Proceedings Chapter

Enhancing knowledge and practice: Research competences of a distance learning coordinator

CLASS, Barbara

Abstract

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Reference

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Enhancing knowledge and practice: Research competences of a distance learning coordinator

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Abstract: Professions related to digital education are at different stages of maturity in terms of scientific knowledge gathered. A lot has been written on tutors for instance whereas literature on the distance learning coordinator (DLC) is more dispersed. The different dimensions this role can entail and competences expected to practice it are partly described in the literature. The purpose of this article is to discuss the research dimension of the DLC by analyzing the work of one of them during 15 years in an academic setting. This is done from a perspective halfway between the position of a reflexive practitioner and a scholar practitioner (Bédard, 2014). By revisiting the different scientific achievements catalyzed by the DLC, this paper offers the opportunity to document the research dimension of the DLC. Findings suggest similarities between the DLC and the DBR researcher with regards to expertise and knowledge brokering. Further in-depth research to thoroughly document the variation of dimensions and competences of the DLC in view of a social and professional recognition of this role is suggested.

Introduction

The Faculty of Translation and Interpreting at the University of Geneva underwent a major paradigm shift in 2004 when it introduced a transformative blended learning environment for the training of trainers in conference interpreting (Class, 2009; Dastyar, 2018, p. 197; Sandrelli, 2015, p. 76). This transformative innovation in teaching and learning, which continues to take the form of a blended continuing education programme, has been undertaken with a design-based research (DBR) (McKenney & Reeves, 2012) approach.

The same scholar served as a distance learning coordinator (DLC) back then in 2004 at the interpreting department, and, since 2017, at the translation department, to set up a Bachelor degree entirely online, in parallel to its face-to-face edition, which started in Autumn 2019. Furthermore, the scholar is also a senior lecturer and researcher at the Educational Technology Unit of the Faculty of Psychology and Educational Sciences.

The situation in 2019, with the digitalisation of the university (University-of-Geneva, 2019) and a national context that is very much supportive (Secrétariat-d'Etat-à-la-formation-à-la-recherche-et-à-l'innovation, 2017), is of course very different from the situation in 2004. This is particularly the case in terms of institutional support for distance learning initiatives.

Reflecting about both projects as cycles of different levels of granularity of a larger research sheds light on the DLC's role to advance knowledge in the design of innovative learning environments.

This paper is both a reflection and a research in the sense of the categories identified by Bédard (2014, p. 101) who was inspired by Schön (1984) and Boyer (1990) among others. It relies on the framework of the relational aspects of expertise (Grundmann, 2017), considering the DLC as the expert who guides action. In other words, considering she is a broker (Fishman, Penuel, Allen, Haugan Cheng, & Sabelli, 2013; Meyer, 2010; Schlierf & Meyer, 2013), possessing both theoretical and practical knowledge, plus knowledge gained through interactions with stakeholders that puts her at the heart of decision-making processes.

The purpose of this article is to discuss the research dimension of a DLC working in an academic setting. We retrospectively analyse her scientific achievements. The paper starts by reviewing the different roles of the DLC and discusses characteristics of a knowledge broker. It then presents the context, the theoretical framework, the methodology and discusses the impact of these achievements on theory and practice. The conclusion presents a tentative model of the different dimensions of the DLC's role projected on her core competences – digital education expertise; knowledge brokering; soft skills.

Literature review

Distance learning coordinator (DLC)

Digital education needs professionals who are capable of addressing techno-pedagogical problems and one of them is the DLC (Surry & Robinson, 2001). This profession is gaining growing attention in the literature in both the French and English speaking worlds, documenting existing experiences and trying to build competence frameworks in view of its normalisation (Armao Méliet, 2017; Coulibaly, 2006; Devolder, Vanderlinde, van Braak, & Tondeur, 2010; El Khir Missaoui, 2010; Jenni, 2008; McFarlane, 2011; Renaud, 2010; Réné-Boullier, 2003; Stein & Anderson, 2017; Vanderlinde, van Braak, & Hermans, 2009; Wiesenmayer, Kupczynski, & Ice, 2008). A few years ago, the author studied this literature, grey literature and job advertisement and came to the conclusion that the name and role of the DLC vary according to five dimensions, independent of the work setting: pedagogical, technological, administrative, quality assurance and change agent (Class, 2017).

