More than à la carte international research methodology courses: towards researching professionals and professional researchers? The RESET-Francophone project

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The RESET-Francophone project.

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Abstract: Considering methodology as a core scientific landmark, this paper presents the framework of the RESET-Francophone project. A training project in research education, which in the long run aims at contributing to the training of the next generation of researchers in (digital) education in the Francophone region. This endeavour can be achieved through capacity building in the form of an international community of scholars and the creation of local expertise hubs. For the time being, evaluation of the first module indicates that both the learning design adopting research pedagogy recommendations and the scaffolding of virtual mobility support learning and brain circulation.

Introduction
Undertaking research requires specific skills and knowledge (Durette, Fournier, & Lafon, 2016; Swissuniversities, 2016) and has an impact on professional identity (Dubar, 2000). To develop both, the question of research pedagogy is discussed through the RESET-Francophone project. The purpose of this paper is to describe the setting up of this project in the domain of research education. Training modules bring together, each, about 20 PhD students from Southern and Northern countries. In its first phase, spanning 2018-9, the project entails four modules. The first three deal exclusively with methodology, addressing i) research data management; ii) qualitative research methodology; iii) quantitative research methodology, and are offered at a distance. The fourth module is offered in face-to-face and invites participants to reflect on the topic of methodology and international scientific cooperation in the field of education. The tutoring support comprehends a local and a distant component, blurring the frontiers between face-to-face and distance. Participants benefit simultaneously from two communities of practice: a local face-to-face one and an international distant one (Zhao & Tsatsou, 2018). At this stage, the setting up of the project is broadly defined in terms of research education, teaching research methodology and international community of scholars. This paper is of special interest to Northern and Southern stakeholders concerned with scientific collaboration. Indeed, advancing research topics relevant to particular contexts by leveraging proven methods, can lead to the creation of new regional scientific expertise hubs.

Research education: the picture in Northern countries
Core research competencies
Empirical studies have identified six research core competencies that are expected from PhD students: i) knowledge and technical skills; ii) transferable competencies that can be formalised such as communication skills or management issues; iii) transferable competencies that cannot be formalised such as cognitive abilities; iv) dispositions, which refer to autonomy, rigor and creativity; v) behaviours such as perseverance; and vi) meta-competencies such as the capacity of adaptation (Cryer, 1998 cited by Durette et al. 2016; Durette et al., 2016; Mowbray & Halse, 2010 cited by Durette et al. 2016). On the other hand, normative documents like the National Qualification Frameworks, echo similar competencies labelled in terms of knowledge and understanding, applying knowledge and understanding, making judgements, communication skills and learning skills (Swissuniversities, 2016).

Research pedagogy
Research pedagogy raises the issue of how those competencies can best be developed and reports a lack of pedagogical culture in the domain of research education in the social sciences (Earley, 2014; Kilburn, Nind, & Wiles, 2014; Wagner, Garner, & Kawulich, 2011). Despite this, Kilburn et al. (2014) reveal three "complementary and inter-related pedagogical goals" (p. 197): i) making the research process visible with active engagement in
research; ii) understanding what research is by actually conducting research; and iii) nurturing reflexive practice.

The emergence of these goals seem to be confirmed in some parts of the English speaking world (Lewthwaite & Nind, 2016; Nind & Lewthwaite, 2018b). The diversity of learners imposes additional challenges on teachers, conducting teachers to enact some active and “inclusive pedagogy” that leads to “a blurring of the roles of teacher, learner and researcher for all parties involved” (Nind & Lewthwaite, 2018a, p. 85).

**Digital literacy of the researcher**

Pedagogical discussions are starting to include issues related to the digital literacy of the researcher (Tsatsou, 2018). It is evident that researchers need to train in terms of digital literacy (JISC, 2014) and especially in the use of specialised software. Researchers’ digital environment includes, at least, some search, writing, referencing, data management, project management and communication systems. In terms of data analysis, doctoral students need to develop the understanding and the mastery of the overall data analysis process and, in parallel, learn how to handle it in a specialised software (e.g. for qualitative research Woods, Paulus, Atkins, & Macklin, 2016). Understanding the differences between existing software (e.g. for qualitative research, Roy & Garon, 2013) and choosing the most appropriate one is an additional challenge that needs guidance.

