

Education, teacher training and multiliteracies: articulating projects of research-training*

Obdália Santana Ferraz Silva¹

ORCID: 0000-0002-2638-0529

Úrsula Cunha Anecleto²

ORCID: 0000-0002-3027-9474

Sirlaine Pereira Nascimento dos Santos³

ORCID: 0000-0001-9177-8261

Abstract

This study aims to discuss teacher training, within the scope of Basic Education, creating opportunities for teachers to (re)think and (res)ignify their pedagogical practices, considering the current sociocultural context, to demand professionals who appropriate the diversity of languages, cultures and hypermedia that make up multiliteracies. It is a macro project that articulates different projects, developed in postgraduate programs (*stricto sensu*) of a public university, which raise themes such as cultural diversity, multimodality, multi-semiosis, digital convergence, articulation between teaching, learning and research, within the scope of teacher training. In this context the main question of this study focusses on the following way: How teachers have been prepared to work on the different types of existing literacies, even which involve digital technologies, related to the demands and challenges proposed by the (multi) literacies? As methodology, we opted for research-training, collaborative, through formative meetings based on reflective sessions. Results of researches carried out between 2017 and 2018 lead to the conclusion that public projects and policies aimed at teacher training will need, in the face of given changes by the digital culture and multiliteracies, to think about teaching training and pedagogical practices, based on a teaching conception that, effectively, establish a relationship between knowledge and student's daily life; between human development processes and the possibilities of learning offered by the literate culture agencies, considering the guidelines for an inclusion of the diversity as a basic principle of citizenship.

Keywords

Teacher training – Literacies – Multiliteracies – Research-training – Digital culture.

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1- Universidade do Estado da Bahia (UNEB). Salvador, Bahia, Brasil. Contato: bedaferraz@hotmail.com.

2- Universidade Estadual de Feira de Santana (UEFS). Feira de Santana, Bahia, Brasil. Contato: ursula.cunha@hotmail.com.

3- Prefeitura Municipal de Salvador, Secretaria Municipal de Educação. Salvador, Bahia, Brasil. Universidade do Estado da Bahia (PPGEDUC/UNEB). Salvador, Bahia, Brasil. Contato: sirlainenascimento@yahoo.com.br.



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Pedagogical research and practice: paths and shortcuts, from the theoretical to the empirical field

Digital Technologies (DT) have had a great influence on the way of thinking and understanding the world; of communication and interaction between subjects; entertainment, learning and cultural manifestations. The changes promoted by DT invite us to discuss critically their challenges and their potentials for education, aiming at the re-signification and expansion of reading and writing practices, based on the principles of multiliteracies pedagogy, which invites us to rethink pedagogical actions and teacher training in the cyberculture context.

From this perspective, considering the transformations and challenges proposed by DT and the multiliteracies pedagogy in teacher training, we have developed research involving Basic Education teachers, within the scope of a research group from a public university - in two postgraduate programs. to discuss literacy practices that Basic Education teachers have developed in their pedagogical praxis⁴, in the multiliteracies context, expanded by DT.

The studies intend to deepen debates about teacher training and pedagogical practices, based on a teaching concept that contemplates human development processes and learning possibilities offered by literate culture agencies, to attend to the demands of educational proposals, in Brazil, according to diversity as a basic principle of citizenship. Among the projects developed and under development, we will deal here with research carried out in 2017 and 2018 whose focus is teacher training in Basic Education.

The teaching and learning scenarios where we are involved in, as teachers, encourage and move us to research into the following questions: what challenges and contributions does the multiliteracies pedagogy bring to the Basic Education teachers' training, in the digital culture context, aiming to establish a pedagogical organization of confrontation between the fragmentation and hierarchy of knowledge, for an integrated and integrative approach of the areas of knowledge? How to enable the construction of a multi-literate pedagogical practice that contributes to enhance the learning of elementary school students through creative / collaborative actions that involve the various existing literacies, including those related to DT?

The commitment to teacher training leads us to the understanding that we cannot think about the classroom without considering the paths of training actions that contemplate the intense social demands of reading and writing, considering the transformations engendered by linguistic and cultural diversity and the way in which people communicate, produce and construct knowledge in the digital technological society (COPE; KALANTZIS, 2000).

