Guiding Professional Life-long Learning Projects: the Case of an Immersive Blended Learning Certificate Accompagner des projets professionnels en formation continue : le cas d'un certificat de formation hybride et immersive

Kalli Benetos, Daniel Peraya

Abstract

This case study presents a blended learning study program offered as a continuing education certificate of advanced studies for post-secondary educators and training professionals in the private, non-governmental, and public sectors. This accredited certificate program is unique in that it allows participants to propose and develop their own practical pedagogical projects. Another distinguishing characteristic is that it is offered in blended learning mode, i.e., alternating face-to-face phases with tutored distance learning phases. The pedagogical team includes one professor and one coordinator who supervise the entire program, as well as external instructors who provide individually tailored consulting on participants' projects. During their studies, participants experience first-hand, the techno-pedagogical solutions proposed through their implementation within the program.

Keywords: blended learning, hybrid learning, e-learning, continuing education, life-long learning, project-based pedagogy, immersive learning, Europe

General Context

Program stakeholders

Arthur: professor in a European university. Arthur initiated the creation of a certificate of advanced studies in the design and development of online learning and is responsible for the

academic and instructional design aspects and tasks that he shares with Madeleine. He also teaches specific courses within the program.

Madeleine: scientific collaborator. Madeleine works closely with Arthur as an instructional designer and coordinator for the program. As well as teaching assigned courses, she administers the learning management systems used within the program (*Moodle, Mahara*), devoting 40% of her time to the certificate.

External instructors: experts in the domains of competence that are integral to the proposed curriculum but outside of the expertise of the organising team.

Project tutors: most instructors within the certificate program also take on the role of project tutors. When necessary, additional collaborators are hired solely as project tutors.

With such a small team, each stakeholder is called upon to assume multiple roles and functions: the strict division of labour seen in large-scale educational institutions is not practical in the current case and context.

The certificate program in question is a blended learning program that alternates between face-to-face and distance learning phases. The program is aimed at postsecondary or university level educators, as well as professional educators and trainers in the private, non-governmental or public sectors who need to implement instructional or educational programs within their institution or business.

After several years of running the program, Arthur and Madeleine wish to share their experience, as well as to take stock of the ground they've covered so far, and to highlight some of the innovative aspects of their certificate program. They decide to organize a meeting with colleagues and instructional designers interested in their experiences, so as to describe

the different steps that led to the development of their particular program and their view of its current state. This meeting took place early February in a classroom on campus.

Start of the project

Arthur recalls that when the certificate was first designed, his research and teaching unit offered several continuing education courses in the field of educational technology. "*At that time, I wanted to group the various courses into a structured whole; a program that would lead to accreditation and certification,*" he explains. The creation and organisation of continuing education programs is part of a professor's mandate and Arthur has had more than 30 years' experience delivering educational programs and courses through various media. Hence, it was natural for him to assume responsibility for the design and development of this program.

When Madeleine began working with Arthur, she already had 10 years of experience developing online courses, as well as two years of university teaching experience. Thus, she was able to quickly take on the numerous tasks needed to coordinate and manage the program.

Madeleine described how the program evolved over time.

"My work was varied from the start. Besides taking care of common administrative tasks such as managing the budget, enrolments, communication with the university's Continuing Education Department and publicity, I also administered the techno-pedagogical learning environments and kept abreast of the latest technological developments, especially in the area of Web 2.0 related technologies. And, of course, I also acted as an Instructional Designer (ID) for different instructors to ensure there was an underlying coherence among courses and the activities proposed within each course."

Madeleine explained that, as a tutor, she also monitored the progress of some of the participants' professional projects. She pointed out the example of Amandine, a former primary school teacher, who wished to create a series of courses for primary school teachers

addressing the integration of technology in their teaching practice. Arthur, who also tutored some of the projects, added that they were both required to teach several courses within the various proposed modules that related to their respective areas of expertise.

Arthur explained that his collaboration was not limited to Madeleine:

"Other specialists were included to complement and complete the program's pedagogical team. These experts were selected based on their domains of competency. Some participated only as instructors for particular courses within various modules whereas others also took on the role of tutors, following the progression and development of participants' projects."

