in capital cities from three different Brazilian states, and their working conditions vary from state to state, and even from the location of each school in the same city. In the following accounts, the participating teachers—as coauthors of this study—explain their work conditions and describe some aspects of the school community where they work, such as the social and economical backgrounds of the school community related to the human development index (HDI). We explain briefly the context and idiosyncrasies of each teacher, but kept the personal sense of the writing (1st person) to preserve the original meaning of the narratives.

Account 1—Many Paths, Several (in) experiences: The Cases in Ceará

This account was originally penned by an experienced teacher who has been working for twelve years in the municipal school

network of Fortaleza and for six years in the state-run school system of Ceará. He currently works in four schools, in these systems, and has recently completed a professional Master's degree in Physical Education (PROEF program), reflecting upon and investigating his pedagogical practices. The state of Ceará has an overall HDI of 0.682 and its capital city—Fortaleza—has HDI of 0.754. In terms of well-being, quality of life and human development, a HDI value above 0.800 would be classified as very high, between 0.700 and 0.799 high, 0.550–0.699 as medium and below 0.550 as low.

According to the teacher, after the first notified case of Covid-19 in Fortaleza (Silva and Muniz, 2020), the municipal and state governments decided to suspend in-person school lessons in their respective school networks (both state-run and private) and also used actions related to distance learning (known locally as EAD), in compliance with the terms of State Decree No. 33,519 of 19 March 2020, in item III of Article 3, that states that: "In-person scholastic activities, in all schools and Universities of the Government-run networks, in the state of Ceará, are hereby mandatorily suspended for a period of fifteen (15) days as from 19 March, with the option of starting this suspension on 18 March". In another State Degree, No. 33,523, of 23 March 2020, the suspension of class activities was extended to 1 May 2020. In the municipality of Fortaleza, Decree No. 14,611 of 17 March 2020, determines the suspension of in-person educational activities in all schools of the municipality-owned school network, on a mandatory basis, from 20 March to 31 March of this year.

In this context, the teacher(s) must prepare home-based scholastic activities to be handed in, with the adoption of some forms of Digital Technologies for Communication and Information (DTCIs), including WhatsApp, e-mail from the school coordinator, Facebook, Instagram, Online Student, Google Classroom, and Google Drive), also taking into account the reality experienced by each school, for such use. In the light of such conditions, I would like to present my thoughts about this moment: 1) Difficulty in complying with the pedagogical guidelines of four different schools; 2) Align thoughts and execution of pedagogical practices with the use of DTCIs within the school itself; 3) Heterogeneity in the use of DTCIs as a didactic and pedagogical tool; 4) Difficulty in drawing up and creating situations for experimentation of bodily practices, as a theme unit of the curricular subject of Physical Education, and the use of DTCIs.

Here I must stress that this division into four points is not a result of any hierarchy or sequence, but merely seeks to make comprehension easier for the reader. The items here listed are interconnected, and these relationships can be stressed or not during the discussions. The first topic opens a discussion about my difficulty to comply with pedagogical guidelines in these days of pandemic. Every week, the educational networks (state and municipal) change the information about how to proceed with home-based activities. By way of example, I could mention that, in the first week of suspension of in-person lessons, the Education Department of the State of Ceará advised us to use WhatsApp groups with the student(s) and send documents to the e-mail addresses of the school board; in the second week, we were to send

the activities through Google Drive. In the midst of the turbulence of information, we should also mention that each school uses the DTCIs that are most convenient or most accessible. This means that I see myself having to use different technologies, as I teach in four different educational contexts.

With regard to alignment of thoughts and execution of the pedagogical practice within the school itself, I have also observed, in what has been said at virtual and written meetings of the WhatsApp group, that the teachers have different opinions about the moment we are now going through: some agree with the use of DTCIs while others oppose this. I also see that there are some disagreements regarding which DTCIs should be used, such as Google Drive and/or the WhatsApp group, among others. In most cases, this is because the teacher(s) are more familiar with one type of technology than another. This means resistance to adopt a new resource within the set of DTCIs, also because they do not feel comfortable with “the new”, and neither have any training possibilities been offered to the teachers, students or school management, at these times of emergency.

I have noticed that most of the teachers are very worried and hesitant, as they see this as a moment never before experienced in the history of humanity, and that has significantly affected the lives of those working in basic education, their teaching practices, and also the “new” relations that they need to establish with themselves, as human beings, faced with a world pandemic, among the content to be taught and with the students. The heterogeneity in the use of DTCIs as a didactic and pedagogical tool is a point that I consider crucial at these times of pandemic, as I perceive that within the school unit, we have teachers of different ages, who see the world in a different light and have differing views of the human being, different teaching qualifications, different beliefs, different degrees of (de)motivation, dreams and expectations.

In the schools where I work, I see differences between different professionals regarding the use of DTCIs. As an example, I mention that I know a teacher who has great difficulty in sending e-mails, while there is another teacher, in the very same institution, who can easily create applications and handle different technological resources. This phenomenon is not only among teachers, but also in groups of students. I teach at night, where I have students who are 60 years old and have never used a computer in their lives.

In view of this, how can we reduce the distance between peers, between teachers with and without experience, about the use of DTCIs? What can we do to facilitate the teaching and learning processes with the use of DTCIs in emergency situations? What technological resource would be most appropriate for the students at Brazilian state-run schools? What is the role of DTCIs during these times of social isolation? These are just some of the questions bubbling in my mind!

To close, I would like to highlight the difficulty in preparing experimentations involving content (games and play activities, gymnastics, dancing, sports, contact sports and adventure pursuits) for Physical Education lessons and the use of DTCIs. Physical Education is a compulsory component of the curriculum, that should address the issues of “knowing about something” (concepts and knowledge) and of “knowing how to

do it” (experimentation), of bodily practices. At this moment, I have noticed that, in the Facebook groups on Physical Education there has been a rise in the number of posts asking for suggestions of activities about the aspect of ‘knowing how to do it’. On the other hand, I do not see the same occurrence of questions about “knowing about something”. However, after all, shouldn't we link theory and practice? Why do we have difficulty in linking Physical Education mediated by DTCIs? Could it be that some content within Physical Education are “easier” or “more difficult” to be put as a theme in these pandemic days? These are just the concerns of a teacher seeking to think, act, and think again, in benefit of the quality and social function of state education, even in difficult periods as the one we now face.

Account 2—Educational Actions in Belém do Pará During These Pandemic Times

This account was originally written by an experienced teacher who has been working for the municipal and state basic education network of the Brazilian state of Pará. He specialized in Special Education, with an emphasis on Inclusion. He has been working as a teacher in a specialized state-run unit, in three municipal schools, and at the Municipal Department of Education (Semec), where he has helped with the recording of video lessons. The state of Pará has an overall HDI of 0.646 and its capital city—Belém—has HDI of 0.746.