The teacher training has as challenge the construction of proposals that give professors the possibility to be multiliterate, trained, to construct knowledge that enable them to develop pedagogical activities that involve actions mediated by DT, based on dynamics and an interactivity that contribute to re-signify literacies practices in Basic

4- *Praxis* is actually a theoretical-practical activity; that is, it has an ideal, theoretical side, and a material side, properly practical, with the particularity that only partially, through a process of abstraction, we can separate, isolate one from the other". (SÁNCHEZ VÁZQUEZ, 2011, p. 241).

Education. Here, we refer to changes that require educators to reflect on practices that are outlined in a context of pluricultural linguistic manifestations and invite us to discuss, in a broader way, literacies and multiliteracies, understood here as interrelated and non-exclusive processes.

This study represents, therefore, a shared need to socialize research carried out within the scope of the *stricto sensu* postgraduate program, in partnership with schools in the countryside and in the capital. We hope to contribute to critical reflection and debate regarding teacher training and multiliteracies, in the Brazilian educational context, in which teaching and learning of reading and writing are understood, in addition to the physical classroom, for linguistic-communicative function for the formation of discursive subjects.

From text to context: theoretical and methodological reflections

As a theoretical basis, we base this study on the perspective of language as a mediator between individual and history, in which writing is understood as an interactive, social, historical, and dialogical process (BAKHTIN, 2004). In the field of teacher training, we emphasize the importance of teaching knowledge for the professional development of teachers (PIMENTA; GHEDIN, 2002). We will deal with the meanings and conceptions of literacy as a state or condition of the one who appropriates writing (SOARES, 2004; KLEIMAN, 2005); literacy related to the transformations occurred in a society centered on writing with its multiple functionalities, with demands that the subjects need to attend to (TFOUNI, 2010); literacy as a social practice, therefore varying according to contexts (STREET, 2012, 2014). We will discuss the conception of multiliteracies related to linguistic and cultural diversity (NLG, 2000; COPE; KALANTZIS, 2000; ROJO, 2009, 2012, 2013; ROJO; BARBOSA, 2015); digital literacy as a medium for individuation and, at the same time, space for collective representations (IBIAPIANA; RIBEIRO; FERREIRA, 2007), which pretends a construction of students' communicative competence.

Literacies and multiliteracies practices in teacher training: a means for the construction of the communicative competence

The pedagogical practices of reading and writing carried out in the classroom will make more sense for students if these practices are based on the development of communicative competence, on reflective training and the collaborative teaching and learning process, aiming at promoting critical thinking, intensifying interaction between students and teachers. We know that, in a literate society, in which writing has become a means of interaction between subjects and reading a form of understanding the world, these practices (both in print and digital media) must guarantee the sociocultural and cognitive development of the apprentice (BAZERMAN, 2007), to contribute to the construction of the communicative competence (HYMES, 2009) of this subject.

Literacy, in this context, represents a process of social and historical learning of reading and writing, emerging "as a way of explaining the impact of writing in all spheres of activities and not only in school activities" (KLEIMAN, 2005, p. 6). In this sense we

expand the possibilities of the investigations of the research group in which we belong to, considering that studies on literacy practices presuppose a diverse set of situated social practices that involve a system of signs, such as writing or other modalities, for producing meanings (ROJO, 2009).

The research we carry out authorizes us to interpret that literacy practices in different spheres, both school and out-of-school, have relevant social objectives for the participants in the situation and have social and cultural consequences that are collective. To be literate, then:

[...] is to participate in a set of social practices in which meanings and senses of certain culturally encoded contents (traditionally, but not exclusively, written texts) are generated, disputed, negotiated, and transformed. (BUZATO, 2010, p. 53).

These are new knowledge provided by cyberculture that require the learning of other literacies, besides the school one, because the actions that involve reading and writing, today, demand the use of different languages, new styles of reasoning and knowledge, given the multiplicity of meanings attributed to literacy.

Considering that “[...] text producers increasingly and deliberately use a range of modes of representation and communication that coexist within a given text” (KRESS; LEITE-GARCIA; VAN LEUWEEN, 2000, p. 374, our translation), the school, as a literacies and multi-referential agency, will have the role of implementing a set of reading and writing practices - whether or not they are valued, whether local or global - that cover different social contexts, contributing, thus, for the expansion of the communicative competence of its students. Therefore, Ferreira (2018, p. 43) reminds us that:

[...] the reading process, in a multimedia society, should not be restricted to verbal elements, that is, the visual elements (images, sounds, movements, colors, diagramming, formats and highlights) must be considered as constitutive elements that will contribute, in a significant way, to form the communicative act.