Conducting needs analyses, designing blended and on-line courses, training trainers and supporting stakeholders during course delivery are the main tasks of the pedagogical dimension. Being knowledgeable of institutionally provided technology or in charge of managing it, identifying appropriate technology to cater for pedagogical needs, developing multimedia course material, and keeping up to date with digital learning trends in the training domain represent the main tasks of the technological dimension. The administrative dimension comprehends the writing of institutional documents and internal reports, management tasks, financial tasks and partnership seeking. The quality assurance dimension addresses procedures for the evaluation of programmes and accreditation. The change agent dimension is related to sharing a vision, suggesting innovation and providing adequate professional development. Finally, competences related to communication skills, leadership attitudes and establishing relationships based on trust are expected from the DLC.

Knowledge broker

The research dimension of the DLC has not been documented in the literature. Yet, if we consider job advertisements, already in 2001, a Master or a PhD degree were necessary to pursue this occupation (Surry & Robinson, 2001). Today, we note that more often than usual, it is expected from the DLC to transfer up-to-date knowledge from the field of (digital) education to a given disciplinary domain or to business settings. This transfer task is clearly identified as one task of the knowledge broker (Meyer, 2010; Schlierf & Meyer, 2013) and requires specific skills.

The knowledge broker fits particularly well to analyse the research dimension of the DLC within a higher education institutional setting. “Brokering involves a range of different practices: the identification and localization of knowledge, the redistribution and dissemination of knowledge, and the rescaling and transformation of this knowledge” (Meyer, 2010, p. 120). One of the challenges of the DLC, who intervenes in two disciplinary domains to achieve this transformation of knowledge, consists in convening the intertwined theoretical and practical dimensions of both. The DLC starts by fully understanding the problem practitioners encounter. She then relies on theoretical knowledge from the field of (digital) education to implement it into another disciplinary domain and then, after having seen in practice how it has been adapted, the DLC tries to bring knowledge back to (digital education) in the form of design rules. This is the ideal process that can sometimes be hindered by visibility-invisibility issues and institutional contexts. Indeed, “knowledge brokers often try to make their roles and work visible and appear valuable to others. This might be especially difficult within the value system and the hierarchies of the academic world, a world that rewards and prioritizes disciplinary training, journal papers, research grants (Surridge & Harris, 2007, p. 309), and monopolistic organizational linkages (Joerges & Shinn, 2001, p. 8)” (Meyer, 2010, p. 122). Visibility and valuing might also be hampered by the statute of design research approaches in the broader world of research (e.g. funding agencies). Despite Stokes (1997)’s visionary work that showed how research can be fundamental and inspired by practice at the same time, i.e. his *use inspired basic research*, design research still struggles for full recognition.

While knowledge brokers “might be well placed to resist the “dogmas” of the domains they are eventually meant to bring together (Hargadon, 2002, p. 77)” (Meyer, 2010, p. 122), it is well-known that each discipline has its preferred research approaches. The variation of positions towards research methodologies, particularly the divide between theory testing and theory building perspectives has been largely discussed over the last decades (e.g. Teddlie & Tashakkori, 2009) but can still be an obstacle in an individual career path. In addition, the literature on research conceptions (Akerlind, 2008; Brew, 2001; Class, Schneider, Laroussi, & Lombard, 2016; Kiley & Mullins, 2005; Meyer, Shanahan, & Laugksch, 2005) attests a large variation, spanning from transformative experiences to career planning as unique objective. Diverging conceptions can also be a cause of downturn. This, not to mention hidden agendas (Grundmann, 2017, p. 30). In a nutshell, it takes a seasoned DLC, with some research methodology expertise, to understand the landscape in which intervention is expected and the ways to valorise it in an academic path.

Context

The context of the study is in fact composed of several contexts and the DBR, understood here as one big project, is considered from the research dimension of the DLC. The research is located at the University of Geneva (UNIGE) in the years spanning from 2003 to 2020 and addresses continuing or higher education. To provide a comprehensive picture, we have taken the decision to mention projects conducted by the author in her different academic settings. The scholar works as researcher and senior lecturer at the Faculty of Psychology and Educational Sciences (FPSE), and more specifically at its Educational Technology Unit (TECFA). She has been working as a DLC at the Faculty of Translation and Interpreting (FTI) since 2004, first at the Interpreting department (DINT) and then, much later, at the Translation department (DTRAD).

