Active learning in basic education: an experience report on remote teaching

ABSTRACT

The uneasiness with the way that basic education seems to be tied to a traditional teaching routine, in which teachers work as transmitters of knowledge and students are passive and submissive in the learning process, motivated the research that originated this article. It aims to report the experience of using active learning in an online course for multipliers of Basic Education, during the beginning of remote teaching, in the Recife municipal school system. In this research, we had thirty participants who are in a course developed on the Google Classroom platform with the theme of Active learning methodologies, with a total of 42 hours of dedication. This article is characterized as a qualitative, descriptive study, of the experience report type. As main results, we found that most participants claim to have knowledge of the term active learning methodologies, most of them do not know the types of active methodologies existent, or even confuse the term active approach with teaching or research methodology or even with applications, tools and technologies used in the classes. The results found reinforce the importance of promoting training for teachers of various education networks, so that equity in the various levels of education can be a reality.

KEYWORDS: Active Learning. Active Methodologies. Basic Education.
INTRODUCTION

The Lab Educat research group develops activities at the Federal University of Pernambuco, studying and researching about diverse educational innovations such as the use of Digital Information and Communication Technologies (DICT), active methodologies, didactic choreographies, institutional choreographies, student engagement, teacher engagement, etc. Within our research we have always been concerned about the fact that, even before the pandemic period that changed everything we were used to; as educators, basic education lived stuck in a traditional teaching routine, in which teachers worked as transmitters and students as passive and submissive.

However, the vision we are building through our research, at least since 2018, is that education should be challenging, engaging students in analysis, synthesis, and argumentation, aiming for an active posture in learning. This active posture is mostly observed in private schools, where teachers are expected to expand their approaches, but, this in fact is difficult to achieve in most public schools.

In 2019, we had the opportunity to take part of a selection promoted in a partnership between the Lemann Foundation and Columbia University, in the United States, which was looking for teams of Brazilian researchers interested and willing to promote research that would suggest solutions precisely for this inequity in basic education, issue that we, researchers from Lab Educat, were already concerned. We managed to be one of the six Brazilian teams contemplated through the theme "Understanding the power and potential of active pedagogical approaches for teacher engagement in public school contexts" and we started to work in 2019, in the municipal school system of the city of Recife, in Pernambuco.

The initial stage of our research occurred through an exploratory study, in which we identified the deficit that teachers had in relation to more active learning practices and therefore, we decided that a pilot course on active learning methodologies would be carried out so that teachers could have a more substantial contact with the theme, offering it initially for two groups: i) For teachers who are in the classroom; ii) For teachers called multipliers. The course was planned to take place in the beginning of the 2020 school year, in a classroom setting, but due to the outbreak of the Covid 19 Pandemic in our country, causing all schools to be closed, we decided together with those responsible for the Department of Education that the course would be held remotely using the Google Classroom platform, which was the most accessible one we had at the time.

What are these active methodologies, anyway? Moran (2018) argues that active learning is reflective and deep, as it arises from a practice and makes sense within the context of the student. Valença and Tostes (2019) suggest that we learn better when we study something that makes sense to us, associated with a real or mental experience. Active learning, then, is brought about by the use of active methodologies, which Moran (2018, p. 4) defines as: "Teaching strategies centered on the effective participation of students in the construction of the learning process in a flexible, interconnected, and blended way."

To make this participation possible, the student needs to realize that the topic taught makes sense within his or her reality. Also according to Morán (2018), the learning process is active when three important characteristics are mentioned: personalization, sharing and tutoring.
Personalization corresponds to paths that make sense for each of the students, engaging them in the learning process, making them free and autonomous, also making teaching more equitable. Teachers and schools play a key role in this context, as they must point out the students' interests in search of helping them build this active and deep learning. Moran points out that

(...) Learning is most meaningful when we motivate students intimately, when they find meaning in the activities we propose, when we consult their deep motivations, when they engage in projects to which they bring contributions, and when there is dialogue about the activities and how to carry them out. (MORAN, 2018, p. 6).