Madeleine elaborated:

"In addition to teaching and monitoring the progression and development of participants' projects—including formative evaluations—each instructor was also responsible for his or her own course, its instructional design, and the associated implementation of proposed activities and contents within the techno-pedagogical environment."

Arthur explained:

"Our human resources for implementing this program are very limited. Each member of the pedagogical team had to assume multiple functions: administration, coordination, course design, content creation, teaching, tutoring, etc."

"This increased the workload for each of us but it allowed everyone to play an important role in making sure the program ran smoothly," Madeleine noted.

These added tasks demanded that external instructors, in addition to their field of expertise, also have some experience in the instructional design of blended learning and the technopedagogical environments upon which they relied. "*We specifically looked for this before they were asked to come aboard*," added Arthur. When new members first joined the team, the objectives, the pedagogical approach, as well as the demands and constraints inherent in the program's organization, were explicitly communicated. When necessary, Madeleine offered faculty members additional technical or pedagogical support to ensure a sound implementation of their lesson plans. "It was important that there be an underlying consistency and coherence between each module, as well as between each course within them."

The recruitment of tutors was a little different, Madeleine explained.

"Once participants each had written a proposal that described the project they wished to develop during the program, a call was made to potential tutors within our institute's professional network. Those willing to participate could select among the projects that interested them and I tried to allocate projects according to the needs of the projects and the tutors' particular areas of expertise, their interests, and their availability."

Individual tutoring was available for each participant throughout the program. This way, tutors kept an eye on the evolution of participants' projects while maintaining an overall view of the appropriation and integration of new competencies resulting from work done within each module and implemented within students' projects until completion of their projects.

The program outline

Arthur admitted that educational programs about the design and development of online learning were quite rare in academia in their region. "*Our offer was unique and tended to be a niche market*," he explained. Each module corresponded to one key stage in the design and development process of online learning (see overview in figure 1 below). The first module was devoted to defining the project proposals for each participant.

"During the first introductory module, participants were helped to define the mandate and specifications of their projects, identifying the needs of their target audience and limitations of their contexts, and, finally, defining the global objectives of the learning program they wished to implement," Madeleine explained.

The second module focused more on the instructional design and development of the project, while the third presented what Arthur called (using the term proposed by researcher Geneviève Jacquinot-Delaunay), "the latest technologies," that is, the latest, most innovative information and communication technologies (ICT). The fourth module tackled questions

regarding the monitoring and evaluation of online learning. The last module aimed at integrating the previous modules into a final term project. "It is essentially a program leading to certification," Madeleine explained, "but participants may also take a non-certificate option, allowing them to participate in face-to-face sessions without having to complete distance-learning assignments, nor having to develop a professional project." Arthur further explained that this solution was proposed from the start to include participants who had neither the time, nor the inclination, to meet the program's demands but who wished to become familiar with the field or simply to learn about its evolution and latest developments. "Actually, few participants chose this last option which served more to inform than to train."

Participants who chose the certificate program option received four ECTS credits¹ that could be validated in any European university. "*I find our program offers numerous possibilities for our participants*," Arthur stated. Madeleine shared this viewpoint but pointed out the various conditions that participants had to meet: mandatory participation in the introductory module, followed by a choice of at least two of the three in-depth modules.

"Each module consists of three topic sessions, each including one day of face-to-face instruction and workshops, followed by two to three weeks of individual or collaborative work at a distance. Each module ends with a report in which participants make links between, and integrate topics presented, into their professional project," Madeleine explained.

Arthur added that this modular approach was implemented from the start "to better meet the needs of the target audience and their personal and professional constraints."