A communicative competence presupposes an expansion of linguistic knowledge in relation to reading and writing and considers the variation of language and social and cultural norms that are part of communicative contexts:

[...] the acquisition of this type of competence is obviously enriched by social experience, needs and motives, and questions in action that is itself a renewed source of motives, needs, experiences (HYMES, 2009, p. 86).

Due to its diversity of textual forms, communicative competence is a kind of “ethnography of symbolic forms” (HYMES, 2009, p. 94): representation of the variety of genres, languages and textual modes that are interrelated with the communicative needs of a society. In the research we carry out, we understand communicative competence as a

system of linguistic knowledge and communicative skills, required in textual production processes, in various literacies practices.

We focus on investigating how these literate actions take place in the school space from the perspective of ideological literacy (STREET, 2014): writing practices associated with the social, cultural, and power structure of society. So, we understand the subject as a social actor, who wants to give meaning to his life experiences, to value his creativity and cultural uniqueness, through the diversity of language, semiosis, and media, that is, the multiliteracies.

By characterizing literacies as multiple, we are referring to different cultures, as opposed to a unique literacy and culture; and when dealing with multiliteracies, we talk about the various forms of literacy that are associated with channels or modes of communication in which reading and writing practices are performed – computer literacy, visual literacy. Street (2012) explains to us that *The New London Group (NLG)*, by presenting the notion of multiliteracies, “[...] is especially interested in channels and modes of communication that can be termed ‘literacy’”.⁵(STREET, 2012, p. 73, author’s marks)

The conception of multiliteracies that supports our research is based on the idea presented by the NLG (2000) and expands to cover aspects essential to the understanding of discursive orders today: the multiplicity of language, semiosis and media that characterize the texts that circulate in contemporaneity, and the cultural multiplicity of urban centers (ROJO, 2012), as we organize below.

Figure 1 - Concepts that constitute multiliteracies



Source: adapted from Borba; Aragon (2012).

The multiliteracies involve hypermedia-literacies, which weave from the combination of multiple cultures and the different semiotic modalities that expand with TD and multiply in hypertextual nodes that relate meanings and actions, which need to be re-signified by teachers and students, from a critical reading. These are multimodal and multicultural semiotic practices, from which, when we appropriate, we experience new relationships, new forms of humanity, other communication practices and other social networks. These practices challenge us to think new paradigms for teaching and learning.

The multiplicity of languages and the multimodal and multi-semiotic resources that have circulated in increasingly broad ecosocial networks challenge the basic education teacher to be multiliterate, from a responsive personal and professional training that allows him to move through the discursive-textual and hypertextual interactive practices demanded by the sociocultural context in which he lives. According to Street (2014),

5- New London Group

literacies are ideological, vary in time and space, as they are interconnected to the social context, cultural practices, and existing power relations.

Multiple literacies are produced with the evolution of DT, from which cultural models emerge, representing the very experiences of subjects in their environment, in view of their communication systems, production and social relations in network. Thus, in the symbiosis of man and digital technology, arises the cyberculture that is the technological infrastructure, but also the human beings who, connected, navigate in the ocean universe of information; a set of techniques and, also, practices, attitudes, behaviors, values, thoughts that are collectively developed in cyberspace (LÉVY, 1999).

In cyberculture, literacies advance beyond the printed and become integral parts of digital culture; they constitute social practices, as contemporary processes that format texts in discursive genres, between them by various semiosis, which integrate the new literacies. This⁶ is how the multiliteracies that concern the multiplicity – cultural and semiotic – of literate practices of networked society are configured.

The principles of multiliteracies, based on a contextualized and interdisciplinary teaching, presuppose a pedagogical work that considers the various cultural manifestations present in the classroom, from the elaboration of activities involving multi-semiotic and multimodal literacy processes, based on changes in theoretical and practical perspectives.⁷

Cope and Kalantzis (2000, p. 18, our translation) signal that the proposal of a pedagogy of multiliteracies is to develop “[...] an epistemology of pluralism that provides access without people having to erase or leave behind their different subjectivities.” This means considering the multiple and diverse everyday realities of students and individual learning trajectories. To this end, the teacher can build a base that⁸ *is the foundation of his praxis* that involves the conception of language related to his sociocultural use, diversity, and textual multimodality, which is possible using DT, directed to the collective and collaborative construction of knowledge.

