IGNITIONS ON EDUCATIONAL EXPERIENCES DURING THE PANDEMIC

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INTRODUCTION

The Covid-19 pandemic state was declared by the World Health Organization in March 2020.[1] This decision was followed by a series of changes and restrictions imposed by governments around the world. One of them was to change to a remote mode of teaching across a wide range of courses. Such a shift, which some have called "emergency remote teaching",[2][3] took educators by surprise and ignited the necessity of rethinking and adapting their contents, materials, methods, and pedagogical approaches on the fly, as the semester was already under way.

Such a scenario was not different for the educators of the Faculty of Fine Arts of the University of Porto (FBAUP), in Portugal. On March 12, they received the official communication that schools and universities must close,[4] and had just a few days to prepare before starting teaching remotely. Although a few teachers cope better with the constraints of the situation, since they had already adopted educational applications – or at least had some experience using them; others received the news with shock – especially those whose classes demanded the use of specific materials, equipment, or spaces.

This paper presents a study aimed at understanding how the teachers of FBAUP responded to the challenges provoked by the first wave of the Covid-19 pandemic. It first introduces the applied research methodology; then, it synthesizes six categories of the promoted educational practices; and, finally, it discusses some general postures embraced by the teachers as a consequence of remote teaching and what were their perceived impacts on students' performance.

METHODOLOGY

At the end of the semester, by June 2020, a task force composed of a supervising teacher, two researchers and a technician in communication design was formed. Its goal was to understand how the FBAUP teachers dealt with the transition from presential to remote classes, and what were the teaching and learning experiences implemented by them. A study was then planned and divided in two phases: i) analysis and collection of data, and ii) conversation with teachers.

First phase: analysis and collection of data

Analysis of questionnaires

Two weeks after remote classes started, the Director of the Faculty shared a questionnaire with teachers and students of all cycles of study aiming at understanding, among other issues, students'

access to technology and how the teaching/learning experience were running so far. This initiative was a helpful starting point and allowed us to skim through the students' responses seeking for the classes that were adapted in an efficient way amidst the circumstances provoked by the lockdown.

Contact with faculty members

In parallel to the above-mentioned task, we spoke to four technicians who were responsible for art and design offices to understand in which manner their experience with teachers, students, and the office itself changed with the remote classes. In addition to that, we sent emails to i) the members of the monitoring committee (which are usually composed by two teachers and two students) of first degree and master's degree courses, asking them to share examples of positive/creative experiences promoted by the teachers during the classes; and ii) to the teachers themselves, asking them to share their experiences and students' responses regarding the remote classes.

Collected data

After the analysis of the questionnaires, we created a list with all mentioned classes (n=48). The higher number of mentions for a class was 15 (n=1), followed by 11 (n=1), 9 (n=3), 8 (n=2), 7 (n=2), 6 (n=5) and 5 or less (n=34). Regarding the contacts with Faculty members, the emails (n=14) sent to the course monitoring committees resulted in 6 answers (n of teachers=5, and n of students=1), where 3 (n of teachers=2, and n of students=1) indicated promoted practices. We also received responses from teachers (n=10) sharing their promoted experiences and practices.

As a result of the first phase of the study (see Table 1), we selected 20 teachers who represented 7 courses and 3 cycles of study and invited them via email to participate in the second phase. All of them responded and accepted our invitation. Two teachers, however, were not available during the scheduled dates, so they received the general questions by email and returned their impressions via a pre-recorded video.

Teachers			
n=20	Male	n=11	55%
	Female	n=9	45%
Classes			
n=26	**Classes per course**		
	Bachelor's in Fine Arts	n=9	34,6%
	Bachelor's in Communication Design	n=9	34,6%
	Bachelor's in communication sciences	n=2	7,7%
	Master's in Art and Design for the Public Space	n=2	7,7%
	Master's in Fine Arts	n=2	7,7%
	Master's in Image Design	n=1	3,85%
	PhD in Fine Arts	n=1	3,85%

Table 1. Overview of teachers and representation of classes per course.

Second phase: conversation with teachers

Online interviews

From July 15 to 24, we scheduled and ran online interviews with the teachers aiming to gather deeper insights on their impressions, experiences, and responses to the shift for remote classes. For this task, we used the Zoom video conferencing platform. Averaging 45 minutes long, the interviews were conducted with the participation of two researchers. Since we sought to gather participants' insights to

learn more about a specific experience, the interviews were planned under a semi-structured format, [5] and guided around three main questions: the challenges faced by teachers, how did they respond to them, and what were the results of the experience.