The flow across contexts is represented in Table 1. First, there was the DUTICE[1] diploma which soon became the UTICEF[2] master and which goal was to train teacher educators with technology (Class, 2003; pilot of the PhD study Class, 2009, p. 139). Second came the Master of Advanced Studies (MAS) in Interpreter Training which aim was to train interpreter trainers (Class, 2009). More recently, and in parallel, come a) the Bachelor in multilingual communication for Arabic language which goal is to reach out to a geographically spread audience with a complete on-line programme (Class & Halimi, 2019); and b) the RESET-Francophone training which aim is to train PhD students in research methodology (Class, 2019). Very recently, in 2020, comes the Open Education for Research Methodology Teaching across the Mediterranean research project which aim is to issue a model based on the analysis of RESET-Francophone and interviews with methodology experts (Class, 2020). For ease of understanding and within this paper we will name these contexts respectively: 2003-Pilot; 2009-Cycle; 2017-Cycle; 2018-Cycle and 2020-Cycle.

Name of the programme **Name within this paper**	**Faculty**	**Year**	**Training type**	**Degree awarding or certificate of attendance**	**Modality**	**Average number of students per intake**	**Theoretical contribution**	**Practical impact**
UTICEF 2003-Pilot	FPSE-TECFA	2003	Training of Trainers	Degree awarding	Blended	20	Tutoring Support Structure (output)	Structuring design and tutoring activities
MAS 2009-Cycle	FTI-DINT	2004-2015	Training of Trainers	Degree awarding	Blended	20	Component model of activity-based training (output)	Socio-constructive learning environment with a Content Management System
Theoretical reflection on DBR as a powerful approach for digital education (Class & Schneider, 2013)								
e-Ba 2018-Cycle	FTI-DTRAD	2017-ongoing	Regular Bachelor degree	Degree awarding	Distance	5	Face-to-face and distance training led simultaneously (input)	Learning environment on the institutional UNIGE Moodle
RESET-Francophone 2018-Cycle	FPSE-TECFA	2017-2019	Pilot training modules for PhD students	Certificate of attendance	Blended	18	Virtual and scientific mobility added with a dual cognitive apprenticeship component (input)	Learning environment on the TECFA Moodle
Open Education for Research	FPSE-TECFA	2020	SNF funded research project	NA	NA	NA	Model for open research in research methodology	Open education learning and teaching

1 DUTICE stands for Diplôme Universitaire en Technologies de l'Information et de la Communication.
2 UTICEF stands for Utilisation des Technologies de l'Information et de la Communication pour l'Enseignement et la Formation.

Methodology Teaching across the Mediterranean 2020-Cycle			(no training)				(output)	environment (work in progress)

Table 1 : Overview of contexts impacting the research dimension of the DLC using design approaches

The scope of this paper is to focus on the research dimension of the DLC's role within the Faculty of Translation and Interpreting in the years 2004-2019, thus subsequent sections will concentrate exclusively on the 2009-Cycle and the 2017-Cycle.

Theoretical framework

The revisited and synthesised theoretical framework of the 2009-Cycle can be visually represented as follows (Figure 1):

