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CLASS, Barbara, et al.

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Reference

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Abstract: This article concerns a new project among French speaking countries in the EMEA region. Its goal is to set up transitional education for doctoral applicants in the domain of educational technology, to help them write a robust PhD proposal and to enable them to apply as doctoral student in one of the partner universities. We shall discuss the first stage of an Educational Design Research (EDR) project to design a new distance teaching programme and to create a study book on research methodologies in educational technology. This EDR project is also meant to serve as a work-in-progress best practice project within the training programme to involve doctoral applicants and make research concrete. Theories and design rules from research methodologies in educational technology, textbook research, teaching research methods in the social sciences, transitional education, internationalisation, the relationship between practice and research and, finally, scientific translation will be taken into account to define the framework.

Introduction

This article presents a project that is in the making. In 2012, the IFIC1 institute for knowledge engineering and distance education was created as a joint venture between the Tunisian Government and the Agence de la Francophonie (AUF). In January 2014, the institute has launched a networking project in educational technology2, supported by a consortium of 22 French speaking universities from Algeria, Belgium, Burkina Faso, Cameroun, France, Lebanon, Madagascar, Morocco, Senegal, Switzerland, Tunisia and Canada. One of the actions is to set up an incubator to train doctoral applicants in research design and methods. Participation in the programme should lead to a solid PhD proposal that will enable students to apply for a doctoral position in one of the partner universities and therefore to train as researchers in educational technology. The training will comprise several modules, probably: research design and proposal writing, theory driven research methods, exploratory theory for creating research methods, and design science. It should allow learners to create an integrated model of diverse research designs, i.e. make them able to assign a research approach with a research problem.

1 IFIC: Institut de la Francophonie pour l'ingénierie de la connaissance et la formation à distance.
2 MIRRTICE: Mise en Réseau de la Recherche en Technologies de l'Information et de la Communication pour l'Enseignement.
To support the learning design, we plan to produce a study book, starting from an English text created in 2009 and integrating other sources produced by consortium members and open source texts. Translating, updating and merging materials into a coherent whole is challenging for two reasons: Educational technology research uses a wide range of research designs, methods and technology and adapting materials to French for a non-native French speaking audience requires cultural adjustments. The book will be used for a variety of learning activities fitting a range of pedagogical strategies implemented in the incubator, including various forms of project-oriented and collaborative learning as well as more direct instruction. Such an endeavour is best assisted by an Educational Design Research (EDR) project. Setting the developmental framework, documenting each step of the project, backing the different design choices made to plan the study book and eventually suggesting design rules to refine it, will help the consortium team to deliver a flexible and professional tool. The EDR project itself is also meant to serve as a best practice case with which doctoral applicants will be associated. Seeing the different building blocks and the dynamics of an ongoing research project, and participating in it whenever possible, is part of the overall pedagogical strategy. This cognitive apprenticeship modelling approach to teaching should help doctoral applicants bridge theory with both authentic activities offered within the training programme and a work-in-progress research project.

This article focuses on the first stage of an EDR project in little explored area, i.e. technology-enhanced research method education. In addition, we address the specificity of designing for a Southern based French speaking audience for whom French is a lingua franca facilitating communication between a rising scientific community. We first present the research approach and describe the project. We then provide some information about the literature review and outline the developmental framework, research questions and techniques. Finally, we discuss some of the challenges related to this project.

Designing an educational design research project

Training researchers in educational technology represents a weighty responsibility, even if, in the incubator, we are only dealing with the first step of a long process. The training and reference material will orient the thesis proposal and since prospective students had little prior exposure to research methodology, it represents a first consistent learning experience as a future researcher. The training programme also should influence research conducted later, i.e. the programme also aims to be a foundation for a common research language and culture that promotes both diversity and integration.

For these reasons, and many more that will be unveiled throughout the article, the consortium team thought it appropriate to set up an Educational Design Research (EDR) project to design and implement the incubator programme and its learning materials. EDR is an approach that starts from real practitioners' problems and aims at solving them it, mobilizing both theoretical knowledge and intervention in the field. As Reeves (2014) report such an approach to be pragmatic, grounded, interventionist, iterative, collaborative, adaptive and theory oriented:

Educational design research is pragmatic because it is concerned with generating usable knowledge, and usable solutions to problems in practice. It is grounded because it uses theory, empirical findings and craft wisdom to guide the work. It is interventionist because it is undertaken to make a change in a particular educational context. Educational design research is iterative because it generally evolves through multiple cycles of design, development, testing, and revision. It is collaborative because it requires the expertise of multidisciplinary partnerships, including researchers and practitioners, but also often others (e.g., subject matter specialists, software programmers or facilitators). Educational design research is adaptive because the intervention design and sometimes also the research design are often modified in accordance with emerging insights. Finally, it is theory oriented not only because it uses theory to ground design, but also because the design and development work is undertaken to contribute to a broader scientific understanding.

