THE PADLET IN ONLINE EDUCATION OF DEGREES O PADLET NA EDUCAÇÃO ONLINE DAS LICENCIATURAS EL PADLET EN LA EDUCACIÓN UNIVERSITARIA EN LÍNEA

Rosinângela Cavalcanti da Silva BENEDITO¹ Simone LUCENA²

ABSTRACT: The COVID-19 pandemic, experienced since the beginning of 2020, forced us to live a physical distance and suspend face-to-face classes. This situation aggravated problems experienced by schools and universities. Showing the fragility of institutions not only in a structure that follows the advances of the 21st century, but also in teacher training. In this article we aim to discuss the pedagogical practices adopted in the pandemic period and present practices developed in the Mathematics Degree Course and in the Mathematics Pibid of the Federal University of Campina Grande (UFCG), in Cajazeiras, Paraíba. We present the use of the Padlet application as a teaching methodology in different contexts, encouraging student interaction and authorship. We can observe that many practices implemented for the continuity of classes bring a confusion of concepts and reproduction of traditional and content teaching practices. Interfaces like Padlet can boost creativity, authorship and co-authorship and interaction, principles of online education.

KEYWORDS: Online education. Teacher training. Math. Padlet.

RESUMO: A pandemia da COVID-19 vivenciada desde o início de 2020, forçou a vivermos um distanciamento físico e a suspender as aulas presenciais. Essa situação agravou problemas vivenciados pelas escolas e universidades. Mostrando a fragilidade das instituições não apenas em estrutura que acompanhe avanços do século XXI, mas também na formação de professores. Neste artigo objetivamos discutir as práticas pedagógicas adotadas no período pandêmico e apresentar práticas desenvolvidas no Curso de Licenciatura em Matemática e no Pibid Matemática da Universidade Federal de Campina Grande (UFCG), em Cajazeiras, Paraíba. Apresentamos a utilização do aplicativo Padlet como metodologia de ensino em diferentes contextos, incentivando interação e autoria dos alunos. Podemos observar que muitas práticas implementadas para continuidade das aulas trazem uma confusão de conceitos e reprodução das práticas do ensino presencial, tradicionais e conteudistas. Interfaces como o Padlet podem impulsionar a criatividade, a autoria e coautoria e a interação, princípios da Educação online.

PALAVRAS-CHAVE: Educação online. Formação de professores. Matemática. Padlet.

RIAEE – Revista Ibero-Americana de Estudos em Educação, Araraquara, v. 17, n. 3, p. 1837-1854, July/Sept. 2022. DOI:https://doi.org/10.21723/riaee.v17i3.16767

e-ISSN: 1982-5587

¹ Federal University of Sergipe (UFS), São Cristóvão – SE – Brazil. PhD student in Education. ORCID: https://orcid.org/0000-0003-3027-745X. E-mail: professorarosinangela@gmail.com

² Federal University of Sergipe (UFS), São Cristóvão – SE – Brazil. Department of Education. Doctorate in Education (UFBA). ORCID: https://orcid.org/0000-0003-1636-7707. E-mail: sissilucena@gmail.com

RESUMEN: La pandemia del COVID-19, vivida desde principios de 2020, nos obligó a vivir la distancia física y suspender las clases presenciales. Esta situación agravó los problemas que experimentaban las escuelas y universidades. Mostrando la fragilidad de las instituciones no solo en una estructura que sigue los avances del siglo XXI, sino también en la formación docente. En este artículo pretendemos discutir las prácticas pedagógicas adoptadas en el período de la pandemia y las prácticas actuales desarrolladas en la Licenciatura en Matemáticas y en el Pibid de Matemáticas de la Universidad Federal de Campina Grande (UFCG), en Cajazeiras, Paraíba. Presentamos el uso de la aplicación Padlet como metodología de enseñanza en diferentes contextos, fomentando la interacción y la autoría de los estudiantes. Podemos observar que muchas prácticas implementadas para la continuidad de las clases traen confusión de conceptos y reproducción de prácticas de enseñanza tradicionales y de contenidos. Interfaces como Padlet pueden impulsar la creatividad, la autoría y la interacción, principios de la educación en línea.

PALABRAS-CLAVE: Educación en línea. Formación de professores. Matemáticas. Padlet.

Introduction

The pandemic of COVID-19, which has taken hold worldwide since the year 2020, has brought dire consequences to society with much loss of life, reaching marks today of 502 million infected and 6.19 million dead worldwide. On March 11, 2020, COVID-19 was characterized by the World Health Organization (WHO) as a pandemic. To contain the spread of COVID-19, measures have been recommended to isolate and treat identified cases, mass testing and physical distancing between people, use of protective masks, and more frequent hand washing. In addition to these measures, all places that could be crowded were closed, such as theaters, churches, shopping malls, stadiums, schools, and universities.