¹ European Credit Transfer and Accumulation System. For more information see

http://ec.europa.eu/education/lifelong-learning-policy/ects_fr.htm

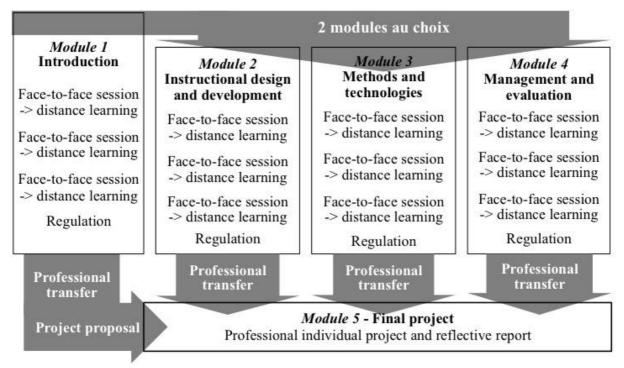


Figure 1 Organisation of modules and courses within the certificate program.

Complementary information: organisation in time

Participants were required to complete the introductory module as well as two of three indepth modules (see figure 1 above). Each module took place over the course of three months. The first two months included three face-to-face days of instruction and workshops, each followed by two to three weeks of related distance learning and assignments. The third month was dedicated to the application of acquired concepts to each participant's project as formalised in a final report. A break of roughly two months between modules gave participants time to appropriate and adapt concepts to their particular professional contexts and to put newly acquired skills into practice before beginning a new module. An assigned tutor monitored each participant throughout the program. This personalized, overarching support and guidance through the project ensured a seamless integration of concepts and skills acquired in a step-by-step manner throughout the course of each module. This allowed the assigned project tutor to conduct follow-up and gradually adapt their guidance according to a participant's evolving needs.

Two modules were offered each term. Participants might choose to take two modules in parallel and complete the certificate requirements in one year. Though the curriculum was designed so that participants could take module 2 after module 1, modules 1 and 3 could be taken concurrently without disrupting the continuity of the project development stages. Module 3 was dedicated to the most recent developments in, and uses of, educational technology. In reality, few participants chose this option². Those who did opt for this condensed format often found themselves overwhelmed by the amount of new concepts and tools and practices that had to be acquired and the amount of work involved, despite the additional support offered by the tutorial team.

The target audience

Arthur described the target audience as being composed of faculty (regardless of status) as well as instructors, trainers, and program coordinators and directors in the private, non-governmental and public sectors. Most people interested in this program—between 8 and 12 per year—already played a central role in the process of introducing, managing, or coordinating the implementation of new or existing courses online in distance or hybrid formats as part of their profession and, occasionally, as part of their personal interests or leisure activities. "Our public was heterogeneous," Madeleine pointed out. Arthur further added, "We saw a huge diversity in age, professional experience, education level, domain of expertise, technical and pedagogical competence, etc. This made the support team's job quite

² 4 out of about 40 participants over 3 2-year sessions.

arduous at times, as it demanded a lot of flexibility and creativity on our part," Madeleine explained.

Participants' motivations for taking this program were varied. For example, they might be responding to an employer's demands, "for instance, the foreseen implementation of upcoming projects and the awareness that there was a lack of competency within the organisation," Arthur clarified. "In such cases," Madeleine continued, "people are usually looking for particular advice to fulfill their mandate." We also saw professionals who needed certification and recognition for tasks and skills that were not part of their initial job descriptions but, as their jobs evolved, had since been added. "In this context, a program leading to certification made sense," Arthur commented.

Initial conceptual choices

Blended learning

Arthur came back to the constraints within which he had to work when the certificate program was initially designed. "*Catering to employees always implies having to take their geographical and time constraints into account.*" It was often difficult, if not impossible, for working professionals to take courses offered in traditional formats because the time the courses were offered conflicted with their working hours, the commute to classes was too long, and so on. "Offering the program in a blended learning format was immediately recognized as the best solution to these problems," Arthur explained. Thus, 25% of the curriculum took place in face-to-face settings during three days of each module. "As a result, 75% of the learning activities were completed with distance tutoring, using the technopedagogical tools and environment provided," completed Madeleine.