For the teacher, we have been advised about the suspension of lessons and have been invited to participate in the delivery of staple food baskets (welfare supplies) in some of the schools. In other schools, we have prepared questionnaires for the students to fill in together with some colleagues, for the Semec video lesson project; here we were divided into cycles, being free to list subjects to be addressed in the lessons. Here I would like to stress that, even though I must acknowledge the efforts that the colleagues at Semec have made to produce content, there has been a lack of specific training for carrying out the activities on video, together with poor publicity of the lessons.

At Semec, the recordings were made with the help of a studio specially hired for the production of the material, which was complemented with homemade videos for showing on free-to-air (FTA) TV and later on YouTube. We used mobile telephones, computers, and social networks, for the publicity of the lessons. Even though the lessons have been praised, I must confess that I received many reports from students who were unable to watch the content due to the lack of a signal on channel 47 (private) in their homes, and for financial constraints blocking them from having a high-quality Internet service to watch the lessons on YouTube. At the City Hall, the video lessons, that were to continue through to the first weeks of July, were terminated earlier to prepone the holidays, which meant that this Project could not even secure the minimum number of lessons for this curriculum component.

Of course we miss the contact with students and colleagues; the moments of sadness on the death of colleagues during the pandemic and, most significantly, we felt the stress generated by the spate of controversies about the lessons being resumed without any assurance of security, which got worse with the

publication of a technical note on 26 May by the State Education Council, establishing a schedule for the return of in-person lessons, penciled in for the first fortnight of July, for the state-owned sector, and the second fortnight, for the private school network.

We felt that our opinion has no relevance, meaning that we are left at the mercy of the progress of data regarding infections, without us having any real assurance that the City Hall or the State Government will ensure minimum conditions of health and hygiene, or even clear and well-structured plans for the resumption of in-person lessons. I work in two different schools, and ever since I arrived, every day we have faced the problem of lack of water. There are also classrooms where the air conditioning does not work, meaning that we are forced to work in the heat or even have a rota of classrooms together with other colleagues.

What we see is the exclusion of students who do not have access to good quality Internet and, more significantly, the feeling of “doing for doing’s sake” as there is no training, qualifications or even any standardized guidance to lead these processes.

And, on reading the Council note, some queries come to mind: Why do state-run schools have to restart before private schools? Could this be to see if our students and colleagues have been infected by Covid-19—or possibly to make sure that the students who pay shall be safer?

Account 3—Outlook for the Pandemic Within the Reality of São Paulo

This account was originally the work of a lady teacher who has, for the past nine years, been working in the Government school network of a municipality of the interior of São Paulo State. She has worked as a teacher in a municipal school, and also worked in the Municipal Department of Education, working in the qualification of teachers for the network. The state of São Paulo has an overall HDI of 0.783 and its capital city has HDI of 0.805. However, the teacher works in the network of Vinhedo (HDI of 0.817), which is characterized by offering good working conditions and proper equipment in the schools. Although the municipality has a very high HDI, there is an impoverished population with students who cannot access the internet.

In the teacher’s perspective, to talk about my school experience in the pandemic, one must go back in time a bit, as the new coronavirus arrived in my town well before the in-person scholastic activities were suspended. The town where I teach is close to Viracopos Airport with its many international flights. In addition, the municipality has many upmarket closed condominiums, and has a population of about 72,550 inhabitants, meaning that the city is quite small.

The first ever case of the novel coronavirus in Brazil was reported on 26 February and was a case imported from Italy (Brazil, 2020a), involving someone who spent the weekend in one of the luxury condominiums in their city. With this notification, the municipality, and particularly the school where I teach, started some protocols with regard to the pandemic. This was well before measures were taken by the State, and well before knowing that the virus would become a reason to close teaching

institutions. There, my lessons already had to adapt in some ways, as we had already included protocols for hygiene before and after the lessons, with washing of hands and use of sanitizing gel, bought by the management of my school.

At that moment, we started to see the dead on television every day, together with the distancing situation experienced in other countries, while we unfortunately witnessed an utter lack of preparation with regard to the restrictive measures here in our country. However, during this period, many reports and questions asked by the children within the school’s daily activities helped, to a certain degree, to make people get alarmed about what was yet to come.

On 13 March, a Friday, I went to school to give my morning lessons, and started to feel feverish, with smarting eyes and a sore throat. I stayed at the school in the afternoon and then, at the end of the day, when I returned home, I had a high fever that continued over the weekend and even on Monday, when I felt really weak.

Then, on 19 March, the City Hall informed the parents that there would be pedagogical proposals during this period of distancing, which we still thought would not last long. Then there was a discussion about the term contact says, and the need to offer 200 days of tuition time or 800 h.

On 24 March, there arose a collection of activities as created by the media center of the Department, without even listening to the teachers about how the structuring of the processes would occur with regard to the children and their families during this new situation. In fact, the creation first happened on an internal process, between the technical team of the Department and the management teams of the schools, and an invitation was sent to anyone with an interest in suggesting activities.

However, in parallel to the network process, my school unit organized and structured contact with families by setting up WhatsApp groups, initially concerned with families who, we knew, could already be facing financial difficulties. However, this contact through messaging apps was organized and managed by the school’s management team, and the teachers were not granted access. We could only create or send materials that could be passed on within these groups, without any direct contact with the children or with their families.

Within this process, I decided to construct some proposals that could be experienced by the children in their own homes, and which could, to a certain extent, continue with the projects that we had been constructing before the world stopped, at least our world did. I came up with three proposed suggestions, for the class groups I teach, based on a theme of games and play activities that we had been studying prior to the pandemic. All the proposals had the same organization style: first the theme and our previous study were put into context; then some kind of construction for the children was proposed; at this moment it was necessary to construct or otherwise prepare, based on elements of their daily activities, one possibility being interaction within an e-nvironment which the children could use as yet another option for games and play activities within their homes, or even on their mobile telephones, while attempting to detach most children from the shooting-based games that they always said they spent hours on, so arriving at the proposal of a final product that could

be a base for new types of interaction between the children and their families.

At this first moment, I sent the proposals through the WhatsApp account of the coordination of the school, who would pass the message on to the family groups of each scholastic year group; however, I never got any feedback about what the children thought about this or if they interacted with the proposals, which could have been through lack of feedback on the part of the families or the non-return by the school.

After this initial moment within the repertoire offered to the children through the messaging app, as a work proposal of mine, the Education Department, through a normative instruction, asked us to come up with activities to make up the routine activities of each year, where the teachers of all schools would send the Department a routine schedule divided into days of the week, with their respective content. Thus, the teachers of Physical Education were asked to include their activities in a "space" within this routine, a space they called "recreation". I readily opposed this and started another proposal, opposite to this, for construction in partnership with the polyvalent teachers of my unit, in a non-fragmented movement. Soon came another normative activity, by which "specialist" teachers would no longer work on the schools' routine. They had to rally round with their colleagues from other schools, by class year, and then only send "activities" for the corresponding years. At this moment, I ended up taking responsibility for the fourth year, and planned proposals for the whole network, together with a Physical Education teacher from another unit; however, once again opposing the guidance, I continued working in partnership with the teachers of my own unit.