This EDR project is pragmatic in the sense that it seeks to provide a particular target audience of practitioners – i.e. future French speaking PhD applicants – with research methodologies in educational technology. It is grounded because it uses theoretical knowledge, empirical findings and craft wisdom in the domain of research in educational technology and in its teaching and learning. It is interventionist because its goal is to coach PhD applicants to write a robust proposal, increasing their opportunity to conduct a PhD project and in some years to run research in educational technology in Southern based institutions. It is iterative, for example, the writing of the first French edition of the study book, the definition of programme goals and learning outcomes, and major techno-pedagogical choices constitute the next part of this first research and
development cycle. It is collaborative, because several researchers and practitioners in the field are participating in this scientific endeavour. Due to the fact that we are in the phase of designing the first cycle, the adaptiveness of the project has not yet been put to the test but any future occurrence will be recorded and documented. Finally, it is theory oriented because it uses theory as input and aims at producing design rules as output. In addition, the EDR approach will provide the project with ample documentation which is easily available for consultation and which demonstrates, to a certain degree, the consortium team’s accountability within a knowledge building perspective.

Additional factors will influence the writing of the study book and affect the characteristics of the project: a worldwide crisis of educational systems, prolific publications in the domain of educational sciences that have little impact, and the weak, but somewhat growing influence of technology on education and teacher education. Reeves, McKenney, and Herrington (2011) reported about the crisis of educational systems worldwide on one hand and on the fact that research in education has never been so flourishing on the other. For them, “there appears to be fundamental disconnect between the conduct and reporting of educational research and serious improvement in educational outcomes” (p. 56). They interpret this paradox (high number of publications – poorly performing educational systems) as reflecting a need to conduct focused research that responds to real day-to-day educational issues. They also identify other limitations to conducting meaningful research: “(a) the mindset of researchers; and (b) a limited view of what constitutes research. Educational design research offers a way to address both of these barriers and make educational research much more meaningful”. We argue that researchers in educational technology need a new mindset and need to go beyond the inheritance of past centuries’ main-stream understanding of research, reported for instance by Stokes (1997). Southern French speaking countries have not been spared by the educational crisis and should share in the increasing awareness that research and practice can be linked to augment the chances of a “meaningful impact”.

Technologies are an integral part of education today. Kereluik, Mishra, Fahnoe, and Terry (2013) synthesised 15 different 21st century skills frameworks and came up with three broad categories, each comprising three subcategories: Foundational Knowledge (Core Content Knowledge, Cross-disciplinary Knowledge, and Digital Literacy), Humanistic Knowledge (Life/Job Skills, Ethical/Emotional Awareness, and Cultural Competence) and Meta Knowledge (Creativity & Innovation, Problem Solving & Critical Thinking, and Communication & Collaboration). Regarding the impact of technology on education, they also noted a “seeming paradox of “nothing has changed” and “everything has changed”” (p. 133). The “core roles have not changed (to know, to act and to value)” but it is necessary to “continually shift and come up with newer ways of instantiating them” (p.133). Given the fact that the overall project aims at training researchers in educational technology who will be working with educational institutions, the future researchers will undoubtedly be faced with technological issues and their impact on education. It is thus considered important to promote reflection about 21st century skills needed for researchers in educational technology.

The project

The incubator will be designed as a formal training programme on research design and methods in educational technology that probably will last 6 month. Its aim is to prepare master students for a doctoral programme in the European tradition, i.e. focused on producing a PhD thesis. Creating an incubator involves three major tasks: 1) Identifying clear learning objectives, 2) Creating learning designs and, 3) Producing a study book. The target language will be in French, for an audience of doctoral applicants, affiliated with several cultures and for whom French is not the mother tongue. Holding a Master’s degree (i.e. ACREDITE) represents the fundamental admission criteria to take part in the incubator as a doctoral applicant. In addition, criteria for the admission of doctoral students of the respective national qualification frameworks from partner countries will be consulted to make sure that the different sets of criteria correspond and that those doctoral applicants who are leaving the incubator with a robust proposal will meet admission requirements to apply for a PhD student position.