In an attempt to continue classes in Brazil, the Ministry of Education published Ordinance No. 343 of March 17, 2020 (BRAZIL, 2020a) authorizing the substitution of onsite academic activities, in progress, for classes and non-face-to-face activities that use information and communication media and technologies until the health situation was controlled.

In this regard, the Opinion of the National Education Council (CNE)/ Full Council (CP) No. 5/2020, approved on April 28, 2020 (BRAZIL, 2020b) brought indications for the reorganization of the School Calendar and guidelines for the development of non-face-to-face classes in relation to each level of education, giving suggestions for activities to be developed, calendar organization and workload.

At UFCG (Federal University of Campina Grande), classes have been suspended since March 2020, having to regulate remote teaching by means of a previously non-existent Resolution. Thus, it was implemented, through Resolution No. 06/2020 of the Higher Board of Education of the Federal University of Campina Grande, the Extraordinary Academic Regime (RAE, in the Portuguese acronym), related to the subjects of the 2020.1 period that was suspended. This Resolution provides that students could choose to join the remote learning or leave the suspended period, without loss in the progress of their course, but giving the opportunity to continue the course for those who could and wanted to study remotely. Thus, we started in UFCG, in September 2020, a period of the so-called remote teaching.

This chapter aims to present the report of a teaching experience during the pandemic of COVID-19, with students from the class of the subject Teaching Practice of Mathematics in High School of the Mathematics Degree Course of UFCG in the period from September 2020 to December 2020 and with students of the Mathematics Subproject of the Institutional Program for Initiation to Teaching (PIBID) in the period from September 2020 to April 2022. To do so, we divided the text into four parts, in which we initially present reflections on online education, bringing the definitions of distance education, remote learning, differentiating it from online education, then we talk about the Padlet application, its features and functionality, and soon after, we present Padlet as a methodology for teacher training in practices developed with classes from the Mathematics Undergraduate Course at UFCG, Campus of Cajazeiras, Paraíba. Finally, we present the conclusions of the importance of seeking methodologies for teacher training based on the perspective of online education, developing interactivity, collaboration and authorship of students.

Online teaching, a reality for teachers

(CC) BY-NC-SA

Facing the situation imposed by the COVID-19 pandemic, Education needed to adapt itself to be able to give continuity to the classes, inserting information and communication technologies as a means to communicate with students. According to Nóvoa (2020, p. 8) "the best answers, all over the world, were given by teachers who, in collaboration with each other and with the families, managed to put in place meaningful pedagogical strategies for this very difficult time". However, as the pedagogical activities could not be face-to-face at that time, different denominations emerged for the new practices that came with the pandemic, often creating conceptual conflicts between what was called remote teaching and the already recognized modalities of distance education (DE) and online education.

In Brazil, DE is regulated by the Law of Directives and Bases for Education (LDB No. 9394/96) through article 80, establishing that "the government will encourage the development and delivery of distance learning programs, at all levels and modes of education, and continuing education" (BRAZIL, 1996). According to Decree No. 9057 of 25/05/2017 of the Federal Executive Branch (D.O.U. 26/05/2017) that regulates this article, EaD is considered to be an "educational modality that seeks to overcome limitations of space and time with the pedagogical application of media and information and communication technologies and that, without excluding face-to-face activities, is organized according to peculiar methodology, management and evaluation" (BRAZIL, 2017).

Distance education has been the subject of many studies and research in the world and in Brazil, and for this reason there are numerous methodologies, pedagogical practices, platforms and digital interfaces developed exclusively for this educational modality.

DE is characterized by physical separation and self-learning, where instruction is the center of the process, so that students develop activities based on instructions received in course materials and communicate using different platforms, a model of mass education and traditional teaching (SANTOS, 2019).

Unlike DE, online education emerges with the practices of cyberculture developed in the 21st century and differs from other modalities by using technological devices to propose pedagogical activities using the potential and plasticity of the digital network, through hypertextuality, to develop interactivity in synchronous and asynchronous activities that provide collaborative production, research, discussion and authorship in a collective construction of knowledge.

We are in the era of network connection, marked by the internet, social networks, cell phone applications, to communicate with people around the world, for shopping, location, search for information in a fast and interconnected way, contemporary practices linked to cyberculture technologies, it is about transformations in social practices, in the experience of urban space and in the way of producing and consuming information, which sets up the culture of contemporary mobility (LEMOS, 2004).