Theoretical supplement: blended-learning

Studies conducted as part of the *European Hy-Sup Project* (2009-2012) identified and described different characteristics that define blended-learning or "hybrid" educational programs, courses or lesson plans. Five dimensions were revealed: 1) the organisation of face-to-face and distance activities based on active and participatory pedagogies, 2) tutoring and monitoring of students' methodological and metacognitive progression, 3) the technological rendering of all pedagogical aspects and learning resources from various media (text, image, sound, video, etc.), 4) the explicit expectations regarding the mediation of relations and reflections, 5) an openness to external resources, instructors, and academic institutions, as well as the freedom to choose one's learning path (Deschryver, Lameul, Peraya, & Villiot-Leclercq, 2011).

Concerning the operationalisation and implementation of the program, Arthur stressed the fact that it was not simply a matter of uploading content to a platform and proposing tools for learners to benefit from. If blended learning courses were to reach their full potential, the digitised elements had to be integrated into learning activities. "In many online learning situations," he explained, "developers make resources and learning tools available to students without taking their acquisition into account. However, providing guidance and directing the way learners approach and work through lesson plans should be part of the instructor's responsibility and competency." All distance learning activities carried out within this program were designed and storyboarded from the perspective of all those involved: students, instructors, and tutors alike. "This was the primary innovative characteristic of this certificate program, compared to that which is commonly offered in our university," Arthur highlighted.

Supplementary explanation: learner-centred blended-learning

Arthur and Madeleine opted for the use of a wide range of tools—*services*, according to Gauthier (2004)—available within the techno-pedagogical environment so as to be able to implement the various dimensions inherent to and typical of blended-learning that promotes *action* (Caron & Caronia, 2005). The choices implemented by Arthur and Madeleine placed this program in the category of "learner-centred" instructional design, as described in the typology of Burton et al. (2011), under Type 6, "the ecosystem." Instructional designs of this type take full advantage of all the technological and pedagogical dimensions potentially inherent in blended-learning. The designated metaphor "*evokes the idea of a place where each living organism develops in harmony and balance with its environment. In this light, it is the interaction and enriching exchanges that allow it to develop, and endure,*" (Peraya *et al.*, 2012, p. 11).

Modularisation

Openness, an important dimension in blended-learning, was a deliberate and preferred option built into the program by Arthur and Madeleine, primarily due to given constraints. "All of the competence and expertise necessary was not available within the pedagogical team. It was necessary to seek out other experts," explains Madeleine. Structuring the program into modules was a solution that allowed for *flexibility* as defined by Jézégou, that is, allowing learners the option to control and direct their learning (2003; 2008). Modularisation offers a greater organizational flexibility, so that participants can take the modules according to their interests, needs, and availability. "This design principle is commonly typical of distance education," Arthur underscored. In the present case, the modular organization is also, in part, inherited from the certificate's previous incarnation, built upon thematic, isolated courses, some of which form the basis of current modules.

Learning by immersion

Another innovative quality of this program comprises teaching the use of technologies by using the same technologies in an authentic setting. This approach, Arthur explained, comes from an "immersive" instructional design (Peraya & Peltier, 2012). Madeleine insisted that it is essential that participants experience the type of learning situations they will have to construct and implement (Peraya, Lombard & Bétrancourt, 2008). "Our participants adopt the perspective of blended- or distance learners, by putting themselves in their shoes and experiencing, first-hand, all the advantages and difficulties that arise."

Project-based pedagogy

Participants' professional projects and their integration are central to the curriculum of this program. Madeleine explains that since the 70's, influenced by constructivism, numerous learning approaches and methods—inquiry-based learning, problem-based learning, learning by design—have emerged (Knoll, 1997). "*All share the view that learning is developed within and constructed through a project.*" These pedagogical methods seek to align professional development with the constructivist ideal, but also to open and adapt it to the needs of its target audience (Knoll, 1997). Madeleine continues, pointing out that a project-based pedagogy allows learners to choose their domains of interest, their objectives, and the purpose and context to which their acquired competencies will be applied. "*It is easily adaptable to the learner's needs, previous knowledge, and learning styles.*" As an approach that proposes the resolution of real-world problems in line with learners' interests, project-based pedagogy promotes collaboration, communication, and learning of know-how, while allowing learners

to become more self-regulated and autonomous life-long learners (Markham, Larmer & Ravitz, 2003).