Each interview started with the researchers contextualizing the study and generally presenting the three mentioned questions. After that, the teacher was encouraged to share his/her stories, feelings, experiences, learnings, and, as they touch on significant statements, the researchers could follow up with more specific questions.

Collected data

In the beginning of each interview, the researchers asked teachers permission to record the conversation. This was made by using the 'local recording' functionality provided by Zoom, and we ended with nearly 14 hours of recorded conversation. In addition to the videos, both researchers took notes during the interviews marking relevant topics to facilitate the process of data analysis. After the interviews, we kept in contact with teachers to get extra material, such as examples of students' projects, list of exercises, tutorials, and website/blog addresses, hence we could better understand the promoted practices and its results.

SYNTHESIS OF EDUCATIONAL PRACTICES

The analysis of the collected data and insights from the interviews were based on systemic,[6] and semiotic theories,[7] [8] and aimed at revealing possible tendencies, recurrences, problems, and constraints that intersected the different teachers, courses, and cycles of study. We then structured and analysed all the gathered material and synthesized teachers' responses into six categories of educational practices that might provide a general overview of how they responded to the circumstances of remote teaching. These are: generate networks, rethink materials and tools, reuse archives and materials, produce documents, create environments, and provoke dialogs.

Generate networks

In a context without the presential interactions with others; a context where the collective dimension of learning seems to vanish, since the students were working from home, commonly isolated, and facing conditions most teachers were not aware of; how could teachers promote reflection and ways of creating and sharing?

Generate networks, refers to the creative practices developed from remote collaborative work. Teachers restructured the exercises, practices, and peers' encounters in a way to encourage creative responses based on students' own practices that were then developed or continued with/by their colleagues. It was also applied to promote creative dialogs from the exchange of textual, sound, or visual contents produced by each student. These were implemented, for example, by creating text instructions to be used in drawing or sculpture exercises; or by producing a series of photographs based on a previously given image. They also encouraged the use of digital platforms to promote interaction and collaboration among peers.

Rethink materials and tools

With the school closed, students were unable to use the studios, laboratories, machinery, materials, and tools they needed to develop their projects. How could they, then, work with limited use of equipment and without seeing the proper demonstration of engraving, carving or print techniques, to name a few?

Rethink materials and tools is related to creative practices coming from the exploration of equipment, supports and alternative work tools. Teachers found an opportunity to explore what they have not explored in the past, to rethink essential processes and tools related to their art and design practices, and to discover what students could do with so little. They promoted both research and creative practices to investigate the usage, design, and adaptation of daily utensils to the discovery of alternative spaces, tools, and materials.

Reuse archives and materials

Students were also unable to borrow equipment from school, and, in addition to that, they faced rigid restrictions regarding the use of public spaces. Even if they owned specialized audiovisual equipment (which was not the case for most), they were limited by what they could find at home or what they could see through their windows, or at their balconies. How could they produce original content and develop audiovisual projects in such a context?

Reuse archives and materials refers to creative practices developed from the resignification of preexisting contents. Students were provoked to experiment with alternative instruments or ways of producing content as well as to explore personal or public archives of imagens, videos, and sounds, and to experiment with the audiovisual language to give these contents a novel plasticity, significance, narrative.

Produce documents

The impossibility of using the school's infrastructure impacted not only the access to its resources, but also how teachers presented contents and demonstrated processes. Since they were also unable to access the classes, reproducing their way of teaching remotely would just not work. So, how could they manage the use of digital tools to provide extra materials and facilitate both project development and autonomous study?

Produce documents is related to the practices of producing materials to support asynchronous activities. This was implemented from both teachers' and student's perspectives. On one hand, teachers produced their own documents, whether working alongside technicians to create video tutorials and manuals; or providing virtual tours from their art studios or offices to demonstrate techniques and tools that students could use or explore at home. On the other hand, some teachers asked students to register their own practice and research. This was made with the usage of diaries, notebooks, photographs, videos, or blogs.

Create environments

The presentation of students' projects and discussions of the iterative stages of its creative process started occurring in a remote mode. In such a context, technical factors such as the age of an equipment, the quality of the camera and the internet connection started playing an important role for the quality of such presentations. Since teachers cannot control those aspects, what types of environments could be used to minimize such impacts and favor content sharing through digital platforms?