This movement continued for 2 weeks, and then we received notification of holidays. We stayed on holiday for 20 days and then we returned with a new style of organization. The collection, which formerly had proposals based on years, was now organized by school, meaning that each school would organize its own proposals based on some established guidelines, including: that the specialist teacher would produce activities contextually removed from the routine as proposed by the teachers, that would also be placed in a separate location from the school routines, generalizing the proposals for years, based on the whole network. I opposed this organization once again and embarked upon construction with my colleagues from the unit. We constructed proposals and interdisciplinary routines that for some weeks started from the themes of body culture, such as: discussion about the types of gymnastics; eating habits and physical activities, carried out in the third year; games and play activities as portrayed in works of art, in the second year; and African play activities, in the fourth year. However, I still need to send the "activity" to be part of the Physical Education collection on the City Hall website, as I was the only specialist teacher in the whole network who wanted to construct proposals articulated with school routines, by year.

In this regard, my main difficulties are related to moments of direct contact with the children, and interaction and constant dialogue with work colleagues, to establish a routine that could be interesting for the children and, at the same time, not fragmented and not a mere mishmash of activities. Together with these

difficulties, a strong feeling of anguish still lingers, for being part of a movement which is the exact opposite of what the network established and what my Physical Education peers were doing. I registered my justification at the general management of the segment, which enabled me to establish my routines with the school, as I feel this is more respectful, provided that, in parallel, I could maintain my "activities" with the group of Physical Education teachers. Therefore, I have done my utmost to meet these demands, but I still feel anguish because of the lack of communication with the children, and unfortunately understanding that with this process of social distancing one still plans to reproduce a school logic that was already not working in person and that shall surely not have any success with distancing.

I believe that, as I see it, public funds are being incorrectly used, as the municipality is able to provide the children and their families with access to technology, but the investment of the Education Department still remains at the level of printing routines, thereby reproducing a traditional standard of teaching, already obsolete, which for some time now does not address the needs of the children and does not guarantee learning, let alone the interlocution of our daily activities, which, even though many people don't want this, has indeed changed, meaning that we have to change as well!

Account 4—Actions, Paths and Possibilities in the Municipality of Natal

This account was originally prepared by an experienced teacher, who has been working in the municipal school network in Natal for 16 years, and who is currently a pedagogical advisor at the Municipal Education Department (SME). She completed her Professional Master's Degree in Physical Education in 2012, developing an intervention project at Physical Education lessons at one of the schools, where she worked for 11 years. The state of Rio Grande do Norte has an overall HDI of 0.684 and its capital city—Natal—has HDI of 0.763.

According to the teacher, after Decree No. 11,920 of 17 March 2020 (Brazil, 2020d), which established the situation of emergency in the municipality of Natal, the City Hall—among other measures taken to establish social isolation in the city—publishes, as effective action for all school units, the suspension of lessons for a period of 15 days, which can be extended for a similar period or any other period as may prove to be necessary.

This extension is confirmed with the publication of a new decree, Decree No. 11,931 on 1 April 2020 (Brazil, 2020e), setting a new time frame for suspension of lessons, which would remain in effect until 30 April 2020, a period also subject to review at any moment, whether for preponement or extension of the period. During the first 15 days of suspension of lessons, the Education Department of the Municipality of Natal (SME), under the guidance of the Assistant Secretary for Pedagogical Management, started to discuss, with their advisor teachers, the possibilities of the Early Childhood Department and the Primary Education Department continuing with their educational actions.

These thoughts resulted in the establishment of a portal with the ultimate aim of facilitating approximation between teachers

and students in these days of social distancing, to think of the educational process based on this new reality.

The proposal as sent and debated with the advisors—in which I include myself, as a member of the Physical Education component—is that of showing possibilities and suggestions of activities that, initially, could somehow maintain the relationship between student(s), school, and teacher(s). A relationship that, in the current situation, seeks to establish not the development of learning or specific content, but affective ties and support through play and interactive activities, so that we can stay together in a fun and pleasant way during this period. We quite understand that thinking of, and reflecting upon, actions of this ilk is far from easy considering the host of realities present within the schools of our municipality, the difficulty of access to digital media, and, most importantly, to those arising from the social and economic changes experienced by all families through this period of isolation (teachers, students, coordinators, etc.) with restrictions on ways of access, sustenance, and subsistence, especially the limitations on food intake as a result of lack of regular school meals.

It was also necessary to think about the teacher(s) who had sought other methods of time management, tasks, and new dynamics for personal and professional life. It also became necessary to keep a sensitive eye on the range of contexts in which the teachers of the whole country found themselves immersed, those seeking to reinvent themselves through online lessons, video lessons, and interactions on digital platforms, among others. Many were caught napping, without any kind of support or treatment, or even the necessary qualifications to be active in these virtual platforms, and seek, often in a forced manner, to establish a new significance for their didactic and pedagogical actions.

It was therefore up to the municipality of Natal to consider such realities and to try to find a way that would not make the current reality even worse. The establishment of a digital platform starts with an action which initially brings the socialization of links selected by the team of advisors for the different curriculum components, and here we shall focus on those related to scholastic Physical Education, so that the teacher may access these links and then, based on the situation of the teacher's school, choose those that they feel are appropriate for the student(s).

The activities of the platform are not for evaluation purposes, and similarly are not mandatory, and based on this principle the platform only allows access by teachers in the state education network through registration, providing information such as enrollment number, teaching unit, and e-mail address for registration. It is not mandatory for the teachers to share these links with their students. These are suggestions of complementary activities so that there may be closer approximation with the students during this period. Each teacher has the liberty of choosing whether some of them are shared or forwarded, considering that not all students within the network have access to digital media, or even a mobile telephone that could connect the student to the activities through the links. However, we well know that many teachers and schools already work in their units with groups established through digital platforms, be it WhatsApp, Facebook or Instagram, and that not only allow the circulation of information and other guidance to students and parents/guardians, as also are spaces used by some teachers for the teaching of content and learning to the students,

throughout the scholastic year. Thinking about re-establishing this bond between students and schools, there is the presentation of activities that are easy to understand and that can be easily accessed through a mobile telephone.

Physical Education teachers have access to links that are made available through the thematic units as present, both in the Brazilian National Curriculum (BNCC) (Brazil Ministry of Education, 2018) and in the Curriculum References of the Municipality for Primary Education (Natal, 2020), divided by year of schooling, such as: online games, short videos, comic strips, short texts, creation of games and toys, among others that allow interaction with the core themes of Physical Education and that can be carried out without significant resources at home. Many teachers, even though activities are suspended within the municipality, have already registered and are now accessing the links of the platform.

