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Supporting collaborative practices and reciprocal exchanges of knowledge in digital teachers training.

4S - Open Panel 60. Digital Inclusion In Practices.

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<https://www.4sonline.org/60-digital-inclusion-in-practices/>

Abstract

Teachers training in digital pedagogy is a key issue for schools and universities. Due to the rise of these practices (such as hybrid or distance learning that have been intensively deployed in the context of the Covid19), educational institutions must now find ways to support teachers who have not yet mastered them. However, in this matter, classic teacher training methods often fail, especially when they do not focus on the participant's own discipline or research field (they can encounter sheer refusal of training, lack of confidence in the proposal or dropping out during training). All these issues are intensified by some kind of shame linked to digital illiteracy. In this paper, the authors propose to discuss three continuing education projects aimed at acquiring digital skills and based on cooperation and reciprocal exchanges of knowledge between teachers. Firstly, we will explore the organizing of an event included in the "EdCamp" foundation's program, then, the design and broadcasting of a SPOC entitled "Digital Commons for Education"; and finally the creation of a digital pedagogy cooperative within their university. These three initiatives have one thing in common: they all reject the pedagogical approach of lecture training. On the contrary, they are based on the exchange of knowledge and know-how between practitioners. But we will also see that each of these three initiatives is based on a specific approach of coaching. Finally, we will see how each of them gives a slightly different place and form to the autonomous practices of participants.

Introduction

Teachers training focusing on digital skills is not something remotely new. It has been an issue for schools and universities since at least the mid-1980s (Cuban, 1986; Baron, 1989; Tessier, 2019). However, this issue has been given a new impetus by

the pandemic context, in particular everything that concerns hybrid or distance learning, which has been massively deployed over the last two years, whereas it was previously seen as a mere 'extra' in pedagogical practices. Until then, digital skills could be considered as not being part of a teacher's core competences. This is probably no longer the case. As we all experienced in the months of lockdown, in most OECD countries, a teacher who was unable to use his school's LMS may simply find it impossible to do his or her job. In this new context, educational institutions must therefore find ways to support teachers who have not yet mastered these digital skills, or risk their exclusion. In this sense, One could say that the aim of digital technology in teacher training has moved from innovation to inclusion.

Of course, this observation does not only apply to teachers: the social goal of digital inclusion is based on the assumption that a person who does not master digital skills will always be more excluded as society becomes more digital. Hence the use of the term illectronism (Caclard, 2012; Lefebvre-Chombart & Robert, 2020), which refers directly to the problem of illiteracy, to the forms of exclusion that it entails and therefore to the types of social response to be provided¹.

One of the common features of illiteracy and illectronism is the embarrassment, or even the shame, that they arouse. People who are victims of illiteracy or illectronism do not dare to call for help, and can even wall themselves off in forms of denial or avoidance that can ultimately lead to personal and professional isolation. This perhaps partly explains the difficulty in setting up training courses for teachers on these issues, a difficulty that we were able to observe directly when our university wanted to set up workshops for teachers. In addition to our position as researchers on these issues within a faculty of educational sciences, we should mention that we have held development positions on these issues for the past ten years, including the creation of a DH Lab (digital humanities laboratory).

¹ France, like many other countries, has seen in recent years the implementation of local policy projects explicitly aimed at the digital inclusion of different audiences (young or elderly people, women, people with disabilities, etc.). One example is the Maison de l'inclusion numérique du Gard project: <https://www.gard.gouv.fr/Actualites/Inauguration-de-la-Maison-de-l-Inclusion-Numerique>. About this project and others of the same type, one can refer to the work and interventions of François Huguet: <http://francoishuguet.fr/en>