Create environments refers to practices of creating spaces for sharing references, archives, and ideas. Teachers and students worked on their digital competence and explored digital platforms to allow them to collaborate, express ideas, and present work in both synchronous and asynchronous ways. Teachers also helped students in managing their home environments to adapt provisional workspaces and develop autonomous habits of study.

Provoke dialogs

Despite losing the physical presence and the non-verbal communication signs it provides, the interaction through digital platforms has the potential to gather people located from different physical spaces. How could teachers take advantage of these platforms for the promotion of remote encounters?

Provoke dialogs refers to the practices of promoting spaces for the connection of researchers and students. Teachers used this as an opportunity to encourage the exchange of ideas between students from different classes and even distinct cycles of study by promoting informal presentation sections. They also prepared open seminars with the participation of invited international scholars, making possible an initiative that would demand higher efforts and resources if done in a different context.

DISCUSSION

Educational practices represent general actions resulting from the stances adopted by the teachers as a response to the constraints imposed by the lockdown. Although these emerged from the way each teacher managed the dynamics of their own class, they revealed to be transversal across the diversity of teachers and classes. One of the reasons for that is because teachers had to adapt their way of teaching and, in most cases, to revalue what they usually expected from students. Below we briefly discuss some of those adjustments and highlight teachers' perceptions on how they reflected on students' behaviors. It is worth mentioning that we do not mean that these postures are exclusive of remote teaching or were not put into practice before, rather they happened to be recurrent on teachers' discourses hence seemed to gain some light in times of covid.

Openness to experience and reinforcement of research

The lockdown period intensified the development of openness to experience and exploration of design and artistic practices as research activities. Students were instigated to reflect on the global scenario of social isolation and stimulated to develop their projects as a way of thinking about their own experiences of confinement, thinking about how everyday conditions – even the most radical and painful – could be introduced into their practices. This does not mean their projects had to represent, illustrate, or respond to the changing scenario provoked by the pandemic, rather they might be informed about what was happening in the World and develop their critical thinking by means of investigation. The perceived results were consistent to prior research, which relates the trait of openness as a predictor of creative achievement across the arts and sciences,[9] and to the ability and interest in attending and processing complex stimuli.[10] The alignment of the project proposals to the context of social isolation increased students' engagement, allowed them to perceive some aspects that would probably go unnoticed in other situations, and helped them to cope with the lockdown situation. In addition to that, Covid presented an opportunity to explore how artistic and design tools can be applied for the comprehension of the structural and systemic changes of reality.

Return to basics and historical references

The reinforcement of students' research skills was essential not only for the understanding of the global context they were experiencing, but also for coping with the initial shock provoked by the lockdown and developing their projects with the scarce resources they had at hand. This was particularly relevant for the practices of rethinking materials and tools and reusing archives and materials. The students were introduced to historical references where artists and designers came up with novel solutions, methods and tools when facing conditions of isolation and scarcity of resources.[11] [12] Then they were encouraged to research and explore new approaches for art and design

based on their own experience of confinement. Such investigative approaches gave students the freedom to explore novel technologies, symbolic approaches, and alternative dimensions of work. Some improvised solutions which were commonly seen as weaknesses in pre-covid times, turned out to be seen as valuable features in a post-covid era.

Autonomy, motivation and self reflection

Carrying out research activities also reflected on students' autonomy, and impacted positively on the production of documents and rethinking of materials and tools. Often related to distance learning systems, since its materials have to anticipate potential learning needs and supply for students working in isolation,[13] autonomy is an attribute of the learner's approach to the learning process.[14] Without having the opportunity to see the demonstration of techniques and usage of machinery and tools in person, students had to find ways to reflect on and develop their projects autonomously. This was an opportunity to encourage metacognitive skills and tutor students who will be potentially less dependent on teachers and school's infrastructure. Collaboration also played an important role in that regard, whereas students discussed their ideas openly during classes and could build up autonomy and self reflection in interaction and dialogue with others. They responded well to the circumstances and teachers were generally impressed by their effort, imagination and motivation. One may have in mind, however, that according to Niemi e Kousa, when referring to students' motivation, teachers talked about outer motivation and students' outcomes. Students, on the other hand, meant inner motivation, and even those who thought remote teaching was implemented successfully had problems with learning management and motivation.[15]