Faced with realities that are so close, and nearly always so distant between schools, with regard to interaction by social media or networks, some teachers have found difficulties in accessing the students, initially. The teacher's colleagues report that they are not able to make the links get to them in those schools that do not have WhatsApp groups or Facebook pages, but which, even so, have got in touch with the management of the schools to try to find ways to make these arrive. Other teachers have managed to achieve this sending, using these very platforms. What we perceive here is the attempt, made by a significant part of the teachers, to establish some link with the students, by sending videos, models of games for construction, possibilities of play activities to be carried out at home, but without getting any concrete return from this reach. We understand that others are somewhat distant from this process, when they understand that this is the moment to suspend activities. However, we stress the importance of the initiative, that could bear significant fruit for the teachers in the network, and which could, in the future, be pedagogical partners to feed and enrich the platform.

Together with these actions, the Physical Education teachers are encouraged, through social networks on ongoing qualification in Physical Education, to publish short videos with play activities or other activities that they could do at home, together with their siblings or family members, and some proposals to this effect have already been created and publicized by these, in the social networks of the groups of specific qualifications in Physical Education (@focoefnatairn).

Many are the possibilities suggested by the education networks in order to overcome the problems that arise from the changes of conjecture caused by this pandemic, but it is necessary that these all seek to reflect respect for the human conditions of the subjects of the process, as also their possibilities, limitations, anxieties, and adaptation to a new reality, so as to reduce the effects of this period of social isolation, with important effects upon the educational field.

Account 5—Physical Education in Schools in the State of Rio Grande do Norte, in These Pandemic Times

This account was originally given by an experienced teacher who has worked for 6 years in the state basic school network in the

Brazilian state of Rio Grande do Norte. The teacher has a Master's degree in Physical Education and has 3 years of experience working with PETE programmes in private and government-run institutions.

For the teacher, in the state of Rio Grande do Norte (RN), the suspension of in-person lessons, in both private and government-run schools, occurred with the enactment of Decree No. 29,524 of 17 March 2020 (Brazil, 2020b), suspending the lessons for fifteen days, and then with the passing of Decree No. 29,583 of 2 April 2020 (Brazil, 2020c), extending the suspension of lessons until 23 April 2020, both these decrees being published in the Official Government Gazette of the State of Rio Grande do Norte (DOE), which further adds to the anguish shown by students, parents and guardians, teachers, school directors, and other agents within the educational process.

The deconstruction of a scholastic year, possible shortcomings of the learning process, the lack of interpersonal coexistence, among other factors, have led to the appearance of many measures in an attempt to reduce the effects of such factors. These include the challenges of the use of digital technologies.

In the current situation marked by social isolation, the use of the distance learning system (recorded video lessons and asynchronous tutoring) and remote lesson systems (lessons in real time, requiring synchronous access) appear as possibilities within this period, as they create opportunities for the continuation of teaching and learning processes, based on the materials prepared by the teacher, and also on a schedule and calendar that have been adapted to the current pandemic. However, it is necessary to think about the possible pedagogical consequences of these models in the school system, especially in territory marked by economic, social and cultural differences. This means that the first point to be discussed is that of access and opportunities.

If we consider the state-owned school network, the author of this statement being part thereof as a teacher, then the low usage, or even non-usage, of the suggested platform by teachers is based on some premises, namely: non-mandatory use of these techniques when giving lessons; absence of technical knowledge of the digital tool as proposed by the Integrated System for Education Management (SIGeduc); or even through the feeling of injustice toward students that, as a rule, do not have the technological knowledge for due following of the activities.

We see a powerful reinforcement of the social and economic inequality within the state, as many of the students will not have access to the proposed model, as also the possibility of a delayed scholastic year or even an inflated make-up of classes during the rest of the year. We can also mention the learning that has not been made through human coexistence, and most importantly the bodily movements in Physical Education lessons. It is through body movements, in lessons with themes based on much content based on body practices, such as sports, dance, gymnastics and the like, that the students acquire and show what they have learnt, their feelings and emotions, also acquiring self-confidence and self-esteem; improve in aspects such as responsibility and respect for self and others; and also increase motor performance, among others, having a direct influence on the student's daily life. I can perceive that such dimensions are hindered in the absence of teaching activities in the state-owned school network.

On the other hand, on leaving the state-run and entering the private school network, in which my daughter is inserted as a student of Year 2 of early childhood education (which covers Year 1 to Year 5), we observe the fact that some students, especially those in early childhood education and starting upper primary school (Year 6 to Year 9), who are watching remote lessons at home, need a tutor, normally the father or the mother, or the guardian, to offer assistance for this process, whether in the art of using a computer and/or the lesson platform, or in the organization of the study materials for the different materials, and so on.

However, this remote teaching, together with this new function carried out by school tutoring, has brought many discussions on the part of parents/guardians because, while some of them commemorate the fact that they can play a more active role in their children's school lives and also praise the efforts that the schools have made, to offer lessons in all subjects, and also the specialized schools (sports, dance, etc.), in an attempt to reduce the educational harm brought by the pandemic, others show dissatisfaction, caused by many factors, such as undue charging of school fees (students not using the school premises, as contractually agreed), passing through the belief that it is the responsibility of the school, and not of the parents, to teach the content, and finally the impossibility of their children receiving such support due the remote work that is simultaneous to that of the lessons.

Regarding the lessons of Physical Education and those at the specialized schools, both are using more individualized strategies, always giving advance notice about the materials they could use and the activities they shall be carrying out. During the lesson, the teacher explains and shows what the students shall do, and then asks the students to also carry out or do these tasks. As examples, we could mention the construction of a toy in the Physical Education lessons, and socialization based on a technical dance gesture within the Modern Dance (MD) school as mentioned below.

As I see it, the return of on-site lessons remains somewhat uncertain. Faced with this scenario of doubts, it seems necessary to reconsider the reorganization of the school, together with the school community (classload, course content, scholastic year, etc.) during the similarly uncertain duration of the pandemic. Education, in its element of digital technology, should be more closely looked at, but should still be regarded as something complementary, as access thereto is still somewhat unequal.

Here I would like to mention a positive point within my account. The added value that the educators are given in the discourse of parents and guardians who, on carrying out this role of tutors, feel some essential needs and anguishes that this professional person passes in his or her pedagogical acts, understanding that it is by no means easy to be a teacher, and resizing their importance and social relevance.

COMMENTS

Following, we comment the teachers' accounts from three different perspectives, regarding their relationships to

knowledge, collaborative practices, use of technology, and a Freirean approach. We have considered the reasons for various inequalities described, such as a biased attitude of the administration, questioning the teachers' competency to teach, lack of agency and socio-political communication. The **Figure 1** displays a chart showing the facts that mobilize or demobilize teachers for the use of technology.