Theoretical supplement: project-based pedagogy in life-long learning

Project-based pedagogy is well adapted to meet the needs of adult learners, as defined by Knowles (1973; 1990). However the skills and autonomy required by adult learners to direct and regulate their own learning processes are sometimes neither part of their previous experiences, nor part of their existing representations of learning situations. Grow (1991) suggests a progressive pedagogical approach, designed to scaffold and facilitate the emergence and adoption of skills that allow for self-regulation and self-direction, that are not only indispensable in project-based pedagogies, but also respond to the needs of an adult and heterogeneous public. This is a four-stage process during which the control-autonomy balance is slowly shifted from the instructor to the learner, with the learner becoming progressively more autonomous, while the instructor steps to the side, eventually becoming an additional resource. Project-based pedagogies must be designed in progressive stages that allow the learner to advance from one stage to the next.

The program's evolution

Arthur and Madeleine conducted evaluations regularly during the first months of the program's implementation. But these were performed with participants on an informal basis and so the need for a more systematic evaluation quickly became evident. Participants complained of an intense rhythm and informational density. *"They wanted to have more time to appropriate and integrate content,"* remembers Madeleine. At this point, the program saw a drop-out rate of almost 50% and an almost 6 month delay in the time to completion for a one-year program. *"We had to put a stopper on this and find an amenable solution,"* Arthur

recalls. As a result, a study was conducted to assess the fit between the program and participants' needs.

Supplementary information: evaluation study

A study was conducted with participants of the first year of implementation³ as well as education and training directors in the private and non-governmental sectors⁴. The study revealed that the target public wished to be better informed regarding all aspects of the program and wished for more flexibility in the selection of courses and in the organization of their learning paths. Some participants were not interested in certification, but wished to have access to a high-level of education that would allow them to resolve difficulties related to the design and implementation of their particular professional projects. On a more general level, all wished to receive tutoring and guidance adapted specifically to their contexts and the problems they faced in their practice as instructional and pedagogical designers. They also wished to have more time to step back and reflect upon the progression of their projects. The distancing of oneself, characteristic of all reflective practice, requires time. Finally, it appeared that participants' professional constraints and obligations did not always leave room for the time needed to work regularly and complete assignments in a timely manner for the entire duration of the program.

³ Participants of the first session were asked to fill out a questionnaire with open-ended questions (in a wiki) and to participate in a group discussion where they could share their experiences and give feedback on all aspects of the programme so as to help the design team identify problems and possible solutions they would like to see proposed.

⁴ A dozen private-sector continuing education and training directors were contacted and asked to participate in interviews on the needs and challenges their institutions faced in implementing distance learning. Three agreed to be interviewed.

During the study, three problems jumped out at Arthur and Madeleine: first of all, the heterogeneity of potential participants with regards to technical and pedagogical skills and know-how, followed by a large variance in participants' goals and objectives. Additionally, there was a disparity in the availability and degree of commitment among participants. "We basically became aware of the magnitude of the incongruencies between the design principles upon which the program was based and the way in which it was implemented." The learning experience they wished to impart made little sense to participants. "Each module demanded a synthesis of concepts previously encountered, but as their professional projects were to be developed at the end of the program, there was little opportunity to integrate what they learned as they went along, and the task of connecting their projects with the various modules only at the end proved to be too difficult," Arthur recounted. As a result, their roles as learners on one hand, and instructional and pedagogical designers in charge of the development of an educational program on the other, remained disconnected. It became apparent to Arthur and Madeleine that the design principles and the selected pedagogical approaches had to be made more explicit through the organisation and structure of the modules and assignments. "The needs participants expressed also corroborate with observations mentioned in the literature," Arthur admitted, "particularly those concerning the ability to participate in the selection and implementation of one's learning path, to choose one's learning objectives, to understand the teaching methods and approaches used, and to be able to experiment with new concepts in authentic situations" (Cercone, 2008).