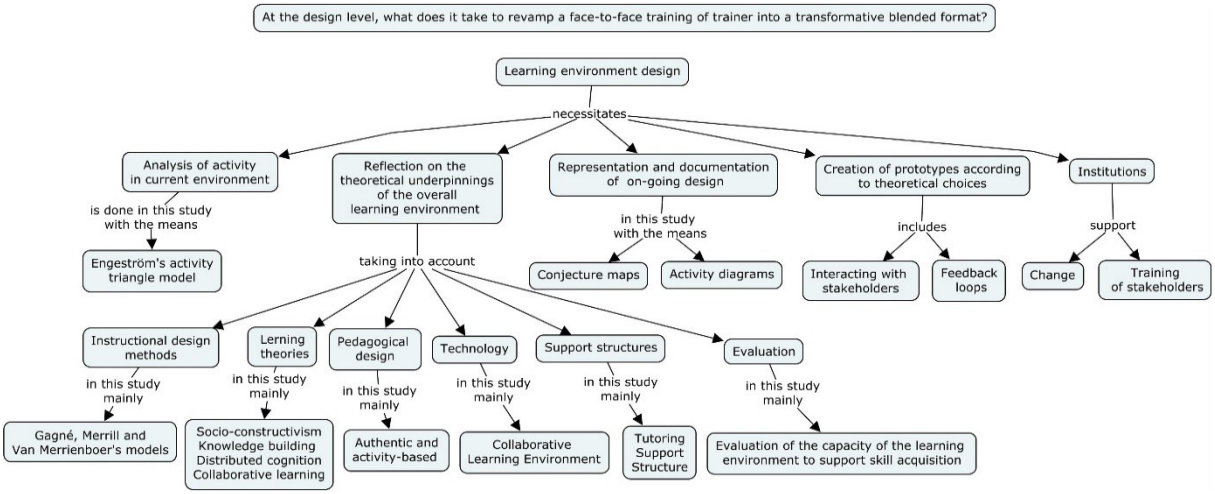

Figure 1: Theoretical framework at the origin of the 2009-Cycle

The subsequent framework of the 2017-Cycle (Figure 3) builds on the output of this 2009-Cycle design research, namely the component model (Figure 2) of activity-based training and subsequent design rules (Class, 2009, pp. 363-389).

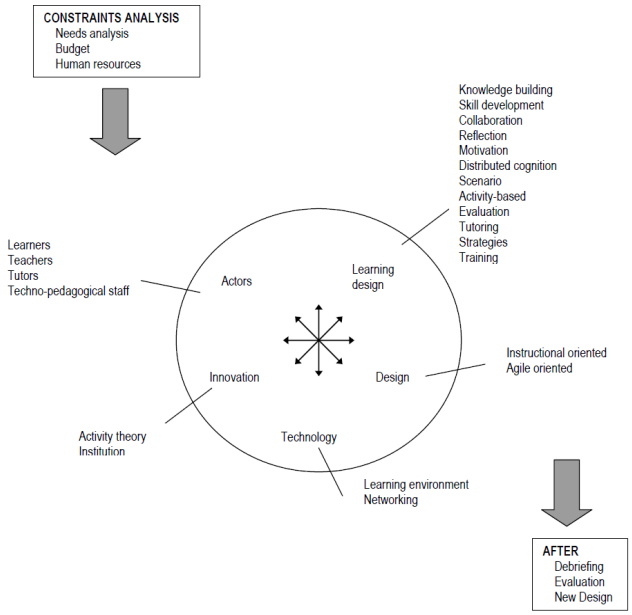

Figure 109: The component model of activity-based training

Figure 2: The component model of activity-based training (Class, 2009, p. 363).

Additional and complementary theoretical inputs have proven necessary and are detailed hereafter. To address the challenge of handling with a face-to-face and an on-line audience at the same time, the theory of transactional distance (Moore, 2013) occupies predominant importance. To train teachers, a professional development approach (Boud & Hager, 2012), tightly related to practice (Hager, Lee, & Reich, 2012) has been adopted. More specifically, to help reflecting about their practice, the TPACK framework (Mishra & Koehler, 2006) has been used. To actually design courses, Laurillard's conceptualisation of learning as a conversational framework (Laurillard, 2002, 2012) helped to gain insights with straightforward learning design methods (Young & Perovic, 2016). Assessment issues constitute one of the biggest challenges, requesting both technical infrastructures (Halbherr, Reuter, Schneider, Schlienger, & Piendl, 2014; Lüthi, Kern, Reuter, Halbherr, & Piendl, 2019) and pedagogical foundations (Gilles, 2002). To support learners, transitional education (Rienties et al., 2012) is adopted to help them acculturate to the University of Geneva environment and gain autonomy. They also need support in terms of learning strategies on their way for self-regulation (Hattie & Donoghue, 2016, 2018). Of course, developing digital skills is necessary both for teachers and for learners to evolve in a distant learning environment (Groupe-de-recherche-interuniversitaire-sur-l'intégration-pédagogique-des-technologies, 2019; Redecker & Punie, 2017). Finally, regarding contemporary domain specific pedagogy, i.e. for translation, Orlando (2016)'s perspective proved helpful, particularly to stay connected with practice. Practice is central because teachers are used to teach in face-to-face but also because they are active professionals on the market. We thus refer to their practice as teachers and as professionals. They are able to adjust their teaching to both the evolving trend of the profession and digital education (Figure 3).

