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Digital skills' portfolio : formalizing the informal in computer learning

An ethnography of distance education engineers

Abstract :

Keywords : formal learning – informal learning – education engineer – C2I – distance education

Issue : digital skill portfolio

In Europe¹, governments have agreed that teachers should be able to use the Internet and a computer to be in tune with the new generation they train. Therefore, the French government has included computer and Internet skills within the ten competencies² necessary to become a high school teacher. In order to be sure that these skills are mastered, the government has included their evaluation during the recruitment process. In order to be selected to become a teacher, a French candidate has to show that he/she masters the Internet and can properly use a computer. How does the French government proceeds to implement this obligation ?

The evaluation of Internet and computer skills goes through a digital skills' portfolio that the candidate has to prepare in order to prove that he/she meets the competencies required. The digital skills' portfolio ("dossier numérique de compétences" is the exact French label) is a set of seven sections³, each of them dedicated to a specific area : communicate with new technologies,

¹ This is one of the leitmovi of ECDL foundation : <http://www.ecdl.com/>

² These ten competencies are listed on <http://www.education.gouv.fr/cid52614/menh1012598a.html> (13th of april, 2014)

³ Listed on the national website : <http://www.c2i.education.fr/spip.php?article87> (13th of april, 2014)

be responsible with the protection of data, prepare a course using new technologies,... The candidate has to fill in the portfolio, respecting its structure, in order to prove that he/she is competent in each section. It is finally defended orally or presented to an examination jury in order to obtain the certificate (C2I : Certificat Internet et Informatique) necessary to become a teacher at high school level.

This evaluation device through a portfolio is not unique : in France, RAEP (standing for “reconnaissance des acquis de l’expérience” : validation of competencies acquired through experience) is a national trend changing the way people are recruited as civil servants⁴. Instead of the traditional competition based on an examination essay, the contenders have to gather information about their personal or professional experience in order to prove that they have all the competencies required. They are not totally free in this process: the final portfolio is predetermined by sections corresponding to core competencies defined by the jury. And this is not uniquely French since many digital portfolio tools to facilitate this evaluation process are easily found on the Internet⁵: it appears to be a modern and international trend of evaluation.

Method : gathering empirical data through a fieldwork in a education organization

However, my analysis is mainly focusing on the C2I French device. Indeed, most of my empirical data come from a fieldwork within a French national distance education institution. During a long run participatory observation among training managers and engineers, I gathered data about the way the institution prepares candidates to C2I. I had informal interviews with the employees and access to daily work data. My point of view is then determined by this field study : even when I compare the French device to other trends that can be found on the Internet, I am determined by what I have seen during months in this institution helping candidates to prepare their C2I digital skills portfolio.

The main advantage of this ethnography of teaching organizations method is that it gives a good view of what the indigenous workers within the organization think and say about what the learners have to learn in order to get their certificate (and finally have all the competencies to work as a modern teacher). It is therefore complementary with the pieces of information that one can found on the Internet (government C2I website for example) and that are more official.

⁴ Raep has been set up by a French law of february 2007, cf. Yolande Ferrandis in *La Raep dans les concours*, La documentation française (2013)

⁵ For example : <https://posterous.com/>

Underneath the official speeches, observing an education organization at work allows to capture unofficial discourses (though hold within office).

The main question of this oral intervention is : how does the international trend of evaluation through a digital portfolio, illustrated by the French C2I, interferes with the integration of formal and informal learning ?

Results : description of the preparation of one's digital skill portfolio

The distant education engineers are in charge of implementing the training : they conceive and implement a pedagogical device to prepare the candidates to pass their C2I certificate. This C2I preparation is based on an online training website since it is distance education. During the time of my observation, it was limited to this training website, though there were projects for a development of it through tutoring. Let's describe first the website and then the tutoring project.