Resolution of identified problems

Arthur and Madeleine took measures to increase the modularity, the flexibility, and the customization of the program. "*More concretely*," Madeleine explained, "*we extended the duration of the program to two years to make it more flexible for participants*." Participants could complete the certificate in one to two years, or even three, if need be. Also inspired by

project-based pedagogical models (Allert, Dhraief, & Nejdl, 2002; Moursund, 2002), Arthur and Madeleine structured the program according to project development phases: 1) define, analyze, plan; 2) develop and implement; 3) provide tutoring, coordination and management of blended-learning; and 4) evaluate process, product, and acquired competencies.

Supplementary explanation: Module 1, hub of the new certificate

The introductory module serves as an overview of the dimensions and stages upon which the participants' professional projects will be developed during the duration of the certificate program. The module prepares participants for the process that they will follow and allows them to select which areas they will concentrate on, and the manner in which they will continue their studies, based on their interests and needs. Since all participants have unique interests, needs, skills, and experiences, they will not be obligated to complete all of the indepth modules. The introductory module is designed to allow participants to determine the objectives for their project, but more importantly, to establish their overall learning objectives for the program.

Due to this evolution, Arthur and Madeleine noticed that the program had a greater coherence. *"The current organization and structure is closer to that which participants will have to put in place in their own instructional programs,"* Arthur pointed out. Additionally, because the current structure is based on the instructional design and development process, the immersive aspect of the program is heightened.

Supplementary reflection: a look at changes made

This second version of the certificate program responded to the conceptual and implementation issues revealed by this study. The objective behind the changes was to

increase flexibility while strengthening the internal coherence between the program and its different "aligning" principles (immersion, competencies, objectives and content, curriculum structure, and the interplay between modules) (Biggs, 1999). The intent was to make the symmetry more explicit between the role of the learner in an innovative, blended learning program and that of the designer of an analogous one.

These various changes, however, brought new questions to light. The relevance of the existing techno-pedagogical environment was questioned. Madeleine pointed out that the platform was mainly geared to managing isolated courses and not a sequence of courses united around a common learning module. "*In this environment*," Madeleine explained, "*we cannot create any activities in an overarching common space that may concern all courses within a module*." As such, neither learners, nor the pedagogical team can have an overview of all assignments and tasks. However, thanks to Madeleine's observations, the pedagogical team decided to integrate an e-portfolio platform with the existing learning management system allowing each participant to elaborate "views" that included their productions, their resources, links and tools (bookmarks, RSS feeds, social networks, etc.) into a personal learning environment that they could organize to their liking and share with other members of their learning community if they wished.

To benefit from such a tool, however, participants needed some guidance, as the particular instrumental skills required to organize the presentation of views in a way that was easily understood by peers and tutors, was complex. To ease the learning curve, its use and appropriation were introduced progressively throughout the different modules. The creation of views presented a good occasion to sensitize learners to the importance of a coherent

organization and clear structure for the presentation of their work, as well as their personal learning environments.

The certificate program today

Overcoming difficulties

Following Arthur and Madeleine's account, a discussion with other members of the team occurred. One of the instructional designers asked Arthur and Madeleine about the challenges they continue to face. Madeleine replied that the monitoring, tutoring, and evaluation by instructors and tutors on the production process of student assignments remains difficult. Though the e-portfolio permits the team to observe the evolution of a view, it offers no tools for evaluating and giving feedback on this progression. "*This particular problem makes the task of the entire pedagogical team more complex*," Madeleine noted. Actually, considering the relatively high number of people who intervene throughout the program (coordinator, instructors, and tutors), the extent to which a participant can benefit from the various feedback available depends largely on their ability to render their diverse productions easily accessible, in terms of organization and visibility. "*And what's more,*" added Arthur, "*it becomes essential that each member of the pedagogical team also have a high level of instrumental capacity to adapt to the various and very different tools, which are sometimes complex and nonintuitive to use.*"

In spite of the difficulties mentioned, Arthur and Madeleine maintained the initial technopedagogical environment as it enabled the pedagogical team to manage evaluations, grades and assignment completion within each module. "*I still had to devise, in collaboration with instructors and tutors, criteria-based grading rubrics for reports submitted by participants at the end of each module,*" Madeleine expounded. "*This provided a common tool with which to evaluate participants' productions, as well as a centralized grouping of their learning* progression: their questioning, their reflections, and their appropriation of various tools at their disposal."