Digital culture, with regard, mainly, to the social practices of multiliterate reading and writing, challenges the teacher to work with language, based on its social uses, involving the convergence of various multimodal and multi-semiotic genres, produced collaboratively in a network: “The challenge is posed by our school reading/writing practices that were already restricted and insufficient even for the printed age” (ROJO, 2012, p. 22). Teachers are challenged to understand and manipulate the forms of multimodal representation, the images articulated to the written word, which requires a specific and differentiated training (NLG, 2000).

Considering the complexity of multi-literate pedagogical *praxis*, to effect it, the teacher will need to face the challenge of developing literacy practices located with basic education students, in view of their experiences with multimodal, multi-semiotic,

6- According to Street (2014), the new studies of literacy understand writing not only from the (psycho)linguistic point of view, but also historical, anthropological, and cultural, considering power relations. This is an understanding of literacy as a social practice.

7- Multi-semiotic or multimodal texts are constitutive of many languages (modes or semiosis) and “[...] require the skills and practices of understanding and production of each of them (multiliteracies) to make it” (ROJO, 2013, p.19). Contemporary texts, whether in printed vehicles or in analog and digital media, are composed of elements such as: “Oral and written language (verbal modality), body language (gestures, dances, performances, clothing – sign mode), audio (music and other nonverbal sounds – sound modality) and static and moving images (photos, illustrations, graphics, videos, animations - visual modalities)”. (RED; BARBOSA, 2015, p. 108).

8- “[...] an epistemology of pluralism that provides access without people having to erase or leave behind different subjectivities”.

hypertextual languages experienced by them outside the school context. Such practices need to establish relationships between digital culture and school culture, in which the school can assume the role of protagonist, creating pedagogical possibilities that contemplate policies of incorporation of technologies in their formative practices.

Collaborative research: an epistemological option for knowledge production and re-elaboration of practice

The choice of methodology for data analysis takes as principle the interpretative study, understood as “[...] a matter of substantive focus and intent, not a question of procedures for data collection” (ERICKSON⁹, 1986, p. 120, our translation). Data analyses were performed in the textual (content of the text), thematic (perception and argumentation of the theme) and interpretative (identification of assumptions, explicit and implicit in the participants’ discourses), for further discussion and reflection of questions raised by the research participants (SEVERINO, 2002).

This collaborative formative process implied a relationship of recognition of the theoretical assumptions that *permeate the pedagogical praxis* of participants. The mediation of the researchers, in this process, was important to provide moments of reflection of the practice, making implicit concepts emerge and presenting other knowledge to provoke the resignification and/or intervention of reality. Thus, we promote meetings for dialogue and reflection about daily pedagogical practice, aiming at a production of meaningful knowledge, which encompasses the world of teaching experiences, woven by symbolic exchanges, social interests, and affective correspondences (GÓMEZ, 1998).

The option for research-training emerges as a counterpoint to research that reduces teachers to only aims of study and as a research proposal that challenges the researcher to investigate with the subjects. In this sense, we proposed formative meetings, aiming at collaborative actions that generated intervention processes in the school context, which were motivated by the need to transform pedagogical practice (ANDRÉ, 2002). Such meetings, configured as reflexive sessions, allowed the active participation of teachers in the processes of research of situations - problem.

The sessions were based on provocations/questions that direct the discussions about the contributions, challenges, and theoretical-methodological implications of multiliteracies in the training and praxis of the Basic Education teacher, contributing to the problematization of the responsibilities and competencies required of them, in the digital society. The principle of reflexivity that permeates the research developed takes as orientation the moments called by Ibiapina (2008) of “reflexive actions”, namely: description (How has my practice been?); information (What is the historical basis of teaching practices?); confrontation (What is the function of the choices made in the construction of citizenship?); reconstruction (What do I have to do to change my practice?).

From this perspective, the research carried out pass through methods aimed at the participation of subjects as partners and co-authors. Guided by the principles of

9- “[...] is a matter of substantive focus and intent, rather than of procedure in data collection”.

collaborative research, we created space for teachers to discuss, reflect, intervene, and produce questions from *their praxis*. Collaborative research has the potential:

[...] to inform not only of the understanding of macrosocial reality, but, above all, in empowering teachers so that they can understand, analyze, and produce knowledge that changes this reality, unto the ideologies existing in the relationships maintained in the school context. (IBIAPINA; RIBEIRO; FERREIRA, 2007, p. 31).