**Doctoral supervision**

In terms of supervision and conceptions of research (Class, Schneider, Laroussi, & Lombard, 2016; Meyer, Shanahan, & Laugksch, 2005; Meyer, Shanahan, & Laugksch, 2007; Wagner et al., 2011, p. 79), it appears that in doctoral supervision two aspects are particularly relevant: properly supporting doctoral students in their research project and introducing them to the researcher profession (Taylor, Kiley, & Humphrey, 2018). While the first addresses issues of conceptions and understanding of the research process, academic integrity, intellectual ownership, authorship and good practice in conducting research in general (Taylor et al., 2018, pp. 101-113), the second addresses “professional development in the six key areas of networking, giving presentations, publications, teaching and learning, academic careers [and non academic careers] and the acquisition of generic skills” (Taylor et al., 2018, p. 159).

This picture of the state of art of research education in terms of skills, pedagogy, digital literacy and supervision concerns Northern countries, what does it look like for researchers in Southern countries?

**What does the reality of the South tell us?**

In Southern countries, research can prove to be all the more difficult because of a fragile foundation. Access to resources, financed research positions, presenting one’s work at conferences or mobility can become difficult because of institutional infrastructure and/or geopolitical positioning (Flanagan, 2015; Orazbayev, 2017). In this context, a preliminary study (Class et al unpublished) shows that those persons who can afford to conduct research in the field of (digital) education are secondary and university teachers or individuals working in research related institutions (e.g. branch universities or research centres). They are therefore not young researchers but professionals inserted in the realm of education and/or research who, consciously or unconsciously place themselves in a perspective of Scholarship of Teaching and Learning (Boyer, 1990). A parallel between this profile and the practitioners who engage in a Doctorate in Education (EdD) might be drawn. A shift in their professional identity ensues from their encounter with the world of research (Buss, Zambo, Zambo, & Williams, 2014; Labaree, 2003; Lindsay, Kerawalla, & Floyd, 2018; Moje, Luke, Davies, & Street, 2009; Whalley, 2016). In the end, basically two forms of identity have been documented: i) the co-existence of the educationalist and the researcher perspective (Labaree cited by Whalley, 2016, p. 110) and, ii) the co-existence, at the outset, of three identities - the learner, the leader and the action researcher - which undergoes shifts in balance (Buss cited by Whalley, 2016, p. 110).

**Supporting the rise of an international community of scholars**

Supporting those individuals to become “researching professionals” and “professional researchers” (Lindsay et al., 2018, p. 2322) with an international community of scholars underlies the RESET-Francophone project. Precisely by building capacity in terms of methodology will enable them to leverage their research interest and take part in the international discussion on the topic. Building a learning network, in the sense of its original definition - “learning in which information and communications technology (ICT) is used to promote connections: between one learner and other learners, between learners and tutors; between a learning community and its learning resources” (Banks, Goodyear, Hodgson, & McConnell, 2003) is the first step towards achieving this goal. Training Southern stakeholders from the education sector and particularly teachers in the use of active pedagogies supported by
educational technologies is underway since more than 20 years with masters like ACREDITE\(^1\) or IPM\(^2\) (Loiret, 2013). This pool of practitioners and their dissemination work result in a substantial number of trained teachers who are willing today to enrich their professional experience with research. The project builds on this bedrock. Supporting professionals to transition to accountable, influential practitioners and researchers acting in an international knowledge society is part of the project’s agenda. Indeed, the ultimate goal of RESET-Francophone, as its acronym elucidates it\(^3\), is to participate to the training of the next generation of researchers in (digital) education, in the Francophone region.

**Context**

**What is RESET-Francophone?**

RESET-Francophone is a project supported by the Swiss State Secretariat for Education, Research and Innovation in the form of the Leading House MENA\(^4\) launched in Spring 2018. The project is a partnership between eight institutions spread on six countries: i) in Switzerland, two entities from the Faculty of Psychology and Educational Sciences at the University of Geneva: TECFA\(^5\), the unit of Educational Technologies and ERDIE\(^6\), the team concerned with international dimensions of education represent the project; a third entity, the doctoral school for educational sciences\(^7\), part of the Conference of Universities of Western Switzerland (CUSO) is also in; ii) in Morocco, there is the DILILARTICE lab, specialized in educational technologies, and which is part of the Ibn Tofail University\(^8\); iii) in Algeria, there is the CERIST\(^9\), a research centre for scientific and technical information; iv) in Tunisia, there is the UVT\(^10\), the Virtual University of Tunis; v) in France, there is the SEFA\(^11\), department of educational sciences and adult training of the University of Lille; and finally; vi) in Dakar, there is the IFEF\(^12\), an institute dedicated to education and training which is part of the International Organisation of la Francophonie.