A critical look at the inroads made

Emma, responsible for pedagogical services offered to members of the university, questioned them on their views of the state of the certificate program today. Arthur answered that the current program appears well adapted to the needs of its target public. "*There is certainly room for improvement, but this will come with the regular management and evaluation of the program*," he explained. "*Meanwhile, our objective is not to be in constant pursuit of the latest technologies, but rather to propose a framework for pedagogical reflection and to promote a critical look and pertinent use of technologies. On this point, I believe the certificate program achieves its objectives.*"

Marie, a doctoral candidate in educational science, asked Arthur and Madeleine if they felt they were continually innovating within an academic context that is making more and more room for technologies. Arthur replied that the principles that guided the elaboration of this program, that is, blended-learning, the integration of participants' professional projects, the immersive use of technologies and its similarity to the type of educational programs or courses participants will design, develop and implement, are still innovations with respect to what currently exists in university contexts. "Despite the years that have passed, we remain an enclave, as we have developed independently, without any reliance on the predominant way of functioning of our institution."

Precarious financial conditions

Miles, a professor of medieval literature and director of a continuing education certificate in palaeography, wonders about the conditions that can enable and ensure the longevity of a program existing on the periphery of common institutional practices. "*We are lucky in that we*

have little competition in our domain," Arthur explained. However, he admitted that the obligation to be self-financing, as all continuing education programs must be, puts the program in a constant state of precariousness. "The pool of possible recruits is finite," Arthur suggested, "and in times of crisis, education and training are undoubtedly the first sectors to suffer." Madeleine explained that currently, employers generally agree that their employees must seek continuing education outside of the workplace, but it is more difficult to convince them to provide, or allow for the time needed to complete assignments, despite the fact that they are necessary in the development of the participant's professional project, which ultimately benefits the business or institution. "It's quite paradoxical," mused Madeleine, "but participants often feel at odds with their employers regarding the management of their work hours: employers are often astonished that courses require a significant amount of time and work outside of the face-to-face sessions. It is as if they think education and training can be reduced to a few information sessions."

Parting thoughts

When each was asked to summarize in one sentence what motivated them to continue along on the path of innovation, Arthur replied, "I've been extraordinarily lucky to be able to initiate such a program within my institution. Maintaining its creative and imaginative pedagogy is a great liberty that makes up for other forms of institutional standardization." As for Madeleine, she concluded, "What motivates me most is that through this program, not only do we aid participants in achieving their objectives with regards to their projects, but we also give them the capacities, the competencies, and the confidence necessary to continue learning and to be able to confront new problems in the design and development of online learning."