We appropriated collaborative research as a theoretical-methodological perspective that enabled us to create reflective sessions that constituted moments of continuous training, in which knowledge was collectively consolidated and shared. We take as focuses of discussion the pedagogy of multiliteracies, teaching practice and teacher education, aiming to contribute, from theoretical knowledge already built, to a reconfiguration of *praxis* in Basic Education.

Based on this principle, the formative research, completed by 2018, has considered the complexity of the pedagogical practice with which the teacher constantly faces to, from there, think, collaboratively, in reconfiguration of pedagogical practice, considering the problems that condition it.

From the process of research to experiences in the educational field: some results

The results presented here relate to the research developed and completed between 2017 and 2018, involving teacher training for literacy practices, both in printed and digital genres. In this study, we will highlight the research and extension projects that involved schools in the interior and capital: *Technologies, (multi)literacies and teachers training in multiliteracies: re-signifying pedagogical practices with the insertion of mobile digital technologies*.

Research and extension as formative actions with teachers working in schools in the interior

The research entitled *Technologies, (multi)literacies and teachers training*, which generated the extension project with the same¹⁰title, was supported by the Vice-chancellorship of Extension and a research center of the proposing institution. The objective was to elaborate a diagnosis on the use of digital technologies in the classrooms by teachers of Basic Education. From March to July 2017, in which it was developed, we conducted semi-structured interviews with 47 teachers from the initial years of elementary school in the municipal network and 15 undergraduate students of the 8th semester of the Bachelor of Letters with qualification in Portuguese language, from a public¹¹university.

10- The search *Technologies (multi)letramentos and training of teachers* is one of the actions carried out in the graduate programs in which we operate. In its first stage, begun in 2017, it reached four municipalities in the interior of Bahia. A second stage, the Extension Project with teachers from Basic Education, was held in 2018. In the third stage, held in 2019, it is intended to verify, *on locus*, results of the formative process.

11- Terms of assignment of copyright were signed by all participating teachers.

The project of extension, carried out from April to December 2018, aimed to discuss strategies for the organization of educational times and spaces, considering the existence of technological networks that contribute to the construction/reconstruction of knowledge, from physical and digital environments. During this period, we discuss some themes suggested by teachers when reflecting on their own teaching practices: digital culture and school education; pedagogical mediation and use of DT; multiliteracies and critical digital literacies.

Taking collaborative research as methodology, we organize activities in the form of short courses and conversation wheels. The short courses, considered as formative space-time for theoretical study, prioritized the problematization of pedagogical practices that were performed by teachers, with the uses of DT. The conversation wheels allowed the students to reflect, collaboratively, about the daily and school actions, the DT and its implications for the teacher's training.

With this research, we try to know the DTs present in school, in life in the teacher's personal life, even if they often do not make part of their pedagogical practice:

I use computers, mobile phones, televisions with various features. These technologies... is, it helps me a lot, as for example in the ease of communication with people, the ease of solving everyday problems such as managing finances via the Internet, facilitates access to texts, books, and other study materials, including my training since I have sought distance specialization courses, bringing practicality in my routine. (Professor Nany) .¹²

Our research has also contributed to the understanding of how teachers and future teachers at the schools surveyed conceive and use The DT in their classroom; as well as to identify theoretical-methodological conceptions evidenced by teachers in this use:

[...] we use the various languages in the classroom, we are enhancing learning, because it allows the child to have the opportunity to experience, to experience ehhh countless possibilities of learning, in respect to this singularity (pause) that each subject has to learn (pause) and I think we have walked in a way... ehhh which has brought this with much more emphasis, ehhh to our classroom. Whether through music, or through games, or through ehhh of the videos, ehhh through the computer itself, the mobile phone, ehhh [...]. (Professor Ágata).

In this first stage of research, we found that teachers and future teachers use DT in various actions in their daily life, including to attend personal learning situations. Among the most used media by these subjects are social networks, messaging applications and *textual genre e-mail*. Of the interviewees, 60% reported that, in 2017, they used some DT in the classroom with the students. However, although DT are means that contribute to the realization of daily discursive actions of these subjects, their discourses showed us that, often, these technologies and their textual potentialities are not yet integral elements of their classes.

12- The names of the survey participants are fictitious, to preserve the identity of teachers Participants. They are pseudonyms chosen by themselves.

In specific situations, technologies are part of the classroom, because teachers and students use digital devices; however, they are generally more as instrument for, for example, slides showing, promotion of research outside the class, transmission of information, without, however, these media, their texts and intentions being properly problematized:

I use, at least once a week, mobile technologies (mobile device) in the classroom, with the objective of conducting specific research on the contents of the discipline. (Professor Ana).