**Why a training project in research methodology?**

In 2015 we have set up the MIRRTICE (Mise en Réseau de la Recherche en Technologie de l’Information et de la Communication pour l’Enseignement) incubator for French speaking southern young researchers (Class, Schneider, Canal, & Laroussi, 2014; Class, Schneider, Laroussi, & Caron, 2015). This was a joint initiative from several Northern and Southern universities supported by the Institut de la francophonie pour l’ingénierie de la connaissance et des formations à distance (IFIC) and materialised in the Diplôme Universitaire de Recherche en Education Numérique (DU REN). This 6 months on-line methodology course supports MA graduates understand the research cycle, differentiate among major approaches and introduces them to major research fields in digital education. Course outcome consists in the writing of a proposal to get in touch with a future PhD advisor. Generally, two advisors, one from the South and one from the North supervise PhD students graduating from the DU REN. We have noticed that even if PhD students get scientific mobility scholarships to stay in the institution of their Northern advisor, they are very demanding for in depth methodological training. RESET-Francophone seeks to answer this demand and is somehow a continuation of the DU REN but with specific content that students will be able to choose from according to their needs. For example, a PhD student investigating her topic within a theory building orientation will likely be taking qualitative related modules only. Within the pilot, the qualitative module has a load of 60 student working hours spread on two months and focuses on basic qualitative research process anchored in a theory building approach. Activities take learners through the different steps of the research process – reviewing the literature; writing the purpose statement; stating the central research question; choosing theoretical

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3 RESET stands for RElève Scientifique Education et Technologie which means Training the next generation of researchers, Education and Technology in the French speaking world, as identified by the Organisation Internationale de la Francophonie.
5 https://tecfa.unige.ch/
6 https://www.unige.ch/fapse/erdie/
7 https://education.cuso.ch/accueil/
8 http://www.uit.ac.ma/en/
10 http://www.uvt.rnu.tn/en/
11 http://sefa.univ-lille.fr/presentation-du-departement-sefa
12 https://ifef.francophonie.org/
frameworks; choosing specific data collection / analysis / interpretation methods to answer the research question; collecting, analysing and interpreting data with the support of professional software; writing up findings; verifying the validity of findings; and finally, discussing findings in light of existing research results.

Who is the audience?
The audience goes beyond the three countries from Maghreb and already reaches Sub-Saharan countries. As a matter of fact, former students from the DU REN are now undertaking a joint PhD with their national university and a French or Swiss university and are thus eligible to attend the training. In addition, the overall pedagogical strategy is one of knowledge building (Scardamalia & Bereiter, 2014) and contribution-oriented pedagogy (Collis & Moonen, 2006, 2009). For example, the output of Module 1 takes the form of an EduTechWiki page on research data management in the countries of the project partners (Class & Al, 2019). This way, it serves a larger community than the restricted number of participants. The page is part of a broader instructional manual on research methodology (Class & Schneider, no date) where all the theoretical material that is used within the modules, and which is exempted from copyright, is available. The wiki manual is constantly improved and refined thus in perpetual development, again, serving a much larger audience than the participants to the project.

Framework of RESET-Francophone
To support research education, the overall framework of the RESET-Francophone project (Figure 1) rests on previous personal experiences and theoretical contributions, namely the Tutoring Support Structure (Class, 2003), the component model of activity-based training (Class, 2009, pp. 363-364), the developmental framework addressing transitional education (Class, Schneider, Canal, & Laroussi, 2014, p. 2581), work conducted with the use of the TPACK framework (Class & Lombard, 2017) and current reflexion on resources (Class & Schneider, 2019). It is also largely influenced by the social theory of learning in the perspective of Wenger (2018).

First results
Based on 15 evaluations gathered from Module 1, it appears that the learning design and the bringing together of international scholars in the different forms of national face-to-face and international on-line interactions represent the strengths that best support learning. Indeed, to design activities, we have tried to apply Kilburn et al. (2014)
recommendations in terms of research pedagogy. For Module 1 for instance, both the entire research and the data cycle processes are clarified from the outset. Participants are invited to work on their own research and complete a data management plan. Reflexive practice is weaved into the scenario in the form of templates or questions (Boud, 2001). Finally, from these 15 evaluations, it appears that reification of practices to fit local contexts can take place through structured brain circulation (Edler & Flanagan, 2009, p. 23).

References