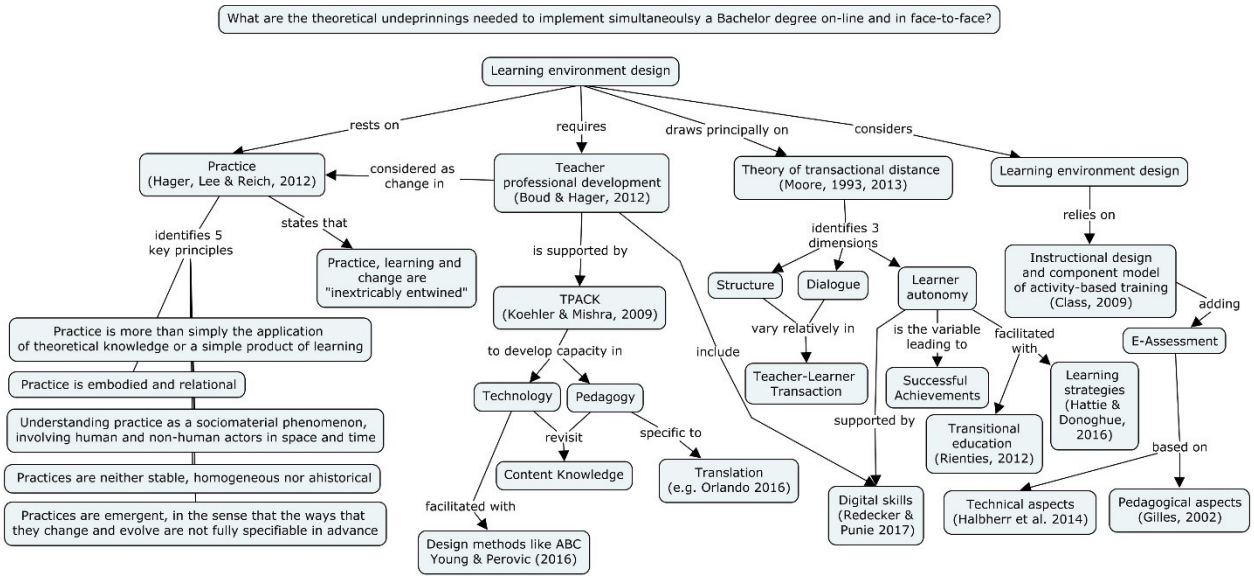

Figure 3: Theoretical underpinnings of the 2017-Cycle

Methodology

This methodology section is a blend. First it recalls the methodology of the 2009-Cycle. Second, it presents some of the methodology of the 2017-Cycle. Third, it presents the methodology used within this paper, on which data this reflection and research (Bédard, 2014) is based.

For the 2009-Cycle, a detailed methodology section can be found in Class (2009, pp. 158-181). We just remind the reader that it was built in such a way to address two strands: learning and teaching *on* and *through* the implementation of a blended programme format (McKenney & Reeves, 2012, p. 186; McKenney & Reeves, 2019).

For the 2017-Cycle, the overall guiding conjecture (Sandoval, 2014) is following: to implement a programme simultaneously in face-to-face and at a distance, it is necessary to make sure learning design processes fit with institutional settings. This conjecture is embodied in three core entities: i) the pedagogical design, ii) the exam setting, and iii) the institutional context and stakeholders (Figure 5). The most tricky and challenging piece of the entire endeavour being exams, it needed a robust techno-pedagogical infrastructure backed on evaluation theories and is represented by the means of a conjecture map on its own (Figure 6). From a theoretical point of view, the pedagogical rigour and systematic process of exam design relies on Gilles (2002)'s Construction Cycle and Quality Controls for Standardized Testing (CCQCST) model that entails 8 steps. The last step can take the form of a matrix combining the seven steps of the CCQCST model with criteria for fair and quality evaluation, i.e. validity, reliability, sensitivity, diagnosticity, equity, practicability, communicability and authenticity (Gilles, 2002; Gilles et al., 2005). From a technological point of view, on-line exams require reliability, usability and security. Reliability in the sense that technological failure must be anticipated with "fail-sage measures" (Halbherr et al., 2014); usability in the sense that the environment must be intuitive, easy to use and known to learners; security in the sense of preventing fraud (Halbherr et al., 2014). The exact same system as the one used at ETH Zurich is used at the University of Geneva.