When students need to present group activities, such as seminars, I use a *notebook* and datashow to view presentations. (Professor Bete).

I often, faced with the lack of the school, reading in the book itself for the children, showing the illustrations. (Professor Mel).

The work with texts from the digital sphere represents a challenge for teachers today, still limited to the use of the printed material. This is not to say that they do not use digital technologies in their classes, but that they do not yet take over with criticism of the multiplicity of language and signs, of the pedagogical potential that texts belonging to the digital genre present, so that they can approach them or explore them successfully in their pedagogical practice, aiming at teaching and learning of a dynamic and interactive reading and writing.

We understand that DT can, in fact, be used as an integrator agent of the classes, to expand the literacies of the students. The data constructed from the interviews lead us to interpret that teachers of Basic Education understand the complexity of a practice that involves multiliteracies. However, the inclusion of digital textualities represents a challenge for its pedagogical *praxis*:

[...] proposing a practice of multiliteracies requires planning, knowledge of various possibilities, methodologies that a didactic situation requires, in addition to research as well. It also requires criticism on the part of the teacher so that he can filter the necessary information. (Professor Mel).

Teachers also understand that literacy models change because they are situated and historical and need to follow the transformations of each technological, social, political, economic, cultural context in a society:

Certainly, working in the perspective of multiliteracies enhances the acquisition of reading and writing. Nowadays, if we do not seek to keep up with technologies, we will certainly be putting ourselves, in the “near future”, on the borders of society. The world revolves around technological advances. (Professor Nany, statement of the teacher).

This reflection occurred in one of the formative moments, promoted by the extension project, when we finished the activities of the first stage of the extension project, making considerations about the social and technological transformations that occur in the current context, which expand and diversify, both regarding the sharing of information and knowledge in the ways of producing them.

Research and extension as formative actions with teachers working in schools in the capital

The blended research and extension project, entitled: *continuous training in multiliteracies: re-signifying pedagogical practices with the insertion of mobile digital technologies*, funded by the Extension Vice-chancellorship of the proponent higher education institution, was applied by a teacher and a master's student, under the responsibility of a guiding professor. Its objective was to support the continued training of teachers from municipal schools, aiming at collaborative elaboration and the development of projects and activities that enhance pedagogical actions and strengthen the teaching and learning process in the final years of elementary school. Fifty-seven municipal schoolteachers in the capital participated in the project; among them, 54 also assumed the role of coordinators in the schools where they worked.

By taking the analysis of the data generated in the conversation circles and in semi-structured interviews, we collaboratively built the Extension project, aiming to attend the demands detected from the situations presented by the teachers. This project is one of the actions within the scope of the graduate programs in which we operate. It was organized into two modules: 44 hours in person and 56 hours at a distance, distributed as well: 36 h of activities in Moodle and 20h of application of activities in the classroom.

In the face-to-face meetings we collaboratively problematized the use of mobile digital technologies in the classroom, we know the multi-literate pedagogical practices already performed by teachers and encourage the construction of new tasks within the school, considering the existence of new media and hypermedia for the construction of knowledge and for the promotion of dialogues between the subjects participating in the project.

The actions developed in this extension project had as a guide axis the themes presented by the teachers at the first meeting: digital culture and school education; pedagogical mediation and construction of network knowledge; multiliteracies and reading and writing practices in various media and hypermedia; textual modalities. For the discussion of these themes, we applied the conversation circles, face-to-face meetings, so that the participants could reflect, collaboratively, about the facts of daily life, their culture, their community interconnected to the pedagogical praxis.

In this formative process, the teachers exposed their needs, which related to the resizing of their pedagogical actions to receive new genres, new textualities, new social behaviors related to the practices of using oral and written languages, considering other models of interaction of communicative phenomena and their social consequences; that is, other literacies and multiliteracies. This initial dialogue led to the discussion of the pedagogy of multiliteracies as possibilities for the development of pedagogical practices

involving multimodal and multi-semiotic languages, as well as to the reflection that the school cannot be out to this movement, because we are members of a society whose relationships are networked and by the hybridism of connections, digital or not. In these reflective moments, the teachers revealed the importance of thematic discussions to expand knowledge:

[...] this course expanded my concept and above all showed me several new ways to work with other media, especially digital media, and gamification. (Prof. Marize).