Cyberculture points to a civilization of pervasive telepresence. Beyond a physics of communication, interconnection constitutes humanity in a borderless continuum, digs an oceanic informational medium, immerses beings and things in the same bath of interactive communication. Interconnection weaves a universal by contact (LÉVY, 1999, p. 127).

It is from the understanding of the contemporaneity of cyberculture that an updating in teaching becomes necessary to bring to teaching practices what is present in the lives of students, removing the still present thought of banking education, of decontextualized teaching, where the teacher only exposes content and students passively watch classes. According to Silva (2010, p. 38):

If schools and universities have not yet properly explored the Internet in the formation of new generations, they are going against history, out of touch with the spirit of the times and, criminally, producing social exclusion and cybercultural exclusion. When the teacher invites the learner to a website, he or she not only takes advantage of the new media to enhance the learning of a curricular content, but pedagogically contributes to the inclusion of this learner in the spirit of our sociotechnical time.

It is important to recognize the importance of networked teaching-learning for the development of authorship, student autonomy, critical development and the development of problem-solving and decision-making skills, and the use of technology for research and the search for information in a critical and conscious manner. According to Levy (1999), online education is presented to us as a new model of pedagogy based on learning with its own characteristics and in a collective and networked way. In this context, the teacher needs to adapt his practice, not only to provide content directly, but to seek to develop the collective intelligence of his students

Online education is marked by the use of technology, not in a technicist way, of reproduction, perpetuating traditional practices, but online education is defended as a "networked, collaborative learning, used in a post-massive perspective, to promote interactivity, inspired by cyberculture practices" (PIMENTEL, CARVALHO, 2020). The role of the teacher is changed, making it a mediator seeking interactivity and sharing, brings the cyberculture as inspiration and enhancer of pedagogical practices, is designed to promote the mobilization of critical and collaborative learning.". (SANTOS; CARVALHO; PIMENTEL, 2016, p. 24).

To promote collaborative learning, the teacher has the role of coordinating the students' practices in the construction of group knowledge, of articulating conversations with and among students, crossing ideas, mobilizing and sharing reflections and dense debates. The teacher must encourage student participation, seeking greater interactivity among students and between student and teacher, articulate the dialogue among the cursistas, bring other sources of information, allow students to express themselves, open conversations for other

(cc)) BY-NC-SA

discussions, and provide opportunities for cursistas to create discussions among themselves (SANTOS; CARVALHO; PIMENTEL, 2016).

Digital networked technologies have the power to promote interaction, if they are directed to this end and not only for content dissemination in a mass communication model. We live in the cyberculture era that demands us to be networked, to work in groups, in this context, we need to understand that collaborative learning must happen in networks, directing the potential of information and communication technology to promote this interactivity.

> Web pages are not only signed, like paper pages, but often lead to direct communication, by digital mail, electronic forum or other forms of communication through virtual worlds such as MUDs or MOOs. Thus, contrary to what the media hype about the alleged "coldness" of cyberspace leads us to believe, interactive digital networks are powerful factors of personalization or embodiment of knowledge (LÉVY, 1999, p. 162).

Of the forms of isolation and fragmentation of modern life, in particular the form of enforced isolation we are living in, the introduction of mobile technologies are leading us to a re-examination of what proximity, distance and mobility mean. (Lemos, 2004) Technology through the internet thus becomes a device to overcome social distance and to network us. The internet in turn is composed of different interfaces. "The interface is a term that, in computer science and cyberculture, takes on the meaning of device, an online space for the meeting of two or more faces in a communicational, dialogical, or polyphonic attitude" (SILVA, 2010, p. 46). The teacher can then take advantage of these interfaces in his online classes to be close to the students, for communication, for creation, discussion, exchanges, criticism and selfcriticism, elaboration, collaboration, experimentation, simulation and discovery (SILVA, 2010). Thus, it can overcome a teaching traditionally marked by the transmission of content, by the individual work of the teacher as content expositor and the student as passive receiver, allowing the teacher to plan meaningful learning situations that make the student the subject of his own learning.

Many teachers did not use these resources in their practice, did not know, did not believe and this is an important lesson of the crisis, the recognition of other teaching possibilities recognizing the power of ICT and its interfaces.

> Today, it is very clear that nothing can replace collaboration between teachers, whose job is not to apply ready-made technologies or apostilled didactics, but to fully assume their role as builders of knowledge and pedagogy. The capacities for initiative, experimentation and innovation manifested during the pandemic must be broadened and deepened in the

future, as part of a new professional affirmation of teachers (NÓVOA, 2020, p. 9).