Sharing is related to share knowledge with people who are part of the student's circle, with the aim of broadening ideas, making discoveries, and even finding solutions to a proposed problem. Tutoring, on the other hand, allows teachers and mentors to function as curators of the student learning process, designing the paths through which students must pass, problematizing and guiding the paths to be taken. The teacher here is a path designer (MORAN, 2018), outlining individual and group activities, seeking creative, open, and entrepreneurial learning. Educational institutions that choose to work under active guidance, need to have more flexible, blended curricula (that integrate spaces and activities) and with a "diagnostic, formative and mediating" assessment (MORAN, 2018, p 10).

Thus, active methodologies are those that provide a learning protagonist in the teaching process, allowing students to be more effective and aware of their role in their learning process.

As we have already presented, there are several types of active methodologies, even they are already being subdivided, Lovato et al (2018) group them in: i) Cooperative active methodologies, which are those in which students help and self-evaluate themselves in order to achieve goals set by the teacher, who does not exercise control or influence over the activity; ii) Collaborative active methodologies, in which "(...) there are no hierarchical relationships. Group members are able to listen, share ideas and work together, enabling interaction among them" (LOVATO et al, 2018, p.160). In this type of active methodology, the teacher acts in a more controlled way, since the phases of work are totally organized by him.

However, we will work here the types of active methodologies presented during our remote course, which we named “Active Learning in Basic Education”, which are: i) Flipped Classroom; ii) Problem-Based Learning; iii) Project-Based Learning; iv) Gamification; v) Case Studies; vi) Maker Learning; vii) Storytelling; and viii) Design Thinking.

**FLIPPED CLASSROOM**

Seeking to improve the learning of their students, who were not progressing within the traditional logic, teachers Bergman and Sams (2012) began to think of ways to engage their students, making the whole educational context more autonomous and active.
It was in order to solve this problem that the flipped classroom emerged, in which the class order as we know it, with students listening to the teacher’s content and then making an activity (usually at home) aiming to put into practice what was studied, is inverted: With the teacher’s guidance, students usually study the content to be worked on at home, before the face-to-face class, and in the classroom, they put into practice what they have learned, through exercises that promote questioning, discussions, and practical activities, aiming at a more active learning.

Bergman and Sams (2012) began the application of the methodology with the inversion performed through recorded videos that were watched by students at home, while in the face-to-face moment the contents were discussed and followed by a guided practice that could be individual or in groups. However, this view was expanded by Moran (2018), when he highlights that the recorded video can be replaced by research conducted by students, guided by references given by the teacher, such as a motivating question, the reading of a text, the use of a podcast, etc.

Some important points about this approach: 1) Inversion is the most common method, but it cannot be the only one, as aforementioned there are numerous possibilities, ranging from surveys to motivational questions; 2) The focus of inversion is student engagement; 3) The feedback given to students needs to be immediate; 4) There are some conditions for the application of the methodology to be successful, among them a high level of planning by the teacher, who must outline the objectives of the activity and align them with the planned assessments; 5) The combination with other active methodologies, which makes the flipped classroom even more engaging.

PROBLEM-BASED LEARNING

The Problem Based Learning (PBL) is a well-conceived methodological proposal, with a solid base and designed characteristics and structures. This proposal moves, as a whole, the organization of the course, school or discipline that intends to use such model and, as with every proposal of active methodology, the student becomes the center of his or her learning process.

Segura and Kalhil (2015, p.91) state that "an important aspect developed by the student in this teaching design concerns autonomy", and continue highlighting some other aspects, such as the possibility of monitoring the students’ activities, with formative and summative assessments throughout the process, and the need to understand all the relevant structures that one should know and follow when applying ABP as a teaching methodology (SEGURA; KALHIL, 2015).

PROJECT-BASED LEARNING

According to Barbosa and Moura (2013), projects are undertakings with a determined deadline of closure, which have defined objectives and that were identified from a problem, i.e., unlike what happens in problem-based learning, which seeks the causes of a particular problem to be solved, the Project-Based Learning (or PBL) is in search of a specific solution to a particular problem.
In this methodology, students meet tasks that usually have a connection to their life outside the classroom, and in which they get involved with interdisciplinary issues. They can work alone or in teams, with the principle of collaborative learning.