The research and design logics can be explained in five constitutive steps. The first and second steps are grounded in theory, in particular the use of instructional design principles and models to govern the overall pedagogical workflow and the use of design rules to implement each step of the workflow.

The first step concerns the choice of instructional design principles that define the overall workflow of the training and its implication on the structure of the study book. We will start from Merrill’s first principles of instruction: the demonstration principle (learning is promoted when learners observe a demonstration), the

3 http://foad.refer.org/rubrique16.html
application principle (learning is promoted when learners apply the new knowledge), the activation principle (learning is promoted when learners activate prior knowledge or experience), the integration principle (learning is promoted when learners integrate their new knowledge into their everyday world), and the task-centered principle (learning is promoted when learners engage in a task-centered instructional strategy).

The second step concerns the use of evidence-based pedagogical strategies to implement each step of the overall workflow and design the pedagogical scenarios. Design rules from cognitive apprenticeship, the knowledge building community model, authentic activities, higher order learning, feedback, collaborative learning, reflection and motivation contribute to conceiving the overall pedagogical scenario.

The third step consists of explaining and justifying choices made for the design of the study book. Since we plan to use a variety of pedagogical strategies and tactics we must design the book so that it can be used in different ways. For example, in a direct instruction perspective it becomes a source of information, a basis of transmission, a knowledge authority, and may even structure a learning module. In a constructivist perspective, it becomes a source of activities and inquiry, a provision of multiple views. In a socio-cultural perspective, it becomes a source of scaffolding, it enculturates students into disciplinary knowledge and practices. In addition, it is necessary to position the study book in the landscape of existing resources. One major particularity, for instance, is to classify research approaches into three main categories: theory-testing oriented, theory-creating oriented and design. The consortium team is asked to keep log files of all the issues that need to be discussed.

The fourth step involves the quality control of both the programme and the study book by international experts in the field. This approach is affiliated with a quality control process supported by peer reviewing and will be complemented through an evaluation of the book within the incubator's training of doctoral applicants.

Finally, the fifth step consists of refining both the programme and the study book. This project will provide a theoretical contribution in the form of design rules that can be applied to the design of study materials in research methodologies and the training offered with them. This step entails cycling again through all the steps.

The study book will be drafted starting from existing resources which, for the vast majority, are in English and particularly from the English study book written by Schneider (2009) on the demands of the School of E-education, Hamdan Bin Mohammed e-University, Dubai, for its Master of Art in Online Curriculum & Instruction programme. But as we said before, the design of course modules is intertwined with the design of the study book. Both are related to societal and educational needs. Both are based upon Anglo-Saxon and French-speaking research traditions. However, we aim to raise awareness about different research traditions in other cultures and promote reflection about their relevance to the domain of educational technology. The overall objective of this research project is twofold: practical and theoretical. The immediate practical contribution consists of coaching doctoral applicants to scaffold a robust methodological approach and raise awareness about research methods and their implications on findings. The scientific contribution consists of advancing the state of the art in the area of teaching research methods in educational technology, particularly through translation and adaptation, design and refinement of a study book at a given point in time.

Concerning the dialectics between practitioners and researchers, it is difficult to differentiate in this project since the consortium team and the target audience are all practitioners and researchers in the field of educational technology. Nevertheless, in an effort to clarify roles, some modelling will be used (see the developmental framework section below).

To provide the training, the learning environment will use a new generation e-learning platform such as Claroline Connect (http://dev.claroline.net/) that includes some “web 2.0” design principles. Users – learners as well as tutors or teachers – will be able to create customised learning spaces and control their environment to optimise learning. The environment should also provide adaptive filtering features (i.e. enable users to select one activity and bring up all objects related to that activity to the desktop) and provide a connection to outside applications known under the label of social networking. The idea is also to prepare for mobility, both virtual and physical: learners would have one space and could connect and organise all their learning experiences within this one space. In addition, for the purpose of best practice modelling in conducting research projects, the environment will enable the storage of data according to deidentification norms in the EMEA region and to data sharing/consulting among researchers. It will have to facilitate access to scientific resources (i.e. electronic libraries, scientific journals, open archives, etc.) and support the PhD procedure (submission of the proposal, access for/by PhD committee, submission of drafts, feedback from advisors, etc.). Finally, it will have to facilitate the respect of ethical procedures (warning against plagiarism, confidentiality, consent forms, withdrawal from study, etc.).

To summarise, it is an EDR project which involves two key components: 1) the translation/adaptation
and final elaboration of a study book, in French, on research methodologies in educational technology and 2) the training that will be offered with it. In the next section, we provide an overview of the literature on the research design and methods and the developmental framework that inform and structure the project.