The teachers' role was changed, taking him out of the leading role in the teaching-learning process and bringing the student to the center of the process and making him the subject of his own learning. In this pedagogy, the teacher creates situations, suggests reading texts, proposes activities, but the student is the one who develops them, he has his power of authorship, autonomy, search, research much more accentuated.

We can put into practice new spatio-temporal arrangements to educate geographically dispersed subjects or to extend the face-to-face pedagogical practice, with online education as a differential. We now have interactive media and collaborative learning beyond self-learning and mass media. We can already learn from the other mediated by technologies that actually allow these "others" to meet (SANTOS, 2019, p. 75).

Technology brings to schools and universities innovation and advancement if it is well used, the activities should challenge students so that they can create, participate, reflect, discuss, opine and be heard, interacting with teachers and other students in the teaching-learning process.

According to Santos (2020), in this year of pandemic, the curricula of schools and universities are all designed remotely using technology and virtual learning environments using cloud files, sharing content to study, with modern devices, site, applications and software that allow editing, sharing, forum, chat, web conferencing with day and time scheduled, but this is the only time when teachers and students meet virtually, for some contact, outside this scheduled time they do not meet through these devices or other virtual means.

Thus, remote teaching is called by pedagogical practices mediated by digital platforms, with the contents, tasks, notifications in applications synchronously and asynchronously (ALVES, 2020). It is characterized by a routine of meetings and studies ensuring the functioning of schools and universities, this being the good part of this model, but it has been repeating bank teaching practices, massive teaching, not using all the powers of information and communication technologies to improve teaching. This practice has caused a lot of boredom, lack of interest and annoyance in the students, who often don't participate in the classes, they are only present in the webconferences, but don't devote their attention to what is being presented by the teacher. And it also develops in students and in the teachers themselves

(CC) BY-NC-SA

e-ISSN: 1982-5587

a negative view about online teaching, compromising the possible and necessary advances brought by cyberculture.

According to Alves (2020) these two modalities bring technology only as a didactic resource, but this perspective has not contributed to learning in a collaborative way. It is necessary to go beyond this, using technology with reflection, questioning, collaboratively, sharing content, making students protagonists of the teaching learning process

Padlet

According to the application's own website, Padlet is software used to create and share content with other people. Through virtual frames, which resemble the construction of the old blogs. However, these boards can contain hypertext content, also inserting videos, audios, texts, links, files, much more resources than the old blogging platforms.

The app was created by Nitesh Goel and Pranav Piyush in 2012 (MONTEIRO, 2020), but initially appeared under the name Wallwisher. According to an interview with Russell (2003) the Indian creators of Padlet say that it emerged from a university project in 2008 at the University of Singapore and gained momentum and quickly millions of users were already using the page, not only to visit, but also to create. According to them, the goal is that people can easily create on the Web, communicate, share information, and if a creative person has access they can create a lot more.

Padlet is characterized by being easy to use, intuitive, inclusive, collaborative, allowing people to contribute to other people's pages, make comments, rate like and like via emoji or edit. The boards can be built in list, grid, column, map, canvas or timeline format.

Mural PRÉ-VISUALIZAR
Agrupe o conteúdo em um layout no estilo tijolinhos.

SELECIONAR

Lista PRÉ-VISUALIZAR
Simplifique a organização do conteúdo em um feed vertical fácil de ler.

SELECIONAR

SELECIONAR

SELECIONAR

Tela PRÉ-VISUALIZAR
Distribua, agrupe e conecte o conteúdo em uma linha do tempo PRÉ-VISUALIZAR
Posicione o conteúdo em uma série de colunas.

Linha do tempo PRÉ-VISUALIZAR
Posicione o conteúdo em uma linha horizontal.

SELECIONAR

SELECIONAR

SELECIONAR

SELECIONAR

SELECIONAR

SELECIONAR

SELECIONAR

Figure 1 – Padlet Formats

Source: Padlet homepage ³

This application allows users to organize online their content on murals, allows the customization of them, the network sharing with other users if you prefer or the privacy of a personal diary, there may be feedback from other users, generating interaction and discussion.

When opening the Padlet homepage we find the image in Figure 2.



Figure 2 – Padlet Home Page

Source: Padlet's homepage ⁴

RIAEE – Revista Ibero-Americana de Estudos em Educação, Araraquara, v. 17, n. 3, p. 1837-1854, July/Sept. 2022. DOI:https://doi.org/10.21723/riaee.v17i3.16767

³ Available at: https://padlet.com/create?back=1. Access on: 12 Aug. 2021.

