

***Teachers' Perspectives on Digital Technologies and Educational Practices:
Challenges and Resilience in a Brazilian Public Educational Context***

Eliane Fernandes Azzari, Pontifical Catholic University of Campinas, Brazil

The Barcelona Conference on Education 2022
Official Conference Proceedings

Abstract

The current paper aims to present and discuss some of the results obtained between May 2020 and December 2021 by the coordinator of the inter-institutional project "Digital Technologies, Society and Culture: educational interfaces from the literacies studies perspective". The data shows teachers' accounts on their own working contexts and praxis with digital technologies which were mobilized as both part of a public state curriculum syllabus and an instructional medium. The selected samples focus on teaching experiences developed during the remote teaching period in pandemic times in different public schools in a Brazilian city in the outskirts of the state of São Paulo. It is a qualitative and interpretative investigation methodologically supported by Participatory Action Research (PAR) and underpinned by literacies studies. The discussion suggests that - acting under several syllabus and social demands to sustain education during social isolation - the participant teachers had to face a myriad of challenges such as: i) a visible inequality in terms of internet access and hardware/software resources available to both educators and students, ii) a deficit in teacher education concerning the access to and the application of digital resources and iii) the overwhelming pressure to work extensive ours added to what can be seen as previously underprivileged teaching conditions. It also points out that, even in the face of a critical and sociocultural shattering period, some teachers still prove to have been able to find out digital solutions and professional practical development due to their own dedication and resilience.

Keywords: Literacies, Digital Technologies, Teacher Education

iafor

The International Academic Forum
www.iafor.org

Introduction

The current paper aims to present and discuss some of the results obtained between May 2020 and December 2021 by the coordinator of the inter-institutional project "Digital Technologies, Society and Culture: educational interfaces from the literacies studies perspective". The Project counted on a solid partnership established between five researchers based on three different major universities in the state of São Paulo, Brazil, and two different area coordinators from the state educational department. The original project aimed at focusing the Seduc-SP Technology Manuals for the different school years. The investigation procedures were meant to start in March 2020 – which ended up coinciding with the spread of the covid pandemic. Luckily, the research was already based on a flexible design. Also, oriented by the listening-based nature of the proposal, the research team was able to review their previous priorities to bear in mind the participants urge at that specific moment. Consequently, the Project took a turn, and the researchers opened their aims to include the participants' most urgent needs – which involved finding ways to cope with the eminent use of digital technologies to mediate the emergence remote teaching and learning processes.

Organized as a qualitative and interpretative investigation, the Project is methodologically supported by Participatory Action Research (PAR), and underpinned by critical literacy studies (Monte Mór, 2015). According to Kindon, Pain & Kesby (2007), PAR is a methodological approach that stimulates different thinking, whilst challenging the ways in which researchers relate to participants. It also “requires cultivation of mutual understanding and respect, sensitivity to differences on organizational cultures and goals (...)”.

The data presented in this paper was generated and collected in two different ways: first, an on-line questionnaire powered by Google Forms was sent to prospect participants – elementary, medium, and high school teachers and coordinators who work in public state schools in the outskirts of the city of São Paulo, in São Paulo state, Brazil. The form also provided potential participants with an ethics statement which had been previously approved by the Ethics Research Committee at PUC-Campinas. Joining the investigation, participants were asked to answer a set of both objective and open questions, and then, they were invited to join in monthly meetings with the research team (which were conducted on-line, by videoconferences, due to the social isolation period, during the worst days of the pandemic). In such meetings, the research team actively listened to the participants accounts on their experiences with teaching contexts in which digital technologies were the main content in their lessons and/or the means in which lessons were (somehow) taught.

In the scope of the Project, language is conceived as a social and dialogical practice (Bakhtin, 1986), and therefore, dialogue and discourse are keywords to the discussion. Drawing from Bakhtinian readings, Azzari et al (2021, p. 290), affirm that “a word (in an expanded sense, which encompasses any form of representation and/or semiosis, and not just the verbal) is a territory marked by conflict, multiple voices, and diversities”. Following those lines, the authors explain that “meaning extrapolates the materiality of its representation and is negotiated and shared in a universe that is discursively, socially, and historically constituted. This universe – whose times and spaces mark tensions and disputes, power relations and searches for ruptures – is permeated by (and simultaneously a cradle of) ideological creations that invariably and irretrievably intertwine the processes of constituting meaning”.