As far as the methodology of this paper is concerned, we rely on Booth and Woollacott (2018)'s framework of Scholarship of Teaching and Learning. It is based on an internal horizon, composed of knowledge building domains (didactic, epistemic) interacting with axiological domains (interpersonal, moral/ethical, societal) that are in tension with contextual factors of the external horizon (Figure 4).

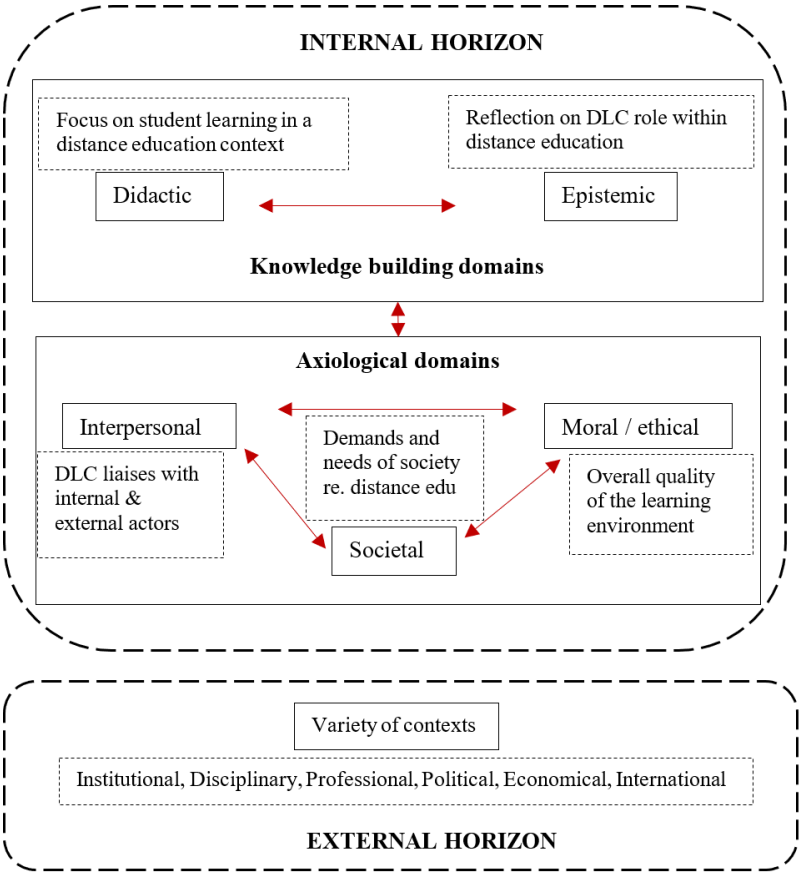

Figure 4: Customisation of Booth and Woollacott (2018)'s framework of Scholarship of Teaching and Learning

Self-confrontation is used as a technique to analyse activity (Rix & Lièvre, 2010). Artefacts used as a support to represent the reality of the researcher dimension of the DLC are articles produced by the author between 2003 and 2020. The scholar engaged in a reflective process starting from that material with the perspective to learn (Boud, 2001).