⁴ Available at: https://pt-br.padlet.com/. Access on: 12 Aug. 2021.

From this page the new user can sign up by browsing the web page or they can choose to install the app, this can also be done with mobile devices. The app provides the options of signing up via Google, Microsoft, Apple or by email. There is a choice of free and paid accounts, allowing for a limited number of Padlets created or unlimited, depending on the plan chosen. The free plan allows the creation of up to 3 Padlets.

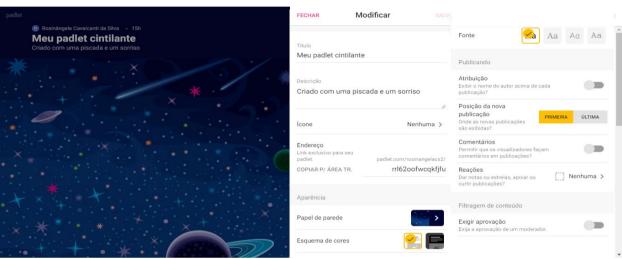


Figure 3 – Padlet Creation Page

Source: Compiled by the author. Assembled from images collected on the Padlet website via padlet.com

By accessing Padlet and choosing the plan, the user already has options available to create his first mural. On this page, Figure 3, you can configure the page by choosing the title, making a brief description, choosing emoji to accompany the title of the mural with icon. You also have access to the exclusive link to your Padlet, used for sharing and for other people to have access to your page. It allows you to choose and modify the appearance of your Padlet, editing wallpaper, colors and fonts of the text boxes. Editing the publishing settings, allows you to display or not the author's name above each post, choose the position of the new posts, open or not the option of external comments and reactions such as liking, rating, stars to each post. It is possible to filter the posting of content, filtering obscene language and requiring the authorization of a moderator to publish on the wall.

Publicar

Pesquisar em imagens, GIFs, YouTube, Spotify e sites ou colar URL

Publicar

Porquador de video

Publicar

Publicar

Publicar

Publicar

Publicar

Publicar

Publicar

Publicar

Porquador de video

Padlet

Padlet

Pesquisa de imagens

GIF GIF

VouTube

Spotify

Pesquisa na Web

Figure 4 – Padlet Creation Page

Source: Padlet homepage⁵

To add a publication, you can put a title and write what you want, in this text space you can also add link and in each frame created has the option to add hypertext. As shown in Figure 4, it is possible to upload files, insert audio recording, photos using the camera, video and audio recording, screen recording, insert location, drawing or even another Padlet as image of the text box created. You can add links, search the web directly from the application, search and add gifs, images or videos from Youtube platform, as well as music or podcasts from Spotify platform.

Padlet brings the capability of hypertext for network communication and interactivity, in addition it is a hypermedia interface. According to Santaella (2014) hypertext is characterized by the ability to store information as a special connector that points to other information and messages in a continuously variable loop, available in an interactive structure that is built by manipulation by the user-reader. Moreover, hypermedia is born from the fusion of hypertextual structure with multimedia, combining images, sounds, texts, animations, and videos in a variety of ways.

These hypermedia platforms, such as Padlet, allow the user to be not only a receiver, but also an author, co-author, producer of information through interaction, configuring the network communication, becoming important in teacher education.

RIAEE – Revista Ibero-Americana de Estudos em Educação, Araraquara, v. 17, n. 3, p. 1837-1854, July/Sept. 2022. DOI:https://doi.org/10.21723/riaee.v17i3.16767

⁵ Available at: https://pt-br.padlet.com/. Access on: 12 Aug. 2021.

Padlet as a methodology for teacher training

Information and communication technologies were something that some professors already used, but on a smaller scale, as a resource, a presentation, a video, an access for research or for official communication by email from the academic control and other professors still did not explore these resources. in their teaching practice. However, with the urgent change in teaching due to the pandemic experienced at the moment, it was a challenge for everyone to start teaching online, as it is a non-face-to-face practice, an experience never experienced by many, thus facing many difficulties of access, recognition of platforms, website and applications, mainly in the search for interaction with students and for that it was necessary to know technological resources to use in classes. Bringing with this, a good part, which was the recognition, dissemination and expansion of technology in teaching methodologies, the updating of many teachers in relation to digital resources, widely used by students in their daily lives, but which were still very far from the activities in the classroom. It was also possible, through this adaptation, to have the opportunity to participate in events and congresses throughout Brazil through videos and lives in applications accessed on various devices.