The online website dedicated to the preparation of C2I is a commentary of the national text describing the competencies a teacher has to prove in order to be certified. This means that the seven sections are listed and, for each of them, a commentary explains what this competency means and how a teacher can prove that he is competent in this field. For example, section five is dedicated to using a computer in a classroom. The national text does not give a lot of details about what is required. Therefore the training website explains different ways a computer can be used in a classroom, either to present the teacher's course or to have the students participate on small groups. Based on this description, the candidates to C2I are incited to describe what they have done in this past that meets this requirement : have they already presented a course with a computer ? Have they had students doing an oral presentation with a computer ? If so, they would have to describe this experience and show what they have learnt that prove that they acquired this competency. If not, the training website invites to a set of exercises in order to meet this requirement.

What I notice here is that the training is mostly based on the valorization of informal learning : most of the time, the candidates just have to formalize what they have already done before. There is no proper learning activity apart from rethinking previous experiences in order to organize it and fill in the certification form (that is to say the digital skill portfolio). Formal learning activity is not the rule but the exception : it appears when there is no previous informal experiences to formalize : in this case the learner has to do the activity in order to acquire the competency.

However, the team of training engineers we observed included a former high school teacher. Indeed, they believed that he would be of much help since he had a precise idea of what are the

Internet skills necessary to teach in a classroom. He was complementary to the official texts thanks to his practical knowledge. And, together, they set up a new pedagogical device, in addition to the training website. They conceived a tutoring process so that the candidate would be alone in front of the website explaining the seven sections of the national text. A tutor would be present (though at distance : he would answer by email, through the Internet) to help the candidates : he would be here to give them pieces of advice, to help them if there was any difficulty and to correct a first draft of their digital skill portfolio before the final submission to the jury.

This tutor is described by the team as the added value of the website. It has a pure pedagogical mission : he is here to accompany the learner and to help him in case of difficulty. The tutor has no standard speech to deliver (everything formal is writing on the website) : he has to personalize what he knows to adapt it to the difficulties of the learners.

In a nutshell, this training device we observed, is a mix of method (what is standard and written on the website) and of pedagogy (the tutor and its role of personalization). These two dimensions are combined to help the learners to formalize their previous informal experience in order to fill in the form of the digital skill portfolio. A discussion can still be raised : what is implied by this formalization of the informal ?

Discussion : formalizing the informal ?

The main consequence is that the learner doesn't have to learn anymore : he has to reorganize what he already knows. One doesn't ingest new materials, one has to digest them. This is the mere consequence of the notion of formalization. Pieces of information are acquired informally all along one's life, then, in order to fill in the form proving that one is competent for a job, one has to formalize them in a "formation". The structure of the formation is imposed by the form one has to fill in, the content is constituted by previous experiences. In case of a lack of certain parts, one can be trained to acquire new items and then be sure to have all the competences required.

The French psychologist Gustave le Bon wrote about the reform of university in early 20th century ;he then asserted that the evaluation tool determines the learning process. Indeed he believed the learning strategy as well as the teaching strategy were centered on the evaluation process. A learner will focus on what he/she will be evaluated. And the teacher will prepare his/her course insisting on what will be tested at the end. He then criticized the memory-based skills that were fostered by classical examination at University.

Following this idea, I think that this new evaluation based on formalizing the informal in computer skill triggers many consequences in learning strategy. The first one is the ability to have a reflexive distance on one's practices. Personal reflection on one's previous experiences is indeed essential in order to meet the requirements of this kind of evaluation. What have I done (even though informally) ? How can I formalize it in order to valorize it ? A second consequence will be the multiplication of a great variety of experiences : the more one discover informally, the more chance one will have to be able to lately formalize it in order to pass a test. Diversity is then researched for its own sake, and because retroactive formalization allows to valorize it. Last but not least, a propensity to explain what one has done will be a consequence of this new kind of evaluation.

Personal reflection, variety of experiences and propensity to explanation are therefore three major consequences in learning strategies that would be a consequence of this new way of evaluation : the formalization of informal.

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