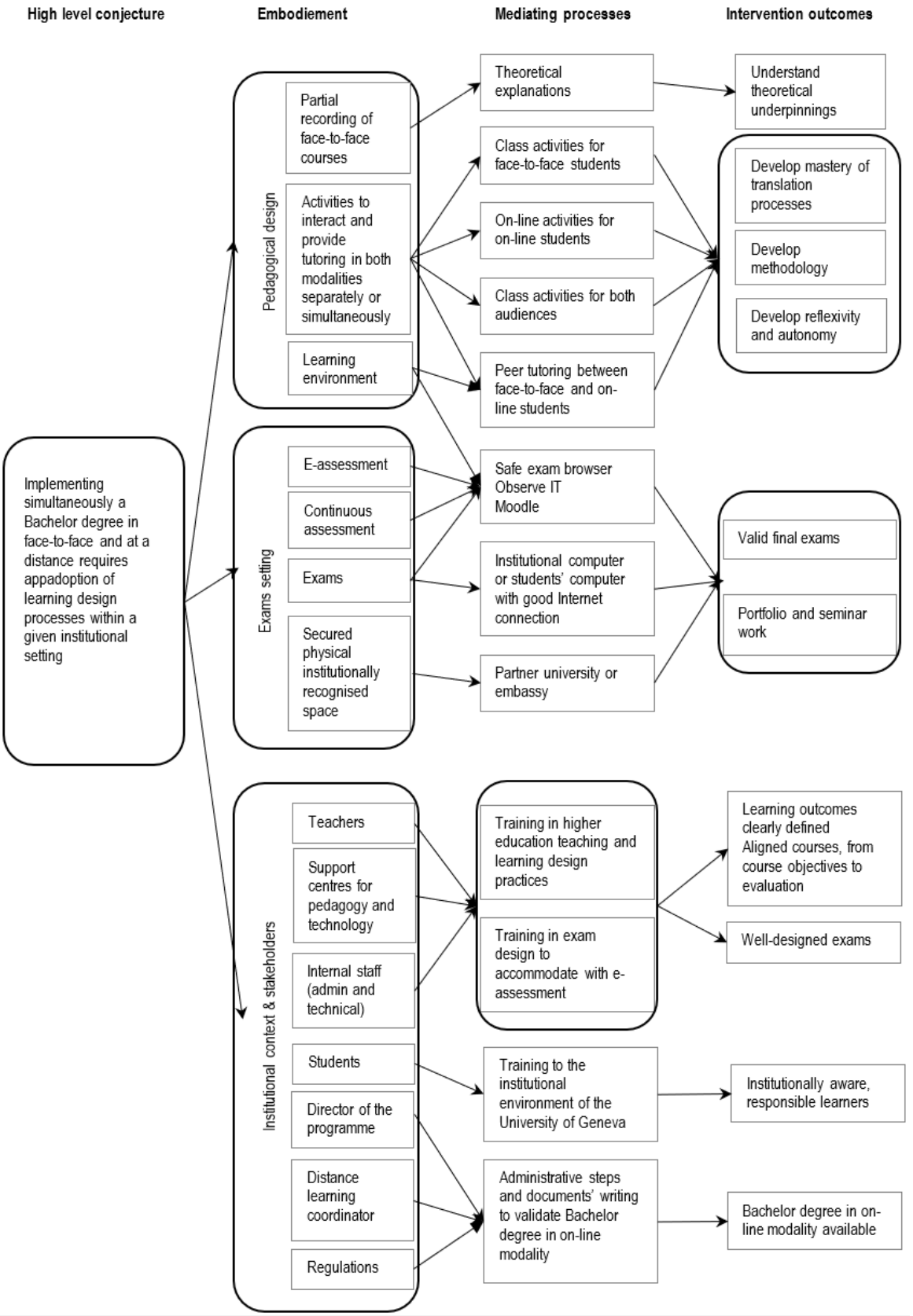

Figure 5: Overall conjecture map of the 2017-Cycle

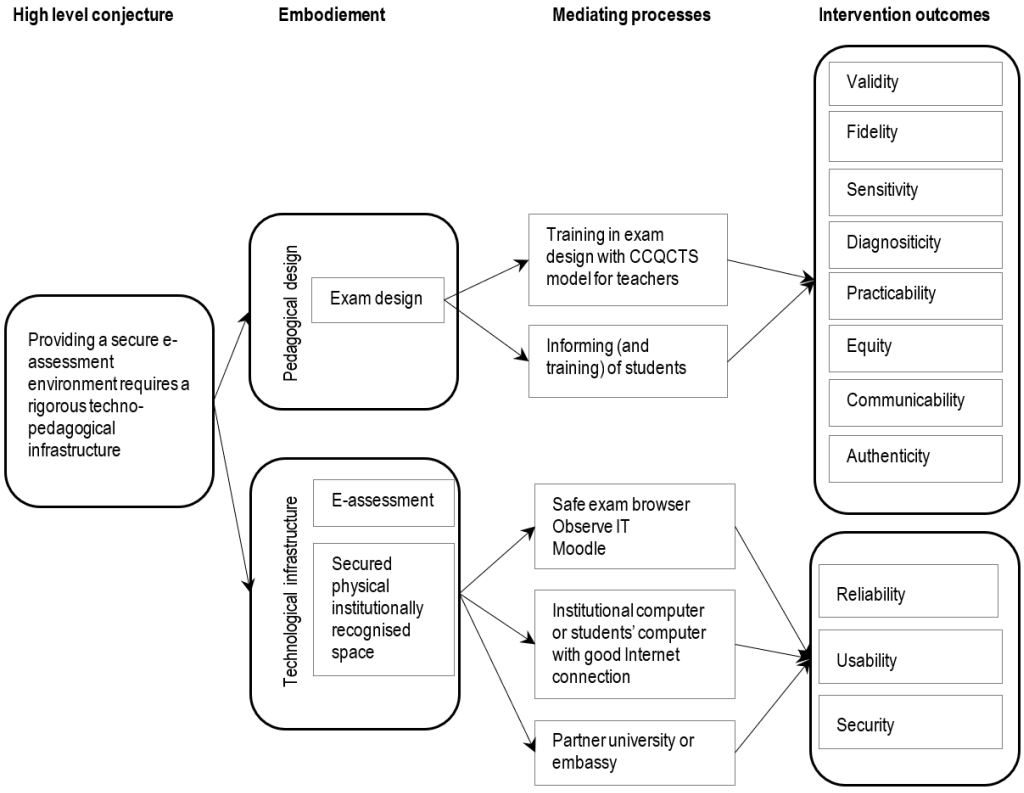

Figure 6: Conjecture map of exam setting

Findings

To report findings, we have opted to divide them into two sub-sections. The first sub-section spots scientific achievements following the 2009-Cycle and the 2017-Cycle in reference to Booth and Woollacott (2018)'s knowledge building and axiological domains. The second sub-section presents the outcome of the present reflection: a model projecting core competences of the DLC on the different dimensions of activity and explicitly mentioning a research dimension for the DLC (Figure 6).

Scientific achievements of the DLC

Impact of the previously mentioned transformative innovations initiated at the Faculty of Translation and Interpreting 15 years ago show the extent to which implementing a new learning environment is conducive to changing professional practices. For the domain of conference interpreting, and since the innovation dates back to 2004, impact relayed in the literature is muliple. Reference books like the *Routledge Encyclopedia of Interpreting Studies* recognise the contribution in terms of change of practices and in terms of advancing knowledge in the training of conference interpreter trainers with educational technologies (Kalina & Ziegler, 2015; Sandrelli, 2015). So does the landmark book *Introducing Interpreting Studies* (Pöchhacker, 2016, p. 205), which focuses on the training of trainers' aspect. More recently, it is the *Dictionary of Education and Assessment in Translation and Interpreting Studies* (Dastyar, 