We describe here the use of Padlet in UFCG classes. At UFCG, we used Padlet in the Mathematics Teaching Practice discipline in High School, Figure 5, to build a virtual mural with research done by students, from a collaborative production on the same page. Presenting concrete materials related to the contents of Elementary School Mathematics, as a suggestion of teaching methodologies in a dynamic way to simulate classes developed in classes.

♥ ☐ CLONAR → COMPARTILHAR 🏚 ... Recursos didáticos para Aula de Matemática Gabriela Dantas 2a CANAL GADANCE 1a Anônimo 1 n ionas pereira de sousa 2a Miara Oliveira 2 PROBABIL TDADE Interessante Combimoria Hipérbole Estatística Será utilizada para a aula o uso de dois DJSCO GEOMÉTRICO Apartir disso, será feito o lancamento determinado resultado. E diante disso construir o conceito de probabilidade. Jogo da Memória dos Plano cartesiano com cartelas de O disco geométrico Números Complexos Representação palpável e visual do principais desenvolver o estudo da que seria um plano carte estatística e analisar gráficos Como funciona? estatísticos

Figure 5 – Padlet page in the Teaching Practice class

Source: Padlet's personal webpage ⁶

On Padlet, Figure 6, students added videos with instructions on how to use the material they were suggesting, posted titles, written descriptions, links with access to videos from other platforms, images, audios with guidance. Allowing everyone to view the suggestions of other classmates, sharing content, allowing comments and likes on the posts.

personagens de uma revista para servir como passageiros e utilizei uma base de pano que também pode ser pedaços de papei(para represen fichas). A sala será dividida em 3 nformações da tebela, onde um eixo será os infectados e o outro as equipes, aquela que chegar ao fim primeiro respeitando as regras do jogo. substituída por um papel mais grosso rence. Abaixo seque uma breve como o "paraná". Os "X" representam explicação de como funciona. As explicação de como funciona. As perguntas no qual o vídeo se refere é sobre o conteúdo. Vale lembrar que o professor deve acompanhar todo o Material Manipulável- Erica Isabel 2 Situação-problema: Duas pessoas entram em um ônibus com 4 lugares Operações com Conjuntos Explicação da atividade sobre Leonardo Santos 2a processo, para que não haja confusão Equação geral da Reta vazios. De quantas maneiras podemos alocar essas pessoas? SOLUÇÃO - A primeira estratégia para Phelipe Lacerda 2a Erica Isabel 2a a resolução deste problema consiste em enumerar todas as possibilidades Felipe Vieira 2a Une nua Régua! de ocupação de duas poltronas dentre as 4 que se encontram vazias. Para Érica Sousa 2a Muito interessar tanto, a utilização da maquete do onibus, será de grande importância para a visualização de todas as possibilidades, facilitando a listagem das mesmas. Outra possibilidade seria Este é um jogo intitulado de "Tabuleiro das Operações com Conjuntos" que pode ser usado em sala de aula, para Marcia Oliveira 2a se trabalhar as Operações com 70 a árvore de possibilidades, neste tipo Conjuntos. Anônimo 2a de estratégia, o aluno será estimulado a perceber que o 1º passageiro terá 4 opções de escolha e que, para cada possível escolha do 1º passageiro, haverá três opções de escolha para o Caroline Leite 2a Parabéns muito bom! 2º passageiro, gerando, portanto, 12 maneiras diferentes desses dois passageiros ocuparem duas poltronas Equação geral da Reta dentre as 4 vazias. Após a Questão motivadora: A figura most

Figure 6 – Indication of materials in Padlet

Source: Padlet's personal webpage ⁷

(CC) BY-NC-SA

It was also used with students of the Institutional Program for Scholarship Initiation to Teaching (PIBID in the Portuguese acronym) to write online diaries with experiences lived in

⁶Available at https://padlet.com/rosinangelacavalcanti/yy7qza317fe7vhxi. Access on: 12 Aug. 2021.

⁷Available at https://padlet.com/rosinangelacavalcanti/yy7qza317fe7vhxi. Access on: 12 Aug. 2021.

the actions of the Mathematics Subproject of the Cajazeiras Campus, Figure 7. The Padlet created in this way, constitutes what Lucena and Santos (2019) called app-diary, the diaries produced through applications, made available in mobile technologies, from narratives that contain written with autonomy, creativity and different languages and hypertextual formats with images, videos, links, texts and audios.