The literature on research design and method for educational technology

Below is a first review of recent French and English literature on the topic of research methodology in educational technology. Research methodology handbooks in the field of educational technology do not exist per se. There is no Research methods in educational technology book like for instance the Research methods in education reference book by Cohen, Manion, and Morrison (2011). This is not surprising since educational technology is a relatively new and small field. Research in this field draws on approaches and methods from other social sciences like psychology, educational sciences, sociology, ethnography, etc. There are many textbooks that cover basic research design and methodology. For most research problems, specialised handbooks exist that cover specific methods. For example for the case study genre, we could refer to Case Study Research, Design and Methods by Robert K. Yin.

With respect to the approach (i.e. the research design), most researchers refer to the field in which they were initially trained or within which they have an academic affiliation. Most researchers in educational technology usually have a background in social sciences and often keep an affiliation with their “home” discipline, mainly for institutional reasons. In some countries, like France, educational technology is not yet officially recognised and one cannot plan a career in this discipline. In other words, research will be evaluated by members of more established communities, like psychology, instructional design, didactics, applied computer science, etc. To explain what the field of educational technology comprises and to inform about contributing disciplines, some authors start by explaining the foundations of educational technology. For Wallet (2009), for instance, four academic fields make up educational technology: educational sciences, cognitive psychology, information sciences and informatics. Research methods thus refer to research traditions of these four academic fields. Cilesiz and Spector (2014), in their recent article, ask whether a particular domain of educational technology actually exists and if so what characterises it and how it differs from the disciplines that influence and inform it.

This situation can stifle the development of new research designs. While it is not problematic to rely on specific methods and techniques developed in other fields, relying on other domain’s definitions and approaches to research hinders the development of ways to do interesting and effective research. For example, the design-based research (DBR) literature grown in our field does address shortcomings of existing approaches, but in some aspects fails to tell people how “to do it”. For example, little practical (textbook-like) information can be found on how to write up DBR research, how to model designs with clear and precise language (which is a requirement to pass as a design science), or how to analyse textual data and log files in an efficient and appropriate way. As corollary, textbooks from other disciplines will not define the same “essentials” and few provide an integrated view of mixed-methods research.

On another note, Oliver (2014) raises the issue of the social aspect of academic research. Research must be relevant but what does this mean? Relevance is discussed in terms of content, audience (i.e. practitioners, researchers), stakeholders (i.e. their respective interests) and processes (i.e. funding, training, peer review, use of formalisms that bring designers in contact with users) to show that “research does not take place in a social vacuum” . Often, authors discuss quality in educational technology research and refer to accepted quality criteria in the respective domains of qualitative, quantitative and mixed-methods research.

We would definitely want to maintain a broad perspective in both the course module design and the study book, e.g. address theory-testing, theory-creating and design. It often appears that scholars from different disciplines cannot communicate because of a lack of awareness of radically different research design options. We wish to provide learners with an overall perspective that would allow them to understand and to create research designs that address complicated multi-faceted issues. Providing capacity building to support the mental flexibility to shift to one’s interlocutor’s perspective to understand how the research is carried out is considered an important 21st century skill.

The relevant constructs, which will probably lay the foundations for the organisation of the study book are the following:
- Introduction to types of academic research and research cycles;
- Principles: research goals, research questions, methods; social aspects of research; quality;
- Practical issues: research topics, planning, conceptual frameworks, literature review, structure of thesis;
Research approaches: theory-testing, theory-creating, design;
Data collection and analysis: quantitative methods, qualitative methods, mixed methods;
Techniques: survey, interviews, statistical analysis, text mining, etc.
Writing up the dissertation and disseminating findings.

The literature review concerning the orientation and the content of the study book is still in progress and the consortium team may come up with a different arrangement of relevant constructs.

Developmental framework

Theories on teaching research methods, findings from textbook research, and research carried out in educational technology, will inform the design of the study book. Design rules pertaining to the field of transitional education will be helpful to design both the study book and the training since doctoral applicants come from different educational/cultural/etc. backgrounds. Design rules stemming from the field of internationalisation will also inform the design of both the study book and the training and designers will be watchful to avoid common pitfalls. A model indicating what pertains to practice and what pertains to research will help designers to clarify roles. Finally, theories from scientific translation will be used for the translation/adaptation and the design of an up-to-date French version of the study book.