Pedagogical Thoughts Considering Relationships to Knowledge

Venâncio and Sanches-Neto, (2019) highlight the complexity of the actions of each teacher when he or she recognizes that each student is full of idiosyncrasies, as a reflexive being, and (self) critical about his or her movements, thoughts, and relationships. This means that the obstacle that is traditionally enforced in concrete teaching situations is the practice of movements in an alienating manner, with regard to the subject of the movement. In previous accounts, we see that the three teachers of Physical Education are faced with a world situation where uncertainties abound, generated by a lethal virus, and tacklings based on their own relationships to knowledge and those of their students.

When a subject recognizes himself or herself as a being with relationships, both with self and with the other, this means that he or she is able to anticipate, identify and arrange for situations so that their own actions can have a bearing on certain contexts, always in the presence of other people. In this regard, when the six teachers are aware of the realities, conditions, and possibilities of the teaching networks in which they work—whether with regard to infrastructure, to the capacity of each teacher to prepare his or her own methods and pedagogical reasons and intellectual resources (the knowledge domain), know how to use equipment and the technological resources (knowledge as an object), and rally round to learn in relationships with others (the relational device) and the activity to be carried out (Charlot, 2000; Venâncio, 2019) – one then identifies that it does not suffice to use Google (Charlot, 2005) so that everything may be solved, just like a touch of magic.

There are three dimensions that intermingle in their relationship to knowledge: the identity, social and epistemic dimensions (Charlot, 2000). In the identity dimension, the relationship to knowledge shows the history of each person, his or her expectations, concepts of the human being; in the case of narrative accounts, this dimension is perceived when one of the teachers admits that there are work colleagues who do not value the use of technologies and are not discriminated by the others, while there are others who prefer other ways of triggering the educational process within the school unit, maintaining their self-image. In the social dimension, the subject does not only have a relationship with himself or herself, recognising the presence of the other person. This dimension of knowledge expresses a relational perspective when one of the narrators mentions that there are teachers who master technological resources, and those who do not. In this case, every one, within a social and relational perspective when faced with their own knowledge and that of their students, and aware of the social, economic and family situations, makes himself or herself available to collaborate and to

try to use new (technological) forms and means. Last but not least, we have the epistemic dimension with regard to knowledge, in which one acknowledges the conception of knowledge, and teaching practices, as processes for the very construction of knowledge, as the real expression of the knowledge as learnt, in the case of the aspects present in the three accounts, in some cases passed from non-possession to possession. In other words, some cases of knowing how to access, use, share, teach and learn about forms of knowledge, whose existence has been deposited in objects, places, and people.

The three dimensions with forms of knowledge are essential for these Physical Education teachers, who presented accounts about the situations experienced, and back up the acceptance that the educational process cannot be limited to the transmission of information through technological resources, digital platforms and the like. It is therefore necessary that human beings, in relation to their own knowledge and that of others, create and generate complex situations, and that they may not be recognized as relationships of knowledge when they are generic and fragmented. Venâncio (2019) highlights the fact that there are connections with complex and polysemic forms of knowledge, and that each subject may enjoy the time that is pedagogically necessary in order to learn based on Physical Education.

With the pandemic, the relationships to knowledge and human conditions for tackling it through new types of social coexistence (at the school, or in a virtual learning environment, and at home) bring about changes and lay bare the neglect by the Government, also showing the lack of ongoing formative policies for teachers, lack of investment in schools' infrastructure, and the lack of conditions for family members to accompany the work that is carried out by teachers within the schools.

Comments Based on Collaborative Practices for Teacher Education

The dynamics of the contemporary world change people's way of being and, according to Charlot (2005), there are some phenomena that stand out. Social practices, like education, incorporate other forms of knowledge, and social attachments are changing to the extent that teachers and students are given little value as political or ethical subjects. There is a world dimension in interdependence with globalization, which means a new stage of domination or oppression (Charlot, 2005; Charlot, 2013).

Due to the accumulation of contradictions that lead to many different types of ruptures, there is a new type of schooling which tends to replace the old one. These seems to be the case with the situations reported by the three teachers, with regard to the implications of the pandemic context. However, we do not know which model shall be followed by teachers in the future, and we do not even know the meanings of teaching and qualification. The concept of teaching implies shared knowledge, and the idea of qualification involves promoting competences in a subject. This means that teacher qualification would be an act of working on knowledge within pedagogical practices, situating them in relation to the complex possibilities of the act of teaching. In the opinion of Charlot (2005), teacher qualification means giving them competences to

manage situations of tension, and also prepare mediations between practices and forms of knowledge.

We understand that, in spite of the individual conduct as set by decrees in each teaching network and of the spread of Covid-19 in Brazilian territory, as also of educational policies, it is necessary that the teachers plan their actions as a group. In the case of account 1, there is an excerpt about teachers that: “[...] do not feel comfortable with “the new”, and these teachers, students and school administration staff have not even received possibilities of qualification, at these times of emergency.” There are technocratic prospects for school education that move the teachers away from any decision-making process (McLaren, 1997). As a result, it makes perfect sense for there to be resistance, even in emergency situations, and for the teachers to collectively refuse to be treated like good staff that merely obey orders.

In the following excerpt of account 2, the concept of lack of specific training for the remote activities as proposed to the teachers through the decrees is hereby reinforced:

“It is also necessary to take a sensitive look that extends over to the different contexts in which teachers from the whole country are immersed, those who seek to reinvent themselves through online classes, video classes, and interaction on digital platforms, among others. Many were caught by surprise, without any kind of support or training, or even the necessary qualifications to enter these virtual platforms, and now seek, often in an enforced manner, to establish a new significance for their actions, both pedagogical and didactic.”

The qualification of the teachers for tackling adversity within the context of the pandemic does not do without political intervention because, even in the current context, there are many curricular approaches available for the teachers, who are politically and culturally empty. In these proposals, the students are taught to fragment their thoughts to isolate them from the pace of daily life (McLaren, 1997). The concern shown in the excerpt of account 3 refers to this sense of qualification, as the teacher thinks about the “reinforcement of social and educational inequality in the state, as many of the students shall not have access to the model as proposed”. This means that, in the (self) formative logic, the most efficient way of teachers taking on the complex and diffuse demands of the Covid-19 pandemic is through collective and collaborative mobilisation, for the group of their actions.

Momentaneous Comments Based on Technology Within Teaching Action: Organicity or Urgency?

On observing the general panorama of challenges that the social isolation process has brought to education, from the standpoint of teachers who toast us with their accounts, and consider the pedagogical considerations that have followed on from them, it is necessary to have a more concentrated understanding of the ways in which the Physical Education teacher has been made to

reorganize his or her postures with regard to the use of technology.