There are several ways to differentiate the projects developed within this approach, according to Moran (2018):

1. Duration: They can be of short duration (one or two weeks, developed within the classroom) or of long duration (semester or annual, being more complex, with interconnected and interdisciplinary themes).

2. Models: Exercise - Project that takes place within a discipline; Component - Project that is not linked to any discipline; Approach - Project that is interdisciplinary; Curriculum - Project in which the disciplines serve the project and not the other way around.

3. Objective: Constructive - that seeks something innovative; Investigative - which involves scientific research techniques; Explanatory - when it is in search of answering certain questions.

The teacher who chooses to work with this methodology needs to analyze their context, and thus select the best type of project that fits the reality of their students, mainly.

GAMIFICATION

Gamification is a trend in corporate education that has been adopted in recent years in all educational modalities. Its main objective is active learning, triggered through student engagement and a logic belonging to the games. According to Moran (2018), scripted classes with the language of games are "important strategies of enchantment and motivation for a faster learning and closer to real life" (p. 21).

According to Kapp (2012), the logic of the games applied in gamified classes has 8 characteristics, namely: rules; competition (which can be presented in an approach that leads to competition or cooperation, this will vary according to what the teacher decides); Reward; Levels; Narratives; Scoring; Differentiated paths; and Feedback. Whether or not all the steps are adopted will depend on the context in which the teacher operates and the profile of the students taking part in the gamified class.

CASE STUDY

As the name implies, the case study is related to the involvement of students in studies of a particular case, which may be a real case or a fictional case, and it does not necessarily have to have a single outcome, determined path or exact answer. As stated by Camargo and Daros:

This strategy stands out for its capacity to raise issues for debate and to have elements that allow for a position to be taken and differentiated solutions to be defined. A good case does not present a single answer, but possible solutions to the same problem. (CAMARGO; DAROS, 2018, p. 66).
Also, according to the authors mentioned above, as a pedagogical strategy, the case study has a very instigating characteristic of investigation, and can bring to the classroom very real situations, with the purpose of open solutions to various issues of our reality, as well as can bring only fictional cases of more reflective nature.

Complementing the understanding of such active methodology, Segura and Kalhil (2015, p.93) state that the case study is "[...] a teaching and research tool suitable to lead the student to understand, explore and describe the events of complex contexts, in which a large number of variables are involved". Thus, the student will need to activate several internal devices to be able to analyze the problem, among them, the most important is the investigation.

**MAKER LEARNING**

*Maker* learning is an active methodology that aims to promote learning focused on “experimenting” on “doing”, as the translation of the term *maker* already suggests. The student becomes the protagonist in the definition and elaboration of what will be produced, and the teacher plays the role of a mentor who plans and encourages reflection on what is being worked, empowering, and motivating these students, also through constant *feedback*, giving them time to imagine, design and bring to practice what was idealized. It is important to point out that this type of methodology promotes interdisciplinarity, the development of socioemotional skills and autonomy.

According to Filatro and Cavalcanti (2018), the most common way to apply maker learning involves a space totally dedicated to this type of learning, a *maker* lab, which is better known as *Fab Labs* or *Fabrication laboratory*. In it, there should be equipment such as laser cutting machine, 3-D printers and vinyl cutting machines (in the case of more affluent contexts). However, we know that this is not the reality of schools, especially public ones, here in Brazil, and so it is possible to make use of recyclable material (for example: newspaper, cardboard, PET bottles), mock-ups, carpentry products, creation and editing of videos on mobile phones, community garden at school, among others, providing the implementation of this methodology.

This practice is linked to DIY (*do it yourself*), being totally in line with the profile of 21st century students, who give preference to more practical activities rather than more traditional tasks.

**STORYTELLING**

We all have fond memories of stories told by our grandparents, which promoted moments of togetherness, sharing of experiences and lessons that endure in our imagination for a long time.