This will be important for the rest of this paper, as the perspective on digital inclusion and the projects we will present here are part of the digital humanities approach. The Digital Humanities is a movement that has its roots in the very birth of computer science and that became internationally structured at the turn of the 2000s (Schreibman, 2016). It is not possible here to expand on all the dimensions of this research movement, but it can at least be said quickly that the researchers involved in this movement are working for the development of a digital culture and technological practices adapted to the human sciences. They raise the questions of the design of these technologies and the critical relationship that should be maintained with them. Over the last ten years, this movement has been institutionalised in the academic world through chairs, courses and departments. One of the typical ways in which this movement has been institutionalised is in the form of 'DH Labs'. This type of structure is generally driven by two objectives: the conduct of research involving technologies and digital inclusion within higher education institutions (through teacher training, the development of innovative tools and pedagogies adapted to this public). In 2013, we therefore experimented with the creation of a DH Lab at the Catholic University of Paris, which we called the Digital Workshop (Atelier Du Numérique) and which brings together researchers from different disciplinary backgrounds (education, media studies, sociology, theology, engineering sciences) and collaborators of different status (developers, designers)². It was in this context and on the basis of these experiences, and of course by using scientific data available on these issues³, that we saw how difficult it was to implement a real policy of digital inclusion in an academic context: if we offered lecture-based training, or even practical workshops centred on specific technologies, very few people signed up, even though we knew that there were many colleagues in difficulty, thanks to informal feedback, but also thanks to quantitative feedback from the University Digital Officers.

² About this DH Lab, see “Disseminating research results in a DH Center: Mediasprint as “unconference proceedings”, Speech given during the conference “Digital Humanities Centres: Experiences and Perspectives”, Warsaw, 8-9 December 2016: <http://dhlabs2016.lach.edu.pl/> <https://www.youtube.com/watch?v=-MYpcCcaZmM>

³ As an example, Messaoui, Redondo, Molina & Pironom (2021), show that this difficulty is not specific to our institution but seems to be widespread. In the institutions they study, the authors note a very low enrolment rate when 'classic' digital training modules are offered to teacher-researchers.

One way of explaining the low take-up of digital training by teachers, and in particular by higher education teachers, is that many teachers refuse to train in anything other than their discipline or field of research. This disciplinary research is already very time-consuming and teachers do not necessarily want to go into fields that give them the impression of being dispersed. Finally, we could add a last hypothesis, which is quite simply the high expectations in terms of quality of training that this particular public have. A course set up by people that are not teachers (for example, IT engineers from the institution's IT department) is therefore likely to be rejected.

All this led us to test different formulas, gradually refining our understanding of the expectations of the particular learners we were targeting (that is, teachers in higher and school education). Here we propose to discuss three training projects aimed at the acquisition of digital skills, each of which attempts in its own way to address these issues of digital inclusion of teachers. Firstly, we will explore the organisation of an event participating in the EdCamp Foundation program. Secondly, we will see the design of a SPOC entitled "Digital Commons for Education", and thirdly, the creation of a "Digital Pedagogy Cooperative" within our university. These three initiatives are all based on cooperation and reciprocal exchanges of knowledge between teachers in order to generate an inclusive dynamic. But we will also see that each of these three initiatives is based on a specific approach to coaching and gives a slightly different place and form to the participants' autonomous practices.

EdCamp: starting from the participants' needs

The first formula that we have experimented in our DH Lab took the form of an EdCamp. Created in the United States in 2010, the Edcamp format is very popular in that country, where several dozen labelled events are organised every year⁴. This model is spreading widely around the world as education stakeholders everywhere seek alternative forms of disseminating skills and knowledge. The organisation of "camps"⁵ is nowadays a popular activity in the world of higher education. Like a Barcamp and Thatcamp⁶, an Edcamp is an 'unconference' in the specific field of

⁴ <https://digitalpromise.org/edcamp/>

⁵ The model is that of the Barcamps organised by ICT players in Silicon Valley (<http://barcamp.org/w/page/402984/FrontPage>).

⁶ <http://tcp.hypotheses.org/category/thatcamp-paris-2015>

education. It does not include a lecture, but only practical workshops dedicated to the exchange of experiences and the development of innovative projects. The sessions are not organised in advance. Participants propose workshops at the opening of the Edcamp. Other participants can then take part. Workshops are usually organised in one of the following ways: open exchanges around the sharing of experiences; conducting practical activities according to the educational logic of the "Learning by Doing" and completing a project within a given time frame. It is a type of event organised by and for people involved in formal education (higher, secondary or primary education) or non-formal education (educational activists, mediation structures): teachers, researchers, students, trainers, educators, mediators. One can also meet people involved in the field of the educational technology industry (called EdTech movement): entrepreneurs, designers, etc. The issues of pedagogical innovation and the use of educational technologies are at the heart of the Edcamps. The work that takes place there can thus concern technologies (devices, software and applications); pedagogical innovations (Blended Learning or Mix Pedagogies); the design of online courses and their scripting; the design of space and the layout of classrooms, etc.