References

- Allert, H., Dhraief, H., & Nejdl, W. (2002). Meta-level category 'role' in metadata standards for learning: instructional roles and instructional qualities of learning objects. *Proceedings of The 2nd International Conference on Computational Semiotics for Games and New Media (COSIGN)* 2002, Augsburg (Allemagne). Retrieved from http://ebookbrowse.com/allert-et-al-cosign-2002-pdf-d27367331
- Biggs, J. B. (1999). *Teaching for quality learning at university: what the student does*. Buckingham; Philadelphia: Society for Research into Higher Education: Open University Press.
- Burton, R., Borruat, S., Charlier, B., Coltice, N., Deschryver, N., Docq, F., Eneau, J., Gueudet, G., Lameul, G.; Lebrun, M., Lietart, A., Nagels, M., Peraya, D., Rossier, A., Renneboog, E., & Villiot-Leclercq, E. (2011). Vers une typologie des dispositifs hybrides de formation en enseignement supérieur. *Distances et* savoirs, 9(1), 69-96.
- Caron, A. & Caronia, L. (2005). *Culture mobile : les nouvelles pratiques de communication*. Montréal : Presses de l'Université de Montréal.
- Cercone, K. (2008). Characteristics of adult learners with implications for online learning design. *Journal of Association for the Advancement of Computing in Education (AACE)*, *16*(2), 137–159.
- Deschryver, N., Lameul, G., Peraya, D, & Villiot-Leclercq, E. (2011). Quel cadre de référence pour l'évaluation des dispositifs de formation hybrides? In Actes du 23^e colloque de l'ADMEE-Europe Évaluation et enseignement supérieur: Retrieved from <u>http://archive-ouverte.unige.ch</u>
- Gauthier, P. (2004). Taxonomies des outils TICE par fonctions technico-pédagogiques. Retrieved from <u>http://gev.industrie.gouv.fr/IMG/pdf/TaxonomieOutilsTICE-3.pdf</u>
- Grow, G. O. (1991/1996). Teaching Learners to be Self-Directed. *Adult Education Quarterly*, 4(3), 125-149. Retrieved from <u>http://www.longleaf.net/ggrow</u>
- Jézégou, A. (2008). Apprentissage autodirigé et Formation à distance. *Distances et Savoirs. Distances et savoirs*, 6 (3), 343-364.
- Jézégou, A. (2003). Formations ouvertes et autodirection : pour un articulation entre libertés de choix et engagement cognitif de l'apprenant. *Education permanente*, *152*(3), 43-54.
- Knoll, M. (1997) The Project Method: Its Vocational Education Origin and International Development. *Journal of Industrial Teacher Education*, 34(3), 59-80. Retrieved from <u>http://scholar.lib.vt.edu/ejournals/JITE/v34n3/Knoll.html</u>
- Knowles, M. S. (1973). *The adult learner: a neglected species*. Houston : Gulf. Trad. française (1990). *L'apprenant adulte : vers un nouvel art de la formation*. Paris: Les Éd. d'Organisation.
- Markham, T., Larmer, J., & Ravitz, J. (2003). Project Based Learning Handbook: a

Guide to Standards-Focused Project Based Learning for Middle and High School Teachers (2nd Ed.). Novato (CA): Buck Institute for Education.

- Moursund, D. (2002). *Project-based learning: Using Information Technology* (2nd Ed.). Eugene (OR): International Society for Technology in Education.
- Peraya, D., Lombard, F., & Bétrancourt, M. (2008). De la culture du paradoxe à la cohérence pédagogique. Bilan de 10 années de formation à l'intégration des TICE pour les future-e-s enseignants du primaire à Genève. Formation et pratiques d'enseignement en questions, 7, 11-28 Retrieved from <u>http://archiveouverte.unige.ch/unige:17661</u>
- Peraya, D. & Peltier, C. (2012). Une année d'immersion dans un dispositif de formation aux technologies : prise de conscience du potentiel éducatif des TICE, intentions d'action et changement de pratique. *Revue internationale des technologies en pédagogie universitaire (RITPU)*, 9(2). Retrieved from <u>http://archive-ouverte.unige.ch/unige:22664</u>
- Peraya, D. & Peltier, C. (2012a). Typologie des dispositifs hybrides : configurations et types. Dans N. Deschryver et B. Charlier (dir.), Dispositifs hybrides. Dispositifs hybrides. Nouvelles perspectives pour une pédagogie renouvelée de l'enseignement supérieur. Rapport final (p. 54-86). Retrieved from http://archive-ouverte.unige.ch/unige:23091
- Peraya, D. Peltier, C. Villiot-Leclercq, E., Nagels, M., Morin, Cyril, Burton, R., & Mancuso, G. (2012). Typologie des dispositifs de formation hybrides : configurations et métaphores. Dans Bélair, L. Actes du 27e Congrès de l'Association internationale de pédagogie universitaire (AIPU). Trois-Rivières (Québec), 14-18 mai 2012. Trois-Rivières : Université du Québec à Trois-Rivières. Retrieved from <u>http://archive-ouverte.unige.ch/unige:23094</u>