This happens because, according to Bruner (1986), the probability of memorization of some content through a story is 20 times higher than when this same content is presented by other inputs. This is the reason why we remember the stories told by our grandmother in a conversation circle, when there was a
blackout in our neighborhood, or those your mother used to tell about when you got into some big mischief as a child.

Stories are also used as a tool for the expansion of meanings, which can make people more integral, supportive and citizens. (PERES; NEVES; BORGES, 2018). And it is because of these benefits that storytelling worked as the main tool to teach key principles of society (religion and politics, for example) in cultures that did not have written language.

This technique is still used in school, especially in early childhood education, as a form of entertainment and as a tool to promote critical thinking:

The child when listening to stories, can perceive the differences that show the good and bad characters, ugly and beautiful, powerful, and weak, facilitates the child to understand certain basic values of human conduct or social coexistence. Through them the child will incorporate values that have always governed human life. (PUIG, 1998, p. 33).

With all these benefits, it did not take long for the technique to be transformed, and it is also present in several contexts, in which the stimulation of processes that build meanings has been increasingly taken into consideration to recover and value the reproduction of culture, values and meanings of the world. And that is how storytelling becomes storytelling, as a tool for active learning.

It is important to highlight that storytelling and storytelling are different techniques: the first is performed also outside a didactic context, seeking the entertainment of spectators or the introduction of society's values (in the case of storytelling in early childhood education), the second is used as "strategy in a broader pedagogical environment of active learning". (VALENÇA; TOSTES, 2019, p.223). In storytelling, the spectators (or students) may or may not interact, depending very much on the theme being told. While in the application of storytelling, it is expected that those who watch participate in a more active way, in search of the construction of the learning objective delimited by the teacher during the planning of the activity.

For the active participation of the student to happen, he needs to realize that that theme makes sense within his reality, and the storytelling that according to Valença and Tostes (2019) is "[...] a practice that uses memory resources, importance of folklore, transmission of values and use of characters that can be political, cultural, or religious leaders", is in line with this purpose.

It is important to point out that, when we talk about engagement, we are not referring to teacher motivation. Motivation and engagement are different things. While motivation is something individual, more related to personal reasons and planning what is necessary for the accomplishment of a task (Silveira 2017), engagement may involve a sense of collectivity, the effort to perform an action or, as Fredricks, Blumenfeld, and Paris (2004) attest, being engaged means being actively committed to the accomplishment of a task. The engaged teacher performs their tasks more effectively, promoting student engagement as well.
DESIGN THINKING

Design Thinking (DT) is, according to Pinheiro, Alt and Pontes (2012) a new way of reasoning and approaching problems, which emerged in the early 1990s. The literal translation means “the way of thinking of the design” and makes use of the words empathy, collaboration and experimentation as principles.

Jonassen (1994) began to conceive the students as designers, when he brought the vision that technology could be used as a tool to promote new learning. Rodrigues (2020) defines DT as a strategy that causes students to expose their ideas, going through processes typical of the design area, in search of innovative creations, being collaborative, working in an experimental character, and with mistakes also being part of the process.

According to him, the application of DT has five stages, namely: i) Discovery, in which one gets in touch with the proposed problem/challenge, and then research preparation is conducted; ii) Interpretation, in which participants engage in sessions to tell the story behind the problem/challenge; iii) Ideation, a stage in which ideas are generated and redefined; iv) Experimentation, in which prototypes are produced and feedback is also sought; and finally, v) Evolution, in which learning is evaluated and the design of the next stages occurs.

According to the learning objective, it is possible to use DT both in the search for the solution of a problem (including it can be combined with approaches such as problem-based learning), and in guiding the development of projects, collaborating with the application of project-based learning.

In this article, we aim to present an experience report of the realization of our course "Learning in basic education", which was developed through a methodology that provided for the involvement of participants, considering their prior knowledge and experience. To this end, we made use of the active methodologies themselves, such as rotation by stations and gamification, which were applied along with moments of dialogue and sharing of experiences among all involved.