Azzari et al (2021), also state that “Luke (2019) highlighted that all forms of representation and interpretation are the result of complex and global/local combinations, and that school

classrooms, as well as domestic environments, are spaces inherently permeated by a plurality of voices/discourses, i.e., by different ways of seeing and interpreting ourselves and the world around us”.

Teachers’ perspectives on digital technologies and their own educational practices were observed by the researchers both in written and oral accounts, which were later submitted to an interpretative analysis that took into consideration the discussions of Luke (2019) about teachers’ narrative, discourse and educational policy, the appreciations of Cope & Kalantzis (2017), and the ideas exposed by Monte Mór (2015).

According to Monte Mór (2015), assuming new/critical literacies as a point of view for education requires us to put a premium on critical thinking so that, in educational environments, it becomes possible for educators and students to investigate the different ways in which meaning-making processes happen within digital contexts. Also, Monte Mór (2013) points out that (new/critical) literacies discussions should favor teacher’s and learner’s agency.

Discussion

Between June 2020 and June 2022, 220 participants answered to the Google Form questionnaire. There were 24 meetings between teachers and researchers, throughout 5 different Modules. Figure 1 presents an excerpt of the data collected during Module II (Aug-Dec, 2020).

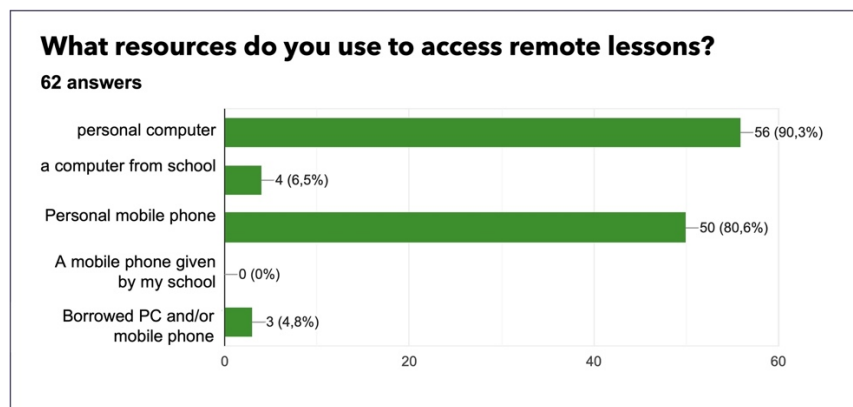


Figure 1: Results obtained in Module II. Retrieved from author’s research files.

The data results represented in Fig. 1 suggest that it took a great deal of resilience for those teachers to adapt to as well to adopt the technologies required in the implementation of the emergence remote education. Most of the participants reported that they had to resort to the use of their own personal equipment to keep in touch with their schools, coordinators, and students, and some of them had also to resort to other people’s equipment to work. This situation was prolonged longer, well into the beginning of 2021, when gadgets such as notebooks and internet connection ships started being distributed by the state government (though most of them arrived at schools too late). Figures 2, 3 and 4 report selected excerpts from the written accounts provided by the participants.

"I have been using multiple platforms: I've joined all of my students Whatsapp groups, I use Google Classroom to post activities, I've hold meetings at both Google Meet and Teams. Most of my activities are developed on Google Forms, and I also use audio and screen recording resources to give them instructions for the tasks.

(...) Few students recorded videos or attended the videoconferences, though, some of them claim to be "just shy", others simply lack interest, but most of them simply don't have fair equipments, such as a laptop or a mobile phone".

(A Middle and High school teacher who taught 300 students in 2020).

Figure 2: Written account obtained in Module II. Retrieved from author's research files.

"I'd never learned to use so many new [tech] tools, at the same time and that fast! I've noticed more and more the importance of a day-by-day usage of Technologies for a dialogic interaction with my students. I have been trying to presente my pupils with communication/aproximation opportunities with tech help on a daily basis, in my teaching context".