Emphasis on the process

The number of constraints attached to remote teaching forced teachers to rethink their activities and promote instructional practices as the conditions permitted. They had to reflect in action,[16] in a process where meaning emerges from practical operations, and in which doing and thinking are complementary. Likewise, students worked through the frame of experimentation which led to the emphasis on the process over the final result. Teachers shared fundamental theoretical aspects in classes and progressed to a practical action focused on the art and design problems of students' projects. Students were encouraged to document and systematize their process, helping them not only to gain verifiable insights but also potentially contributing to forming students more conscious about the creative process in general and their own thought processes in particular. These documentation were then considered by teachers to follow and guide the projects. Due to the chaotic aspect of the design process,[17] teachers reported they were required to help students manage the negative feelings expected from the creative experience.

Synchronous and asynchronous dynamics of teaching

Although 93% of students, in Portugal, have a connection to the internet and access to a computer they can use for education,[18] teachers expected that not everyone would have the conditions to be able to join and interact in the online classes - including teachers themselves. In addition to that, studies reported that video chats have a much higher cognitive load, since users need to work harder to send and receive signals.[19] As a consequence, the time period of classes was usually reduced and asynchronous dynamics of teaching were implemented. The computer-mediated communication became prevalent, and teachers' started exploring and adopting multiple solutions: live classes, pre-recorded videos, blogs, virtual forums, emails, instant message applications, mobile calls. Such an approach evidenced the challenges teachers have with Information Technologies.[20] In that regard, the

Educational Technology Center of the University of Porto provided assistance and promoted a series of webinars on educational platforms for helping teachers to create, publish, and evaluate content. The creation of online spaces facilitated the generation of networks that, as suggested by Hine, formed communities of cohesive social entities that were shaped by each class' circumstances.[21] By being more available for students, teachers reached the end of the semester with higher levels of tiredness, confirming studies which report that distance teaching requires greater work and effort compared to face to face.[22]

CONCLUSION

All in all, if this period was marked by moments of uncertainty, difficulties, and constraints, it also ignited collaboration and empathy in a context where learning progressed in the course of an experience of education that valued the process over the final result. An essentially exploratory process that was promoted through autonomous research, in which students were active agents of their own learning. It was also a period where digital technologies and educational platforms were paramount for teaching, communication, collaboration, and exchange of resources. The experience of emergency remote teaching led to the development of digital literacy, educational methodologies, management of time, and metacognitive skills. It presented an opportunity for the FBAUP community to explore and discover new ways of teaching and resulted in creative and transformative postures that will hopefully contribute to the conversations regarding this "new present" of education and what the post-pandemic university could – or should – be.

NOTES

1 "WHO Director-General's Opening Remarks at the Media Briefing on COVID-19 - 11 March 2020," World Health Organization, accessed May 11, 2021, https://www.who.int/director-general/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020.

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12 Harriet K. Stratis, "Disrupting Convention: Gauguin's Unique Multiples and Transfers," in *Gauguin: Artist as Alchemist,* ed. Gloria Groom, (Illinois: Art Institute of Chicago, 2017), 42.

13 Linda Murphy, "Supporting Learner Autonomy: Theory and Practice in a Distance Learning Context," in *Autonomy 10: Integration and Support*, ed. David Gardner (Dublin: Authentik Language Learning Resources, 2007), 74.

14 Phil Benson, *Teaching and Researching: Autonomy in Language Learning* (Essex: Pearson, 2011), 123.

15 Hannele M. Niemi and Päivi Kousa, "A Case Study of Students' and Teachers' Perceptions in a Finnish High School During the COVID Pandemic," International Journal of Technology in Education and Science 4, no. 4 (2020): 362, doi: 10.46328/ijtes.v4i4.167.

16 Donald Schön, *The Reflective Practitioner: How Professionals Think in Action* (New York: Basic Books, 1983), 62.

17 Tim Brown, *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation* (New York: Harper Collins, 2009), 17.

18 Organisation for Economic Co-operation and Development, *21st-century Readers: Developing Literacy Skills in a Digital World*, *PISA*, accessed May 11, 2021: 40, doi: 10.1787/a83d84cb-en.

19 Jeremy N. Bailenson, "Nonverbal Overload: A Theoretical Argument for the Causes of Zoom Fatigue," Technology, Mind, and Behavior 2, no. 1 (2021), doi: 10.1037/tmb0000030.

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