Figure 7 – Diary of a PIBID scholarship holder

Source: Personal page from a diary of one of the students of the PIBID Mathematics UFCG

Thus, each student built his or her own Padlet, with weekly texts, photo and video records of the lessons taught at the partner school of the Subproject in the city of São José de Piranhas in Paraíba. Allowing the other fellows to access the video made available through a link and comment on it, making evaluations of the classes taught, pointing out positive and negative points and giving suggestions and writing about their own class. Working on interaction, communication, self-writing, reflection on their own training and on the teaching practice, working in a collaborative way, with the active participation of the students in training and with the students' own autonomy and creation..

Final remarks

This pandemic period that we are experiencing has brought to the surface problems faced in education that were hidden, concealed, but which have been present for a long time; schools are outdated in relation to the advance of society, cyberculture, students, social networks, communication and technology. This delay is related not only to the physical structure, but also in relation to teacher training, in order to be prepared to work with technology in a conscious way and with clear goals of developing interaction, communication, co-creation, collaboration, and autonomy.

Seeking to break with what has been seen in this time, in which we saw the insertion of technology in teaching practices as a solution for the development of pedagogical actions, but used by many as a reproducer of the same obsolete, traditional practices of classroom teaching, focused on the transmission of content, remaining outdated in the pedagogical dimension (SANTANA; SALES, 2020).

It is necessary to understand and not disregard the reality experienced by many Brazilians, the difficulties of access to the internet, the difficulties of physical structure in their homes to study, the lack of family structure to provide adequate conditions in a calm and safe environment for students to study at home, lack of adequate equipment, among many other difficulties.

But it is also necessary to recognize the potential of technology that was used as a resource to develop learning in the midst of so many difficulties. We present here the use of Padlet as a device for the development of Online Education, sharing on its devices with technological mediation narrative training with hypertextual content (SANTOS, 2019).

This paper allowed the students involved to present interfaces and applications unknown to them until then, to discuss cyberculture, to present researchers in the field of education who discuss this topic of online education and interfaces, to recognize its definition, to show future teachers students ways different ways of appropriating information and communication technologies as a methodology for teaching Mathematics and Pedagogy.

This experience led to the development of online teaching practices, recognizing and using interfaces for collaborative learning, with greater student participation in their learning process, and bringing education closer to what is expected in our time of cyberculture.

We believe that the changes that have taken place in teaching practice in this time of physical distance, away from classrooms, through cameras and interfaces will affect the future of teaching and learning in all teaching segments, brought innovations, brought new teaching opportunities, of interaction, of collaborative production, very important and that cannot be abandoned, we must learn from them to reflect and recognize their difficulties and potentialities.

REFERENCES

ALVES, L. Educação remota: Entre a ilusão e a realidade. **Interfaces Científicas**, Aracaju. v. 8, n.3, p. 348-365, 2020. Available at: https://periodicos.set.edu.br/educacao/article/view/9251. Access on: 12 Aug. 2021.

BRAZIL. Lei n. 9.394, de 20 de dezembro de 1996. Estabelece as diretrizes e bases da educação nacional. Brasília, DF: Presidência da República, 1996. Available at: https://www.planalto.gov.br/ccivil 03/leis/l9394.htm. Access on: 12 Aug. 2021.

BRAZIL. **Decreto n. 9.057, de 25 de maio de 2017**. Regulamenta o art. 80 da Lei nº 9.394, de 20 de dezembro de 1996, que estabelece as diretrizes e bases da educação nacional. Brasília, DF: Presidência da República, 2017. Available at:

https://www.planalto.gov.br/ccivil_03/_ato2015-2018/2017/decreto/d9057.htm. Access on: 12 June 2021.

BRAZIL. **Portaria n. 343, de 17 de março de 2020**. Dispõe sobre a substituição das aulas presenciais por aulas em meios digitais enquanto durar a situação de pandemia do Novo Coronavírus - COVID-19. Brasília, DF: MEC, 2020a. Available at: https://www.planalto.gov.br/ccivil_03/Portaria/PRT/Portaria%20n%C2%BA%20343-20-mec.htm. Access on: 12 Apr. 2021.

BRAZIL. **Parecer CNE/CP n. 5/2020**. Reorganização do Calendário Escolar e da possibilidade de cômputo de atividades não presenciais para fins de cumprimento da carga horária mínima anual, em razão da Pandemia da COVID-19. Brasília, DF: MEC, 2020b. Available at:

http://portal.mec.gov.br/index.php?option=com_docman&view=download&alias=145011-pcp005-20&category_slug=marco-2020-pdf&Itemid=30192. Access on: 12 Apr. 2021.