(A Middle school teacher with 150 students)

Figure 3: Written account obtained in Module II. Retrieved from author's research files.

"It's been challenging because I have to overcome so many atypical situations to teach Portuguese (literacy) and Technology to approximately 550 students".

(A Middle and High school teacher)

Figure 4: Written account obtained in Module II. Retrieved from author's research files.

The excerpts of the accounts transcribed in Figures 2-4 give us a glimpse at the amount of stress (both physical and mental) those teachers were exposed to during the emergence remote teaching period. However, it is important to highlight that they were already working under less than privileged circumstances, which can be attested by the number of students each educator had to take under their wings. It allows us to conclude that, apart from the lack of equipment and/or internet access – amongst other issues related to the use of digital technologies in their educational contexts/practices – those teachers had already been subjected to endure great duress in the face of their "regular" teaching conditions, which therefore demanded an even greater dose of *resilience* during the pandemic times.

Also, it is clear to see that they had to show an extra effort to further their own education, so that they were able to get acquainted with a great deal of (different) technological resources in such a short period of time.

In the light of the discussion, it is possible to assume that, although motivated by an emergence state, which affected people all over the globe, teachers were drawn to act on their agency. It also shows us that, in terms of (critical) digital literacies, there is still a long way for us to go in terms of both pre-service and in-service education in Brazil. It also brought light to the fact that the digital divide is very much an issue that needs to be carefully and steadily tackled by the Brazilian society.

Conclusion

The discussion suggests that – acting under several syllabus and social demands to sustain education during social isolation – the teachers who participated in the Project meetings reported that they had to face a myriad of challenges such as: i) visible inequality in terms of internet access and hardware/software resources available to both educators and students, ii) a deficit in teacher education concerning the access to and the application of digital resources and iii) the overwhelming pressure to work extensive ours added to what can be seen as previously underprivileged teaching conditions.

It also points out that, even facing a critical and sociocultural shattering period, some teachers still proved to be able to find out digital solutions and professional practical development due to their own dedication and resilience.

Acknowledgements

The research reported in this paper was partially funded by FAPESP, São Paulo Research Foundation, process n. 2020/05055-1. I'd like to thank the invaluable contributions of the following research partners: Walkyria Monte Mór, PhD (University of São Paulo), Petrilson Pinheiro, PhD (State University of Campinas), Juliana Doretto, PhD (Pontifical Catholic University of Campinas) and Tarcisio Torres Silva, PhD (Pontifical Catholic University of Campinas).

References

- Azzari, E. F. et al. (2021). Digital technologies, public school, and literacies: research in pandemic times. In Brazilian Internet Steering Committee (Eds.), *Survey on the use of information and communication technologies in Brazilian Schools*, São Paulo: CGI.br.
- Bakhtin, M. M. (1986). *Speech Genres & Other Late Essays*. Translated by Vern W. McGee. Ed. by Caryl Emerson & Michael Holquist. Austin: University of Texas Press, 1986.
- Cope, B. & Kalantzis, M. (2017). Conceptualizing E-learning. In B. Cope; M. Kalantzis (eds.) *E-Learning Ecologies. Principles for New Learning and Assessment*. New York: Routledge, pp. 1-45.
- Kindon, S. L.; Pain, R. & Kesby, M. (2007). *Participatory Action Research Approaches and Methods: Connecting People, Participation and Place*. London: Routledge.
- Luke, A. (2019). *Educational Policy, Narrative and Discourse*. New York and London: Routledge.
- Monte Mór, W. (2013). The development of agency in a new literacies proposal for teacher education in Brazil. In E. S. Junqueira, & M. E. K. Buzato (Eds.). *New literacies, new agencies? A Brazilian perspective on mindsets, digital practices and tools for social action in and out of school*. New York: Peter Lang Publishers.
- Monte Mór, W. (2015). Learning by Design: reconstructing knowledge processes in teaching and learning practices, in B. Cope; M. Kalantzis (Eds). *A Pedagogy of Multiliteracies: Learning by Design*. Nova York: Palgrave Macmillan, pp. 186- 209.

Contact email: eliane.azzari@puc-campinas.edu.br