A mapping shows that, ever since the 1990s, the international literature focused on education discusses the role of barriers within the implementation of Technologies in teaching practice (Ertmer, 1999), considering the mentioned extrinsic barriers, or barriers of the first class (resources either absent or inadequately supplied to the teacher, such as: time; training; support; premises, etc.) and the extrinsic barriers of second class (beliefs and teaching attitudes with regard to use of technology, such as: teacher-student relationship; trust in the selection and use of technological devices, and their implications for teaching methods; selection of content; evaluation procedures, etc.)

Different from the author here quoted, who invested in the identification of barriers, the fact is that contemporary researchers into Physical Education (Burne, 2017; Souza Júnior, 2018) prefer to discuss the factors that affect the adoption of technologies by teachers. There, we can perceive elements that mobilize or demobilize teachers for their use, and which we apply to the accounts mentioned above.

It seems that, on systemizing demands as shown in the reports, the strategies presented by different realities lead to the appearance of personal, structural and pedagogical dilemmas among the teachers. Most of the factors that mobilize and demobilize the teachers come close to the considerations about relationships between teachers and students, on the one hand, and forms of knowledge—be they of the identity dimension—where it is acknowledged that every teacher and every student builds his or her own path, with experiences mediated by social conditioning factors and which should be respected in their singularity -, of the social dimension, where one considers issues related to access and competence in the use of technology, apart from the social and economic contexts inherent to them—or the epistemic dimension—where there is announcement of competences regarding usage, sharing, and understanding of devices, and the implications this has on the art of teaching and learning. To us, it seems that, observing the reports and thoughts summarized in the chart above, many of the mobilizing factors are centered on the social and epistemic dimensions of the relationship to knowledge, especially with regard to the recognition of social conditions and experiences that announce knowledge to be shared between the teachers.

With regard to the demobilizing factors, we highlight the feelings of incapacity; the perception of absence of qualification for the use of technologies; instability and fear regarding the use of the devices—all linked to gaps in teacher education, which appear in more significant form in these days of social isolation. However, in an opposite direction of what demobilizes, there is the power of sharing ideas between the teachers, something that, in the (self) formative perspective, helps toward collective and collaborative growth of the teaching networks.

The experiences reported raise the issue that the transposition carried out at the urgency of the pandemic, and which has not been reflected that much in the transposition of the remote model, has generated a set of motivating and demotivating factors among the teachers. The most important pedagogical implication is in examples of the acritical use of technological

resources, merely as a strategy for the transmission of content, without relating them in any way to the historic moment we are now living through (with regard to technology and to the pandemic itself). However, there is also the preparation of an unplanned collaborative chain in which teachers proposing to challenge themselves can create strategies for filling in the gaps that currently exist in qualification, in educational policies, and in investments within the process of school education in Brazil.

Pedagogical Comments on the Freirean Perspective

The reports made by the teachers present a portrait of the challenges that they face. They show difficulties that are common to everyone in the world, who need to keep social distancing, change their daily routines, and tackle fear and uncertainty, being faced with SARS-CoV2. If all the stress caused by the pandemic were not enough, they also see themselves facing the need to recreate the pedagogical process itself, in an attempt not to fully interrupt the process of the children's schooling. We consider, as one strength of this study, the teachers' perspectives about their teaching work from different states and regions of the country. The teachers provided critical insights of situations that can illustrate the cultural, economical, and social variety of teaching in Brazilian contexts. Our description of their working conditions also can provide insights into the common problems faced and solutions proposed by the teachers in these different teaching backgrounds.

Many teachers highlight the lack of autonomy for this recreation, as the administrative staff do not encourage dialogue, instead determining what the teaching actions should be. Each network has proposed the use of different resources. Digital platforms and television channels have been created to make communication between teachers and students possible, for sending a wide range of pedagogical materials, including course booklets and video lessons. However, the proposed strategies come up against the immense inequality that both teachers and students have to face, with regard to access and mastery of TDICs. It is essential to point out that students suffer more because of the perverse inequality than has an impact on the country and which has been made prominent with the pandemic. In Account 4 the teacher highlights just how worried she is with being unable to be close to the students and to monitor how they have received and use the materials that she produced.

This reality makes it well nigh impossible to implement an education based on dialogue, as proposed by Paulo Freire. Almost . . . Dialogue does not occur in a synchronous fashion, and many times only the teacher is responsible for giving a message. We know that many students do not receive the message and, when the message is indeed received, they do not always understand the message or have the opportunity to reply to it. Without direct contact with the teachers, some may take up a kind of "banking" Physical Education, where the teacher decides what activities the student shall carry out (whether motor activities or not), without the student being able to understand what he or she does and why. Sometimes, not even this kind of education gets effectively implemented. All the limitations enforced upon the school team

may leave the teacher in a paralysed state, without envisaging any possibility of action.

This is the moment when the Pedagogy of Hope, as defended by Paulo Freire (1997), makes perfect sense. Brazilian education is right now going through a "limit situation", meaning a situation for which we do not have an immediate solution (Freire, 1970). Perceiving this situation is the first step to tackle it, by creating "untested feasibility", a notion that had been presented by the author as a proposed solution to face a limit situation.

In this regard, Freire (1997, p. 51) says:

What we cannot do, as imaginative and curious beings, is stop learning or stop seeking, researching why things are as they are. We cannot exist without asking ourselves about tomorrow, about what shall come in the future: in favor of what, and against what; for whom and against whom it shall come; without asking us about how we can make the "untested feasibility" real, demanding that we fight for it.

Based on this concept as raised by the author, there is a need to construct this "untested feasibility". In Account 5, the teacher proposes something that could get somewhat close to the Freirean view, highlighting that, in the light of the moment now experienced, it is important to assign less importance to the content and learning of knowledge, suggesting that Physical Education should prioritize the maintenance of the affective bond between teachers and students. This bond is something really fundamental and it is necessary to find ways of constructing this bond. It is indeed necessary to define the priority of school education at this moment, and this, a bond with the students, could be prioritized, as other goals cannot be achieved if this dialogue is not established.

Some of the teachers highlight difficulty in dealing with the different content of Physical Education, but none of them comments on whether the pandemic and its impact has been present as a theme within their lessons. If we consider, like Freire (1996), that education allows critical understanding and action upon the world, analysing, together with the students, just how everyone's lives have changed in current times, and the impact of these transformations in all dimensions, also in that of self-movement, is essential. In addition, if teachers and students manage to establish dialogue, then it is possible to stimulate their involvement in the construction of practices that could be carried out even in situations of social isolation and could be more significant to the students. Even though this discussion cannot be made right now, it would be important if this dialogue could occur as soon as the lessons are restarted.