The "Digital Humanities for Education" Edcamp organised in September 2016 had the aim of identifying the possible contributions of digital humanities to education. By mirror effect, the participants also questioned the way in which digital humanities can become a taught "discipline", by stimulating exchanges between researchers and practitioners around educational experiences that involve the use of new technologies. The event was introduced as follows: "The educational dimension of the Digital Humanities is expressed in various ways: transmission of skills in and out of educational institutions, teachers training, democratization and open access to digital culture. The perspective of the Digital Humanities can be relevant for thinking about information and communication technologies for education (ICTE) and their uses. The Edcamp "Digital Humanities for Education" proposed to explore the different forms of these links⁷.

⁷ <http://edcamp.icp.fr/>

In order to achieve these objectives, the Edcamp "Digital Humanities for Education" included three types of events: thematic workshops during which participants imagined pedagogical projects or exchanged around their experiences; a "Kindergarten" which was a kind of open and playful space in which participants were able to discover and interact freely around innovative technologies or pedagogical projects presented by their creators and developers; conferences and communication sessions.

This hybrid format (between conference and unconference) can be explained by our inclusive approach: proposing an event that took the both forms made it possible to attract colleagues who would not have come if the event had only been a "training in digital technology". In a very prosaic way, participation in the EdCamp could be valued in their research activities and was not seen in this sense as time lost. Strange as it may seem, for many teachers, training is a waste of time. We had to take this into account if we wanted to include as many colleagues as possible. The limitation of such a scheme is that it seemed to us to be more suitable for an audience of higher education teachers than for school teachers, who are the main public of our faculty of education (even if there are examples of EdCamps organised in the school world with success). So the inclusive principles that we had begun to identify needed to be adapted to wider audiences.

A SPOC to share the Digital Commons for Education

This first trial was successful in that it attracted about 100 colleagues and their participation and feedback were largely positive. As a result, we decided to set up a recurrent online training program for primary and secondary school teachers. We retained the two principles that had guided the inclusive approach to EdCamp: keeping a horizontal approach - in which everyone brings skills and ideas - rather than a vertical one facing knowers and ignorers; adapting the project to the needs, but also to the professional constraints of these school teachers who constitute the audience of the program.

This online training should therefore be based on digital activities that can be conducted practically in the classroom⁸. The aim was not to give an overview of the theories on innovation and digital technology, but to use concrete examples, the implementation of digital innovation projects by teachers, such as the creation of a digital audio book with kindergarten pupils or the participation of secondary school pupils in a physical sciences escape game. From these case studies, teachers are then invited to imagine methods and tools to develop their own projects and share them with others. This was the philosophy of the “Digital Commons for Teaching” SPOC (Small Private Online Course): to be able to transform one's teaching practice without necessarily becoming a “geek”. The idea is to share one's experience and tools, to share difficulties also, and to find solutions. The aim is to promote the development of teachers' skills and to support them in the development of their digital practices. The implementation of the training includes the preparation of educational scenarios and the production of visual and textual resources by the participants. The success of this training (this SPOC has trained several hundred teachers since its first iteration) has 3 explanations: it is based on the technologies, tools and philosophy of the famous MOOCs (Massive Open Online Courses) applies to a small group, allowing for more interactivity between participants and with the trainers that come in regularly in the platform forums and gives weekly synchronous Zoom meetings. It should also be said that its small format (12 hours) is a strength, as it represented a challenge that could be met by many full-time teachers

However, the limitation of such a program is that it is designed to build momentum among learners but not to sustain long-term work. We therefore still had to find a way of supporting teachers who wanted to deepen their skills following this first approach.

A digital education cooperative within the university

In this spirit, we have imagined a project of digital pedagogy cooperative, implemented since 2018 at the Catholic University of Paris. The primary objective of this cooperative was to improve and transform pedagogical practices, through

⁸ It will be conducted for the third time this year. For a presentation of this training, see https://youtu.be/U_AVhJk9E2c

meetings, exchange and co-development of pedagogical projects between teachers and researchers:

- The forum, which is a yearly cycle of meetings, combining accounts of educational experiences, research work and practical workshops. The goal was to discover new practices and to exchange them.
- The incubator: teachers and researchers wishing to transform a course (using digital technology or the Catholic University of Paris' pedagogical innovation spaces) can present a project. The steering committee examines the proposals and decides to incubate two of them per year. During one semester, the teacher (or a group of teachers) and the DH Lab team meet every week and script the course together. The next semester, DH Lab team supports its implementation on the LMS. At the end of the incubation period, the project leader or the teaching team is invited to give feedback to the teaching community.
- The toolbox: this is intended for professors and teachers who want to ask a question or who wish to have an opinion on a project to be implemented (e.g.: "I want to use digital applications to conduct an activity: which one is the most appropriate?", "I want to do video recording, but I don't know how to do it", etc.). We find solutions to a specific pedagogical and/or technical problem. This requires the definition of a regular weekly time slot, with free access on the set.

Interestingly, only the incubator activity was successful (we abandoned the others). Several teachers who had ambitious digital projects that they were unable to carry out on their own were able to receive support in carrying them out. Here again, it can be hypothesised that the success of such a scheme depends on the ability to adapt to the real needs and constraints of teachers in order to help them progress from where they are, in a realistic way.

Conclusion

In conclusion, in these three examples, the starting point was the same: proposing inclusive training and support systems that made it possible to welcome and support colleagues who refused to follow traditional formal training courses. But the issue of

digital inclusion is not only in the initial moment of welcoming someone (even if it is fundamental). It is also about the end point of the training. This point is particularly well illustrated in an article reporting on another scheme, METAT, the digital methods workshop at Sciences Po Paris⁹. As the authors of this article, who are also the facilitators of this workshop, show very well, in this workshop, the training ends when the person says that he or she has found what he or she came for. The training does not have a predefined time frame: it can be done in one session or several, it can last fifteen minutes or two hours, depending on the need expressed by the person.

This is an insight that we would like to follow in our next projects, and it brings us back to a fundamental rule of adult education: adults are free. Therefore, it is always the learner who decides when learning starts and when it is finished. If we do not recognise this freedom, if we try to train them against their will, in a way that does not suit them, we will not succeed in including them. This is one of the fundamental intuitions of distance education, which has historically defined itself as "open education" (Glikman, 2002): inclusion implies that the training institution adapt to the needs and multiple situations of learners. Without this, these learners risk being stuck in situations of illectronism which will become increasingly blocking in their daily and professional lives. It is therefore the responsibility of educational institutions to develop innovative formats that address the issue of digital inclusion of teachers.

Bibliography

Baron, G.-L. (1989). *L'informatique, discipline scolaire ? Le cas des lycées*. Paris : Presses universitaires de France.

Bourgatte, M., Ferloni, M., & Tessier, L. (Éds.). (2016). *Quelles humanités numériques pour l'éducation ? : Ouvrage collaboratif édité en temps réel*. MkF éditions.

Caclard, N. (2012). La médiation numérique : une urgence pédagogique et politique. *Cahiers de l'action*, 36, 21-25. <https://doi.org/10.3917/cact.036.0021>

⁹ Diégo Antolinos Basso, Audrey Baneyx, Héroïse Théro, Benjamin Ooghe Tabanou, article to appear in the journal Humanités Numériques (<https://journals.openedition.org/revuehn/>).

Glikman, V. (2002). *Des cours par correspondance au e-learning : Panorama des formations*

ouvertes et à distance. Presses universitaires de France, DL 2002.

Cuban, L. (1986). *Teachers and machines: the classroom use of technology since 1920*. New York : Teachers College Press.

Lefebvre-Chombart, A. & Robert, P. (2020). Reconfigurer l'économie sociale et solidaire en Hauts-de-France : un living lab en commun au service de l'intermédiation territoriale ?. *Géographie, économie, société*, 22, 431-452. <https://doi.org/10.3166/ges.2020.0011>

Messaoui, A., Redondo, C., Molina, G. et Pironom, J. (2021). Impact du confinement sur les pratiques pédagogiques dans l'enseignement universitaire technologique en France : une étude exploratoire. *Revue internationale des technologies en pédagogie universitaire*, 18(3), 1-16. <https://doi.org/10.18162/ritpu-2021-v18n3-01>

Schreibman, S., Siemens, R. G., & Unsworth, J. (Éds.). (2016). *A new companion to digital humanities*. Wiley Blackwell.

Tessier, L. (2019). *Éduquer au numérique ? : Un changement de paradigme* (Vol. 1-1).