METHODOLOGY

This article is characterized as a qualitative, descriptive study, of experience report type. The qualitative study, according to Junior and Passos:

[...] assumes the existence of a subjective relationship between researcher and object/phenomenon of study that cannot be addressed exclusively through numbers. It resorts to the interpretation of phenomena and the perception of the researcher to perform the description of them, preferably through the inductive process, i.e., from singularity to plurality. (JUNIOR; PASSOS, 2020, p. 19-20).

And it is seeking this subjective relationship, that we describe our experience, starting from a singular report to plurality, and the latter provides, when presented in detail, a whole process, and that is important for the main theme of our study.

The objective of this article is to report the experience of using active learning in a fully online course for multipliers of Basic Education during the beginning of remote teaching, in the municipal network of Recife. Thus, in relation to the
objective, this proposal is of the descriptive type which, according to Junior and Passos (2020, p.17), is one that "aims to describe the characteristics of a given population or phenomenon or the establishment of relationships between variables". In the case of the report, we will describe in detail the whole process of preparation, objectives, development, and results of a specific course, conducted with selected subjects.

As initially mentioned, the course reported here arose after our group was approved in a selection of Brazilian projects to be funded by a partnership of the Lemann Foundation and Columbia University, more specifically by Teachers College, in the United States. The main theme of the project is: "Researching, teaching and learning: an equity imperative for teacher education". Six projects were approved, including ours, initially entitled: "Understanding the Power and Potential of Active Pedagogical Approaches to Teacher Engagement Across Public School Contexts". Within this proposal, we did an initial work as a pilot project, and thus developed a course that would initially be face-to-face, on active methodologies for teachers of the municipal public network of Recife. And it is precisely about this course that we will report in this article.

The course was planned as part of the pilot project, with the objective of analyzing how teachers engage in the teaching and learning process and whether the methodology used, in this case, the active methodologies, influence this engagement or not. Thus, the course was designed to be applied in person, in early 2020, however, the situation of school closure due to the Covid-19 pandemic led us to a realignment of our course proposal, and we decided to develop it in the online model. At first, we wanted to do only one class with 30 vacancies for elementary school teachers from the municipal schools of greater Recife. However, the demand and acceptance were very big, because the teachers needed such formation in face of the remote teaching development in our country, and for this demand, we decided to make two course rooms, with 30 vacancies each, being one for teachers and the other for multipliers of the municipal network of Recife. It is the class of multipliers that we will deal with in this report.

The course developed in Google Classroom platform, had a total of 42 hours of dedication of the participants (2 hours synchronous - live, and 40 hours asynchronous, in the virtual environment, with videos, podcasts and handouts). Within the 42 hours, there was also individual assistance through email, WhatsApp group and meetings on Google Meet when necessary, always to serve teachers and multipliers in the best way, following the proposal of participant intervention, methodological basis of our research as a whole. In the course design, we had two mandatory weeks with proposed activities for accumulating grades, with a minimum of 70% of the activities must be performed to generate a certificate for the participant. We also had an extra week, for those who wanted to expand the knowledge about the use of Digital Information and Communication Technologies (ICT), use of tools such as Kahoot, Mentimeter and others, to add to the use of active methodologies mandatory in the course.

In the first week, from July 10 to 15, 2020, we developed: videos; podcasts; presentations with the general themes of environment in Google Classroom platform; general schedule of the course; theoretical foundation on what are the Active Methodologies, with the use of diverse material; and some activities in forum and in individual construction in Google Docs, about the concept and the understanding of the class about the Active Methodologies.
In the second week, from 17 to 25 July, we developed a group activity, each group should choose an active methodology, from those available at this stage (Maker Culture, Gamification, Problem-based learning, Storytelling, Case study, Design Thinking and flipped classroom), to deepen and develop activities for presentation in the classroom. Each group would also view their peers' work to learn about all the methodologies applied this week. In each methodology, we left a network of information available, such as texts, videos, and podcasts so that they could study and deepen their knowledge of the subject.

The extra week, from July 27 to 31, 2021, was developed to expand the sources on the use of ICT in Education, and on the use of specific tools such as Kahoot and Mentimeter for interaction with active methodologies. This part of the course was extra and generated an additional 20 hours in the certificate of those who chose to participate.