CONCLUSION

Based on the findings from our analysis of the accounts, there are the following conclusions:

- All the teachers presented a systematic portrait of the challenges they faced during pandemic, meaning that they have agency and accountability about their own teaching work. The teachers showed common difficulties, such as social

REPORTS FACTORS		DEMOBILIZERS	MOBILIZERS
Account 1	External, or first class	<ul style="list-style-type: none"> ✓ Lack of a platform to unify the actions of the network. ✓ Frequent changes in strategy for interaction with the students. 	-
	Internal, or second class	<ul style="list-style-type: none"> ✓ Fear of use and implications in the relationship between administration, teacher, and student. ✓ Lack of experience of some teachers and students, in the use of technological devices. ✓ Incipience of the relationship of technological mediation, and experience in bodily practices. 	<ul style="list-style-type: none"> ✓ Existence of experience in technological devices, in some teachers and some students.
Account 2	External, or first class	<ul style="list-style-type: none"> ✓ Lack of training or qualification for remote action. ✓ Difficulty for the students to gain access to technologies. ✓ Lack of time to organize a pedagogical flow with changes in strategies and schedule. 	<ul style="list-style-type: none"> ✓ Support from the Education Department, with structure to produce audio-visual materials used in remote teaching.
	Internal, or second class	-	<ul style="list-style-type: none"> ✓ Experience in production of content, shown by some teachers.
Account 3	External, or first class	<ul style="list-style-type: none"> ✓ Lack of dialogue of the Education Department with the teacher, to make digital artefacts available. 	<ul style="list-style-type: none"> ✓ Availability of didactic artefacts for use in remote teaching, thanks to the Education Department.
	Internal, or second class	<ul style="list-style-type: none"> ✓ Frequent changes in the strategy of interaction with the students. 	<ul style="list-style-type: none"> ✓ Existence of experience shown by some teachers and students, regarding the use of technological devices. ✓ Collaboration between teachers, within proposals for activities in remote teaching, through digital platforms.
Account 4	External, or first class	<ul style="list-style-type: none"> ✓ Difficulty in gaining access to technologies. ✓ Lack of training or qualification for acting within the digital platforms. ✓ Access exclusive to teachers from the network. 	<ul style="list-style-type: none"> ✓ A platform unifies all actions taken by the teaching network.
	Internal, or second class	<ul style="list-style-type: none"> ✓ Difficulty for some teachers to have contact with students through the digital platforms. ✓ Teachers distant from the process of technological mediation. 	<ul style="list-style-type: none"> ✓ Existence of experience with digital platforms, for some students and teachers. ✓ Collaboration between teachers, in digital platforms.
Account 5	External, or first class	-	<ul style="list-style-type: none"> ✓ Presence of a platform, albeit with pedagogical gaps.
	Internal, or second class	<ul style="list-style-type: none"> ✓ A feeling of incapacity, regarding the use of the network's platform. ✓ A feeling of injustice in the different methods of access by the students. ✓ Lack of confidence in the development of relational dimensions within the experience of bodily practices through technological mediation. 	<ul style="list-style-type: none"> ✓ Perception of the possibility of technological mediation and experience of bodily practices. ✓ A feeling of added professional value by the parents, through remote monitoring and tutorial action.

FIGURE 1 | Chart showing the facts that mobilize or demobilize teachers for the use of technology. Source: Prepared by the authors, based on the model of Souza Júnior (2018).

distancing, change of their daily teaching routine, and coping with being afraid of the uncertainty regarding Covid-19;

- The teachers were overstressed to recreate the pedagogical creations itself to keep their students' learning pace within the process of schooling. Many teachers highlighted the lack of autonomy for this recreation as the administrative staff do not encourage dialogue to foster teacher collaboration;

- The instructions are imposed from the authority; however, such instructions disregard that different networks show different resources. Digital platforms and television channels were created to make communication between teachers and students possible and for sending wide range of pedagogical materials, such as course booklets and video lessons;

- The proposed strategies came up against the immense inequality that both teachers and students have to face in Brazilian public schooling. The teachers were under stressed conditions as they were unable to be closer to their students and to monitor the use of materials that themselves and other teachers have produced;

- The teachers concluded that there is a lack of activities in Physical Education classes by this method hence this kind of education is not effectively implemented. In this sense, all the limitations enforced on the school team may leave the teachers in a paralysed stage without envisaging any possibility of action;

- The teachers felt that the whole basic education system is going through a "limit situation", having no immediate solution

except to follow the theory of *Pedagogy of Hope* (Freire, 1997). But it is difficult to advance—in the sense of the *Pedagogy of Autonomy* (Freire, 1996)—because the majority of the teachers were not qualified for using DTICs in their teaching.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study. Written informed consent was obtained from the individual(s) for the publication of any potentially identifiable images or data included in this article.

REFERENCES

- Armour, K. and Org (2014). *Pedagogical Cases in Physical Education and Youth Sport*. Oxon: Routledge
- Betti, M. (2020). A Pós-Pandemia Colocará O EaD No Seu Devido Lugar. *Centro Esportivo Virtual*. Available at: <http://cev.org.br/biblioteca/a-pos-pandemia-colocara-o-ead-no-seu-devido-lugar/> Accessed on Apr 25, 2020). doi:10.30682/disciscm8
- Borges, C. M. F., and Sanches-Neto, L. (2014). Compartilhando a análise de práticas pedagógicas na educação física: perspectivas colaborativas. *Instrumento*, v. 16 (2), 231–248.
- Brazil. Provisional Measure no 934, of 1 April 2020 Apr (2020a). *Estabelece normas excepcionais sobre o ano letivo da educação básica e do ensino superior decorrentes das medidas para enfrentamento da situação de emergência de saúde pública de que trata a Lei no 13.979, de 6 de fevereiro de 2020*. Brasília, DF. Available at: <http://pesquisa.in.gov.br/imprensa/jsp/visualiza/index.jsp?jornal=6008&pagina=1&data=01/04/2020&totalArquivos=1>. Accessed on Apr 19, 2020
- Brazil. Rio Grande do Norte (State) Mar Decree No. 29.524, of 17 March 2020 (2020b). *Dispõe sobre medidas temporárias para o enfrentamento da Situação de Emergência em Saúde Pública provocada pelo novo Coronavírus (Covid-19)*. Natal, RN. Available at: http://diariooficial.rn.gov.br/dei/dorn3/docview.aspx?id_jor=00000001&data=20200318&id_doc=677489. Accessed on Apr 13, 2020
- Brazil. Rio Grande do Norte (State) Apr Decree no 29.583, of 1 April 2020(2020c). *Consolida as medidas de saúde para o enfrentamento do novo coronavírus (Covid-19) no âmbito do Estado do Rio Grande do Norte e dá outras providências*. Natal, RN. Available at: http://diariooficial.rn.gov.br/dei/dorn3/docview.aspx?id_jor=00000001&data=20200402&id_doc=678994 Accessed on Apr 12, 2020
- Brazil. Natal. Decree no 11.920, of 17 March 2020 (2020d). *Decreta situação de emergência no Município Do Natal e define outras medidas para o enfrentamento da pandemia decorrente Do Covid-19*. Natal, RN. Available at: (Accessed on Apr 15, 2020)
- Brazil. Natal. Decree no 11.931, of 1 April 2020 (2020e). *Determina a suspensão das aulas na Rede Pública Municipal de Ensino até o dia 30 de abril de 2020, e define outras medidas*. Natal, RN. Available at: https://portal.natal.rn.gov.br/_anexos/publicacao/dom/dom_20200402_6dce7bf7f24e30e27cb25bd8d172a530.pdf Accessed on Apr 15 2020
- Brazil, Ministry of Education (2018). *Base Nacional Comum Curricular – BNCC*. Brasília, DF: MEC

AUTHOR CONTRIBUTIONS

AJFS, CCS, RGT, ESF, and WLC jointly developed the capture of narratives with Physical Education teachers in different states of the Brazil and contributed to the writing of the text. ACA, LV, and LSN played a fundamental role in the analysis of data under the lens of different theoretical references. All authors contributed to the article and approved the submitted version.