Reflections on how to teach research methods in social sciences will be taken into account to guide the design of the study book. Deem and Lucas (2006, p. 15) found that “the journey towards being a researcher is challenging, that some students are anxious about their ability to do what is required in their research methods unit and that there is initially a good deal of confusion about what constitutes research”. However, they also found that there is little resistance to methodology teaching at the master level (as opposed to undergraduate level). Interestingly, Wagner, Garner, and Kawulich (2011, p. 75) in a review of 195 articles found that “[n]o formal pedagogical culture for research methods in the social sciences seems to exist” and also that there is no agreement about whether teaching research methods should be bound to disciplines or be transdisciplinary. It is probably more important to ask how transdisciplinary methods should be cast in a context that makes sense to students and whether we should stress the importance of a formally enhanced DBR approach that would include the use of educational and computer science design languages in addition to the usual social science tools. Earley (2014, pp. 248-249) identifies three major gaps in the literature on research methods education: discussion of the learning objectives of an introductory research methods course is scarce; discussion of the actual learning accomplished by students within a research methods course is limited; and discussion about how to assess students in a research methods course is missing. Research findings pertaining to textbook research provides insight on both how textbooks are used and how they might be designed.

Research findings pertaining to transitional education will be taken into account in the second place. Rienties et al. (2012) reported about the large increase of mobility on the part of international students and thus the increasing demand of transitional courses. According to their findings, what is relevant for this project is 1) that the domain of research methodologies is acknowledged as a key part of transitional education; 2) that they have identified 6 key factors to characterise transitional courses, namely content, context, organisation, pedagogical approach, assessment and ICT usage; and, finally 3) that the choices for integrating ICT are independent of other choices such as the pedagogical orientation or cognitive content and that there is little consensus to use one tool for a specific context. In addition, Rienties and Tempelaar (2013) tried to identify success factors for international students and found that “the best predictor for academic performance is academic adjustment. In other words, the extent to which students adapt to the academic way of life in terms of motivation, learning style, drive and/or study approach is the key driver for academic success”.

Thirdly, research findings pertaining to internationalisation will also be taken into account. Knight (2013) has demonstrated the dangers of internationalisation – “commercialisation, diploma and accreditation mills, international rankings and the great brain race”. These warnings are relevant to this project and it is of utmost importance to be watchful during the design, the implementation and the development of the training. The orientation that will be favoured is one of academic and cultural cooperation. “The challenge of strengthening and reinforcing the values of cooperation, exchange, partnership over the current emphasis on competitiveness and commercialisation is front and centre. The discourse and practice of internationalisation needs to be re-oriented to values – especially academic values”.

Fourthly, to clarify roles and interaction between practitioners and researchers, we will use the concept and model of interactive research, developed by Swedish researchers (Figure 1). Interactive research is very close to EDR in that it seeks both to intervene in the field and to produce theoretical knowledge. The goal is to
produce knowledge starting from two interacting, dynamic systems – research and practice. “Both systems are viewed as cyclical in character and driven by problems/issues originating in research or practice”. Theories and concepts, in the research system, refer to “conceptual, codified, and explicit knowledge that is more or less valid across different contexts. The practical knowledge assumed to guide organisational action is seen as more contextual (situated), experience-based and difficult to articulate, that is, tacit or implicit”.

Figure 1: Interactive Research as a Two-Way Flow of Problems and Knowledge

Finally, theories from scientific translation will help the consortium team situate the study book in the existing landscape. Concerning the text category, according to Göpferich’s (1995) classification, quoted by Byrne (2012, p. 72), it will fall under the progress-oriented, actualizing type: “These texts are used to communicate information for the purposes of advancing science and technology by presenting new results or knowledge or a critical evaluation of existing knowledge”. The study book will be written for an audience falling somewhere between the technician who reads in order to “identify and perform procedures, locate components, etc.”, the transfer user who aims for “problem-solving, to fill in gaps in existing knowledge”, and the rote user who reads because he is “interested in clear step-by-step instructions needed to perform a very specific task”. When confronted with concrete translation challenges, three principles will guide the consortium team: 1) the ways of reasoning in the field (i.e. adjust to the logic of academic research), 2) the terminology, and 3) the knowledge of the context of academic research (i.e. how to conduct a research project, the funding, the stakeholders, etc.).

Figure 2 provides a visual summary of the developmental framework used for the design of both the study book and the training.
Provisional Research Questions

The research questions draw from the following constructs: design of the study book, effects of the content of the study book on users’ practice, users’ adjustment to the logic of academic research, internationalisation.