In the multipliers class we had a total of 31 participants, 23 of whom managed to finish the course with 42 hours and, of these, 9 also did the extra part of the course with an additional 20 hours of certification. The numbers in this class were lower compared to that of teachers, which had 33 enrolled, 30 with 42-hour certification, of which 21 finished the extra week of the course.

DATA ANALYSIS AND DISCUSSION

During the course, several tools were used to develop the activities with the multipliers, such as tasks and forms, which we will analyze to give a little of our contribution to the course and the participation of the multipliers in the process. We will also discuss the difficulties and positive points we encountered as mediators in the process.

We emphasize that the course was developed in a complex period for world education, with the advancement of Covid-19 and with the use of remote emergency teaching implanted in our reality so suddenly and unprepared. During the period of the online course, the teachers at the Recife municipal school system were still in the process of reorganizing and studying the next steps, at this time without face-to-face or remote classes. Teachers, coordinators, and principals were rightly participating in trainings and meetings, seeking a resolution of the teaching situation in the municipal educational base. In this context, we entered as one of the important trainings for the network, and therefore, we opened a class of multipliers so that teachers, interns, technicians, and coordinators of the network could enroll, to pass on the information of the course in network.

Perhaps this is one of the reasons why the number of graduates of this class was lower compared to the other, which had a total of almost 100% graduated and certified in the course. The class of multipliers had a percentage of 74.2% of participants completing the normal course, and only 29% chose to take the extra part. With most participants from other areas of education and with other positions, especially coordinators and principals, it was difficult for everyone to have a total dedication to the course, in the face of so many extra demands in that current pandemic situation, and the search for solutions for the educational network in question.

There are several positive points with the application of this course for the multipliers:
1. Not only teachers would be taking the course.
2. Reach at scale for each teacher or group of teachers trained through the practice of the multipliers involved in the course.
3. Dissemination of the practices of active methodologies not only for some teachers, but also for coordinators and directors involved in the course.
4. Differentiated opportunity to choose varied methodologies according to the reality of those who the multipliers can reach.

In all, eight working groups were formed by lottery with the use of the ClassDojo application, and each group had the opportunity to choose a specific methodology for the deepening and presentation. Each group had between three and four participants, and after doing a deepening in their methodology, they had a week to attach their presentations in Classroom, so that everyone could also learn. Below, in Chart 1, we have the arrangement of the groups and the methodology adopted by each.

Chart 1 – Groups and methodologies studied and presented by the class of multipliers

<table>
<thead>
<tr>
<th>Group</th>
<th>Group Name</th>
<th>Methodology adopted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ColaborAtivas</td>
<td>Maker Culture</td>
</tr>
<tr>
<td>2</td>
<td>Engagement</td>
<td>Gamification</td>
</tr>
<tr>
<td>3</td>
<td>Activists</td>
<td>Problem Based Learning</td>
</tr>
<tr>
<td>4</td>
<td>SuperAction</td>
<td>Project Based Learning</td>
</tr>
<tr>
<td>5</td>
<td>24/3</td>
<td>Storytelling</td>
</tr>
<tr>
<td>6</td>
<td>InovAction 2</td>
<td>Case Study</td>
</tr>
<tr>
<td>7</td>
<td>Innovation</td>
<td>Design Thinking</td>
</tr>
<tr>
<td>8</td>
<td>MotivAtion</td>
<td>Inverted Classroom</td>
</tr>
</tbody>
</table>

Source: Authors (2021).

All groups presented the specific methodology activity, but not all participants in each group actively participated, or even responded to the individual activities proposed in the course, such as participation in the live moment, responses to the initial form on teacher engagement and various activities within each week of the course. This lack of participation resulted in a completion rate of less than 75% of those enrolled.

In the form applied in the first week, as a mandatory activity, we noticed that many participants had already heard about Active Methodologies, as shown in Figure 1.
However, despite many respondents stating knowledge of the term active methodologies, we realized, with another question on the form, that a large part of the respondents does not know the types of active methodologies that exist, or even confuse the term active methodology with teaching or research methodology, or even with applications, tools and technologies used in the classroom. Such understandings, sometimes superficial and erroneous, go against what is understood as active methodology, as "teaching strategies focused on the effective participation of students" (MORAN, 2018, p. 4), as well as the characteristics that compose them (MORAN, 2017).