The pedagogy of the multiliteracy takes the teacher from the old model, which took a long time to renew itself, and presents a wealth of possibilities closer to the child and the young today. The inclusion of new media in the classroom brings the student closer to knowledge because he/she also speaks their most used language, the digital language. Multiliteracy in all schools is also a form of social inclusion because it allows low-income students access to the same resources and languages that are being used in middle-class schools. (Prof. Rosa).

In the excerpts, the teachers recognize the importance of multiliteracies in times of digital communication and the need to develop new projects, in the final years of the elementary education, which allow them to carry out practices based on the pedagogy of multiliteracies, from the critical and reflective use of multimedia and hypermedia, aiming to contribute to the construction of linguistic competence and, possibly, to the social inclusion of students, as Rosa points out.

In addition to thinking about activities involving the diversity of languages, the multiliteracies, in the view of this teacher, allow the subjects to dialogue with multimodal and multi-semiotic texts – from the printed and digital spheres – that are part of their local cultures, expanding the possibilities of knowledge production, from local to global. But, as Professor Jânio notes, these are changes that challenge the school to develop collaborative work that involves local and school communities in projects from which students, as Professor Isa explains, can develop their communicative competence, by using digital technologies to explore potentialities, build, transform, rebuild, exercise citizenship:

Before the course, I had never heard of multiliteracies. I believe that it is a possible pedagogical perspective, however, we would have to review our practices, usually conservative, which makes change a great challenge for everyone at school. (Prof. Jânio).

It is to think of the school that I form for work, for citizenship, for personal life considering all the knowledge that this child has. Where teacher and student act collaboratively, where everyone learns and teaches. Teacher and student, student and student, family, student, and school. Of course, for this it is necessary that they really want this transformation and educators who use in their academic life what they already use in their private life. Let teachers come out of common sense and explore the different knowledge and intelligences our students have. (Prof. Isa).

Resuming professor Rosa's speech, we can interpret that it corresponds to the relevance of thinking of a pedagogy of projects that is not limited only to the development of disciplinary contents ("old model"), but that provides the teacher with multiliteracy experiences in Basic Education; that is, to organize didactic activities that allow students to contact with the multiple languages and with cultural diversity, characteristics of today's society. A work proposal in this sense can be realized from devices that students already have – mobile and *tablet* – but it cannot be limited to the use of these resources, as teachers Ana and Luz note:

I also learned in this course that investing in teaching resources that favor multiliteracy, especially in digital media, is urgent and very necessary, but we can start in this culture of multiliteracy, even with the little resource we have, such as a mobile phone or a tablet. What we can no longer do is continue to insist on a 19th century pedagogy for a 21st century student. (Prof. Ana).

[...] in the course I was able to learn that these "technologies" are not simply limited to technological devices. The Pedagogy of Multiliteracies is possible, in my opinion, when the teacher is a researcher. It's not enough to say it's "multi-literate." It is necessary to be and live! (Prof. Luz, author's marks).

To promote teacher's engagement to this new digital context, to transform their classroom into a space to produce knowledge and interaction, it is necessary, continuous research by himself / herself, as Professor Luz emphasized: "The Pedagogy of Multiliteracies is possible [...] when the teacher is a researcher".

Furthermore, the teacher will not be able to avoid using activities that prioritize the development of the subjects' critical sense, articulated to the various languages with which social relations are woven. As Professor Ana warns, "we cannot continue insisting on a 19th century pedagogy for a 21st century student." The teacher will need to be a mediator, to contribute so that the information conveyed in the various media is transformed into knowledge, from the action-interaction-action movement with the students.

Performing multiliterate practices is much more than being a user/consumer of technological devices. It goes through the capacity of production, construction and remixing of knowledge in digital environments; it demands a critical deepening of multi-semiotic languages, in the search to produce meanings for a more significant learning that may culminate in the transformation of pedagogical practices in the school community, so that they reverberate inside and outside it.

If the teacher appropriates the technologies for his daily activities, it should not be different in the classroom, in which, as a mediator, he can promote the development of collaborative productions, instigating the investigative spirit of his students, encouraging them to create creative and dynamic learning paths, from reading and writing projects: "For this, it is necessary that the school be interested in and admits the local cultures of students and teachers" (ROJO , 2009, p. 115).

It is possible to interpret, through the reflections in the formative meetings, that teachers understand the importance of integrating DT into the classroom, for the creation

of new possibilities of expression and communication; that the school cannot ignore the contemporary technological evolution: “The school cannot ignore this reality that is coming closer with the new millennium, far from it, walking in the opposite direction to what occurs outside its walls” (PRETTO, 2013, p. 122).