RQ 1: Usability of the study book: to what extent does it support doctoral applicants in developing the logics of academic research in educational technology?

RQ2: How do both tutors and teachers interact with its content?

RQ3: Does the training support doctoral applicants in the development of methodological research skills?

RQ4: Do both the study book and the training support doctoral applicants in adjusting their mental schemes to the requirements of academic research?

RQ5: How do the respective stakeholders view the international dimension of the training programme?

Planned methods and techniques

According to Reeves (2014) classification of research goals, this project's goals fall into the design/development category. “Researchers with design/development goals are focused on the dual objectives of developing creative approaches to solving human teaching, learning, and performance problems while at the same time constructing a body of design principles that can guide future development efforts”. The project clearly pertains to the design approach and might comprehend some aspects related to theory-testing (i.e. with design rules from transitional education) and theory-creating (i.e. elaboration of design rules). The overall research paradigm, according to Reeves (2014) is interpretivist, which means that “reality is socially constructed through collective definitions of phenomena”.

A mixed methods (MM) design will be used to gather and analyse data within the first cycle of this EDR project. The philosophical underpinnings of MM research are pragmatism, “a deconstructive paradigm that debunks concepts such as ‘truth’ and ‘reality’ and focuses instead on ‘what works’ as the truth regarding the research questions under investigation” (Teddlie & Tashakkori, 2009, p. 8), and the transformative paradigm. "MM research questions guide MM investigations and answers to these questions are presented in both narrative and numerical forms" (Teddlie & Tashakkori, 2009, p. 8).

Conjecture maps will be used to operationalise the design. These maps “provide an overview of all theoretically grounded design elements as well as their expected impact on processes and outcomes”.

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**Figure 2: Visualisation of the developmental framework**

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Particular techniques have not yet been formally chosen but the following tracks are currently under investigation. To evaluate academic adjustment, which has been shown to be the most important factor for success, the Students’ Adaptation to College Questionnaire (SACQ) instrument could be partially translated and used. Academic adjustment, measured by means of four factors - 1) motivation (attitudes towards academic goals and the academic work required), 2) application (how well motivation is being translated into actual academic effort), 3) performance (success of academic efforts as reflected in academic performance) and 4) academic environment (satisfaction with the academic environment and what it has to offer) – would fit perfectly. The additional dimension of personal emotional adjustment could also be used and is measured with two factors: psychological and physical well-being. The remaining two items – social and institutional adjustment – are not relevant, in their original format, to the present research. The social adjustment dimension does not apply because within the incubator, training is offered at a distance and therefore the physical mobility issues of international students do not come into play. Commitment to goals and institutional adjustment are not relevant either since the training is offered by a consortium of different French speaking universities.

To evaluate internationalisation, semi-guided qualitative interviews will be used with the different stakeholders, taking into account the pitfalls and values mentioned by Knight (2013). To evaluate the quality of the design of the study book, open ended questions will be used together with objective data from the training and summative results. To evaluate the effect of the content of the study book on users’ practice, the main indicator will be the number of doctoral applicants who will leave the incubator with a robust proposal and the number of applicants who are accepted as PhD students and will actually be able to pursue doctoral studies in one of the partner universities.

To conclude
This article presents a project that is in the making: the translation and adaptation, from English into French, of a study book on research methodologies in educational technology for a non-native French speaking audience. The training that will be offered with it and the use of the work in progress project as a best practice example for doctoral applicants of “how you may do it” are also part of the project. Both the study book and the developmental framework of the training programme are based on theories and design rules from the domains of research methodologies in educational technology, teaching research methods, research on textbooks, transitional education, internationalisation, the relationship between research and practice and, finally, scientific translation.

The process of translating and adapting the study book for an EMEA non-native French speaking audience is very challenging. First, it is a matter of synthesising up-to-date material in a clear, accessible form. Research methodologies in educational technology change and the study book aims to present current trends available in English and French literature. The language has to be accessible and comply with the French speaking terminology in use in this domain. Second, with authentic higher order training activities, the project seeks to equip doctoral applicants with the skills to be creative and take on leadership roles. Tomorrow these applicants will be researchers leading educational technology labs in Southern countries and it is important to scaffold a sustainable approach to research so that they are able to evaluate their own research and cater for appropriate updated training in the future. Finally, it is important to develop a common language and a more general grounding in research methodologies with other educational technology researchers in order to communicate, share and exchange. Sharing and grounding represent a perfect springboard to support potential exchange with existing and emerging research communities in other parts of the world.

References