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- Buckingham, D. (2010). Cultura digital, educação midiática e o lugar da escolarização. *Educ. Real., Porto Alegre* 35 (3), 37–58.
- Burne, G. (2017). *Moving In a Virtual World: A Self-Study of Teaching Physical Education with Digital Technologies*. Thesis (Master's Degree in Education). Auckland: University of Auckland.
- Burne, G., Ovens, A., and Philpot, R. (2018). Teaching Physical Education with Digital Technologies: a Self-Study of Practice. *Revista Brasileira de Educação Física Escolar*. V. 2 (4), 93–108.
- Charlot, B. (2013). *Da Relação Com O Saber Às Práticas Educativas*. São Paulo: Cortez
- Charlot, B. (2000). *Da relação com o saber: elementos para uma teoria*. Porto Alegre: Artmed
- Charlot, B. (2005). *Relação com o saber, formação dos professores e globalização*. Porto Alegre: Artes Médicas
- Cuban, L. (2001). *Oversold and Underused: Computers in the Classroom*. New York: Teachers College Press
- Cuban, L. (1986). *Teachers and Machines: The Classroom Use of Technology since 1920*. New York: Teachers College Press
- Ertmer, P. A. (1999). Addressing First- and Second-Order Barriers to Change: Strategies for Technology Integration. *ETR&D* 47 (4), 47–61. doi:10.1007/bf02299597
- European Centre for Disease Prevention and Control (2020). Considerations Relating to Social Distancing Measures in Response to the Covid-19 Epidemic. *Mar*, 1–12.
- Fantin, M., and Rivoltella, P. C. (2012). “Cultura digital e formação de professores: usos da mídia, práticas culturais e desafios educativos,” in *Escola e cultura digital*. Editor Orgs (Papyrus: Campinas-SP), 309–346.
- Freire, P. (1996). *Pedagogia da Autonomia: saberes necessários à prática educativa*, 29. São Paulo: Paz e Terra, 150p.
- Freire, P. (1997). *Pedagogia da Esperança: um reencontro com a pedagogia do oprimido*, 4. Rio de Janeiro: Paz e Terra, 127p.
- Freire, P. (1970). *Pedagogia Do Oprimido*. Rio de Janeiro: Paz e terra.184
- Inglehart, R. F. (2008). Changing Values Among Western Publics from 1970 to 2006. *West European Politics* 31, 130–146. doi:10.1080/01402380701834747
- Inglehart, R. (1981). Post-materialism in an Environment of Insecurity. *Am. Polit. Sci. Rev.* 75 (4), 880–900. doi:10.2307/1962290
- Inglehart, R. (1971). The Silent Revolution in Europe: Intergenerational Change in Post-Industrial Societies. *Am. Polit. Sci. Rev.* 65 (4), 991–1017. doi:10.2307/1953494
- McLaren, P. (1997). *Vida nas escolas: uma introdução à pedagogia crítica nos fundamentos da educação*. Porto Alegre: Artmed

- Menin, M. S. D. S. (2002). Valores Na Escola. *Educ. Pesqui.* 28 (1), 91–100. doi:10.1590/s1517-97022002000100006 Available at: <http://www.scielo.br/pdf/ep/v28n1/11657.pdf> (Accessed on Jul 25, 2020)
- Natal (2020). Educação Física. Referenciais Curriculares Do Ensino Fundamental da Rede Pública Municipal Do Natal. Natal.
- Oliveira, F. D., and Pesce, L. M. (2020). “A formação docente, as tecnologias digitais da informação e comunicação e a inclusão digital nas escolas públicas: entre avanços e contradições,” in *Inclusão digital e empoderamento freireano: a formação de professores da educação básica em uma perspectiva dialógica e autoral. Uberlândia-MG*. Editor L. Pesce (Org.) (Navegando, 107–120. doi:10.29388/978-65-86678-00-0-f.107-120
- Pereira, C., Camino, L., and Costa, J. B. d. (2005). Um estudo sobre a integração dos níveis de análise dos sistemas de valores. *Psicol. Reflex. Crit.* 18 (1), 16–25. doi:10.1590/s0102-79722005000100004
- Silva, J. B. d., and Muniz, A. M. V. (2020). Pandemia Do Coronavírus No Brasil: Impactos No Território Cearense, *espacoeconomia*, Rio de Janeiro: Espaço e Economia, Vol. 9 (17), 1–19. doi:10.4000/espacoeconomia.10501
- Souza Júnior, A. F. (2018). Os docentes de educação física na apropriação da cultura digital: encontros com a formação continuada. *Thesis (Master's Degree in Physical Education) – Master's Degree Course in Physical Education*. Natal: Department of Physical Education, Federal University of Rio Grande do Norte.
- Thornberg, R. (2008). The Lack of Professional Knowledge in Values Education. *Teach. Teach. Educ.* 24, 1791–1798. doi:10.1016/j.tate.2008.04.004
- Torres, A. L., Mota, M. M., Ferreira, H. S., Ferreira, A. F., and Darido, S. C. (2016). As Tecnologias da Informação e Comunicação e a Educação Física Escolar: a realidade de professores da rede pública municipal de Fortaleza. *ETD - Educ. Temat. Digit.* 18 (1), 198–214. doi:10.20396/etd.v18i1.8640601
- Venâncio, L. (2019). A relação com o saber e o tempo pedagogicamente necessário: narrativas de experiência com a educação física escolar. *Revista de Estudos de Cultura* 5 (14), 89–102.
- Venâncio, L., and Sanches Neto, L. (2019). A relação com o saber e a corporeidade em movimento: aproximações com o comportamento inteligente na educação física escolar. *@mbienteeducação* 12 (1), 125–136. doi:10.26843/ae19828632v12n12019p125a136
- Venâncio, L., Sanches-Neto, L., Okimura-Kerr, T., and Ulasowicz, C. (2017). (Orgs.). *Educação física no ensino fundamental II: saberes e experiências educativas de professores(as)-pesquisadores(as)*. Curitiba: CRV 29

Conflict of Interest: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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