LEMOS, A. Cibercultura e mobilidade: A era da conexão. **Razón y Palabra**, n. 41, 2004. Available at: https://www.facom.ufba.br/ciberpesquisa/andrelemos/cibermob.pdf. Access on: 13 Jan. 2022.

LÉVY, P. Cibercultura. Rio de Janeiro: Ed.34, 1999.

LUCENA, S.; SANTOS, E. App-diário na formação de pesquisadores. **Educação Unisinos,** v. 23, n. 4, p. 658-671, out./dez. 2019. Available at:

https://revistas.unisinos.br/index.php/educacao/article/view/edu.2019.234.04. Access on: 28 Nov. 2021.

MONTEIRO, J. C. S. Padlet: Um novo modelo de organização de conteúdo hipertextual. **Revista Encantar, Educação, Cultura** e **Sociedade**, Bom Jesus da Lapa, v. 2, p. 01-11, jul.

2020. Available at: https://www.revistas.uneb.br/index.php/encantar/article/view/9077. Access on: 13 Feb. 2022.

NÓVOA, A. A pandemia de Covid-19 e o futuro da Educação. **Revista Com Censo: Estudos Educacionais do Distrito Federal**, v. 7, n. 3, p. 8-12, ago. 2020. Available at: http://www.periodicos.se.df.gov.br/index.php/comcenso/%20article/view/905. Access on: 12 Oct. 2021.

PIMENTEL, M.; CARVALHO, F. S. P. Aprendizagem online é em rede, colaborativa: Para o aluno não ficar estudando sozinho a distância. **SBC Horizontes**, 2020. Available at: http://horizontes.sbc.org.br/index.php/2020/06/02/aprendizagem-em-rede. Access on: 09 Mar. 2021.

RUSSEL, J. A busca de Padlet, apoiada pela YC, para democratizar a criação de conteúdo da Web atinge 1,5 milhão de 'paredes'. **TNW**, Amsterdã, 2013. Available at: https://thenextweb.com/news/padlet. Access on: 12 Apr. 2022.

SANTAELLA, L. Gêneros discursivos híbridos na era da hipermídia. **Bakhtiniana**, São Paulo, v. 9, n. 2, p. 206-216, dez. 2014. Available at: https://www.scielo.br/j/bak/a/Z96vv4RWJy4Qb8hghKmtvCL/abstract/?lang=pt. Access on: 18 Dec. 2021.

SANTANA, C. L. S.; SALES, K. M. B. Aula em casa: Educação, tecnologias digitais e pandemia COVID-19. **Educação**, v. 10, n. 1, p. 75-92, 2020. Available at: https://periodicos.set.edu.br/educacao/article/view/9181. Access on: 25 Apr. 2022.

SANTOS, E. Pesquisa-formação na cibercultura. Teresina: EDUFPI, 2019.

SANTOS, E. O.; CARVALHO, F. S. P.; PIMENTEL, M. Mediação docente online para colaboração: Notas de uma pesquisa-formação na cibercultura. **ETD - Educação Temática Digital**, Campinas, v. 18, n. 1, p. 23-42, 2016. Available at: https://periodicos.sbu.unicamp.br/ojs/index.php/etd/article/view/8640749. Access on: 12 Mar. 2021.

SANTOS, E. EAD, palavra proibida. Educação online, pouca gente sabe o que é. Ensino remoto, o que temos. **Notícias, Revista Docência e Cibercultura**, ago. 2020. Available at: https://www.e-publicacoes.uerj.br/index.php/re-doc/announcement/view/1119. Access on: 19 Feb. 2022.

SILVA, M. Educar na cibercultura: Desafios à formação de professores para docência em cursos online. **TECCOGS** – **Revista Digital de Tecnologias Cognitivas**, v. 4, n. 3, p. 36, 2010. Available at: https://revistas.pucsp.br/teccogs/article/view/52991. Access on: 19 Jan. 2022.

How to reference this article

BENEDITO, R. C. S.; LUCENA. S. The Padlet in online education of degrees. **Revista Ibero-Americana de Estudos em Educação**, Araraquara, v. 17, n. 3, p. 1837-1854, July/Sept. 2022. e-ISSN: 1982-5587. DOI: https://doi.org/10.21723/riaee.v17i3.16767

Submitted: 12/02/2022

Revisions required: 26/04/2022

Approved: 27/05/2022 **Published**: 01/07/2022

(cc) BY-NC-SA

Processing and publishing by the Editora Ibero-Americana de Educação.

Correction, formatting, standardization and translation.