The reflections and theoretical-practical discussions of the themes, held in the face-to-face formative meetings, were always deepened, and expanded in *the Moodle* virtual environment, aiming at the development of activities, in the classroom, that would provide students with interactive and dynamic experiences, with the planned use of mobile devices:

[...] Observe the brightness in the eyes of the students when they became protagonists in the “speeches” (reading) of the *parlendas*¹³. Realizing *that the smartphone* has become an easy-to-use teaching resource that brings the strengthening of stimulus, creation, makes the class lighter, makes students be more focused (Professor Nany).

During the training, we participated in a treasure hunt, using QR Code, which I found very interesting and did with the 6th grading students. This class did not know the QR Code, so we started exploring these codes and knowing the resources. The room has 30 students and was divided into 6 groups, each with 5 participants. To divide the groups, I also used the same codes, with numbers from 1 to 6. Each team had to have at least a smartphone with QR Code reader. Only one student already had this reader on their phone, the others and I downloaded in that moment (1 per team). I placed the clues at various strategic points. On each clue there was a problem to be solved and the answer was the number of the next clue. (Prof. Paola).

I applied two strategies used in classes, the Your Shot app that selects groups and chooses a student through electronic draw to answer a question. The task was used with the Portuguese of the 6th year. I also passed it on to the physical education teacher who has used it to divide the students into groups. (Prof. Pereira).

The teachers’ speeches refer to the moment when they developed multiliteracies practices in their classrooms, organized in the form of didactic sequences and socialized in the last face-to-face meeting.

During the socialization of the production, and in the evaluation of the project, we reflected on the commitment/engagement of the participants throughout the formative process, both in the face-to-face meetings and in *the Moodle environment*: “[...] the topics tackled were great, I learned a lot and I just have to thank all of you who gave me this rich moment of learning.” (Prof. Marta).

We emphasize that the realization of this extension project was configured as a formative action for the teacher in service, but also for his students, because the movement of bringing to the classroom the experiences experienced in the course provided the

13- Parlendas are children’s rhymes that entertain children.

teacher to think about the needs of his students, making learning more significant for these subjects.

Final Reflections of research process in a constant becoming

Research on literacy, multiliteracy, pedagogical practice and teacher training, carried out until 2018, leads us to understand that reading and writing practices, both in printed and digital media, are configured as pedagogical enhancers for a more meaningful teaching and learning process. This research also contributes to the promotion of critical, reflective, and plural educational practices that develop cognitive skills in students that point to the collective production of knowledge.

From this perspective, the studies carried out by the research group, within the scope of *stricto sensu* postgraduate studies, are presented to promote, in the school space, the construction of a culturally sensitive pedagogy that considers the diversity of social practices of reading and writing in various textual media. The research that we developed, within the scope of *stricto sensu* postgraduate programs, points us to a path to walk, towards research-training, which has a mediating trait for the construction of a pedagogical practice that considers all the possibilities of literacy in the human repertoire. At the present time, students need differentiated learning in relation to the ways of interacting with the text – now multimodal and multi-semiotic – through multiliterate actions.

These experiences of collaborative formative research have allowed us to problematize teacher training, from a partnership between university and school, creating space for teachers to understand their teaching practices in an articulated way to social practice, to generate changes in the school culture.

We understand that the work from the multiliteracies can give meaning and restructure the social function of the school, which is not to train docile and useful bodies, but subjects – teachers and students – who, faced with the collapse of a reproduction model that was based on a single literacy, can move through various agencies of the literate culture, opportunistic by printed or digital media.

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Obdália Santana Ferraz Silva is an adjunct professor in the Department of Education at Universidade do Estado da Bahia (UNEB). professor of Postgraduate Programs Education and Diversity (MPED/UNEB) and Education and Contemporary (PPGEDUC/UNEB).

Úrsula Cunha Anecleto is an adjunct professor in the Department of Education at Universidade Estadual de Feira de Santana (UEFS). professor of Postgraduate Programs in Linguistic studies (PPGEL/UEFS) and Education (PPGE/UEFS).

Sirlaine Pereira Nascimento dos Santos is pedagogical coordinator at the Secretaria Municipal de Educação da Prefeitura Municipal at Salvador. Doctoral student and has a master's degree in education and Contemporary at Universidade do Estado da Bahia (PPGEDUC/UNEB).