Answers such as "debates, workshops, documentaries, scientific research, student shows, workshops and exchange of ideas" were recurrent when we asked what active methodologies the participants knew. Such information only reaffirmed how necessary it is to promote training courses like these, aiming to disseminate teaching methodologies that can contribute to changing the reality of Brazilian schools. Providing a profitable knowledge and conceptually based on active methodologies, and beyond, its possibilities of use, such as the flipped classroom (BERGMAN; SAMS, 2012), Problem-Based Learning (SEGURA; KALHIL, 2015), Project-Based Learning (BARBOSA; MOURA, 2013), Gamification (MORAN, 2018), Case Studies (CAMARGO; DAROS, 2018), Maker Learning (FILATRO; CAVALCANTI, 2018), Storytelling (VALENÇA; TOSTES, 2018), and Designer Thinking (PINHEIRO; ALT; PONTES, 2012), several of these, incrementing on technologies for their use.

FINAL CONSIDERATIONS

It is increasingly necessary to promote training for teachers of the various education networks throughout the country, so that the situation of equity in the various levels of education can be a reality. We realized with our pilot research, how much these professionals need training to better know the active methodologies and the use of information and communication technologies for a more participatory, active, and innovative education. As Moran states:

Active learning increases our cognitive flexibility, which is the ability to alternate and perform different tasks, mental operations, or objectives and...
to adapt to unexpected situations, overcoming rigid mental models and inefficient automatisms. (MORAN, 2018, p. 39).

And it was within this proposal that we set up the course of the first stage of the pilot project, and extended it to this specific group of multipliers, so that what was discussed and promoted in the course could be replicated in other schools, networks and for teachers who were not part of these two initial groups.

Our project does not end at this stage, and on a second occasion, we have planned to continue the research, a larger remote moment, with the same classes, but with a more personalized and personified approach to each reality of each group enrolled. It is important to have greater feedback with the application of other questionnaires to know what was developed from the proposed course, and improve the methodologies that the participants most identified, to use more technological resources and reach their students more actively, along with a follow-up and monitoring in a process of curatorship and mentorship.

We propose for future research, that trainings in this model, or in others, are developed and promoted more assiduously by us, teacher researchers, because besides promoting an exchange of information and knowledge, we can still improve data for research in various areas and themes of education in our country.

We take this opportunity to thank the Lemann Foundation, Columbia University and Teachers College for making this research possible through the funding provided to us and applied to our project.
APRENDIZAGEM ATIVA NA EDUCAÇÃO BÁSICA: UM RELATO DE EXPERIÊNCIA NO ENSINO REMOTO

RESUMO

A inquietação com a maneira como a educação básica parece estar atrelada em uma rotina de ensino tradicional, na qual os professores trabalham como transmissores de conhecimento e os estudantes como passivos e submissos no processo de aprendizagem, motivou a pesquisa que deu origem a este artigo. E que tem por objetivo relatar a experiência do uso da aprendizagem ativa em um curso totalmente online para multiplicadores da Educação Básica, durante o início do ensino remoto, na rede municipal de ensino de Recife. Nesta pesquisa tivemos 30 sujeitos que participaram de um curso desenvolvido na plataforma Google Classroom com a temática de Metodologias Ativas, com um total de 42 horas de dedicação. O presente artigo se caracteriza como um estudo qualitativo, descritivo, do tipo relato de experiência. Como resultados principais, verificamos que uma maioria dos participantes afirmam ter conhecimento do termo metodologias ativas, mas que na realidade grande parte não conhece os tipos de metodologias ativas que existem, ou mesmo confundem o termo metodologia ativa com metodologia de ensino ou de pesquisa ou mesmo com aplicativos, ferramentas e tecnologias usadas nas aulas. Os resultados encontrados reforçam a importância de se promover formações para professores das várias redes de ensino, para que a equidade nos diversos níveis de ensino possa ser uma realidade possível.

NOTES

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