2018, p. 197) that values the implementation of a socio-constructivist learning environment and its effect on learning. Another recognition and feedback to practice came from the invitation to organise the annual training of trainers seminar of the International Association of Conference Interpreters in 2017 (International-Association-of-Conference-Interpreters, 2017).

Furthermore, it is important to underline that this practice-based knowledge has also been brought back to the domain of digital education in the form of a PhD (Class, 2009) and follow up articles (Class & Lombard, 2017; Class & Schneider, 2012, 2014).

For the domain of translation, the project is too new to have had any impact reported in the literature yet. Nevertheless, in the field and at the level of practice, what can already be noticed is that changing the evaluation medium without changing the form of the evaluation showed its limits. Categorised as stage 1 in the innovation maturity model (Eduvista, 2010-2014), this step acts as an eye opener for practitioners. It forces teachers to reflect on their practices as far as evaluation is concerned. Indeed, the profession of the translator is changing (Besznyák,

Fischer, & Szabo, 2020) and it is pressing to rethink assessment modalities to be aligned with competences needed on the market. In other words, to conceive exams and an exam environment that allows for resources and places the student in a real life setting (Halbherr, 2019). Experiencing e-assessment modalities accelerates the maturity process and teachers have already started to discuss the nature and status of assessment.

Outcome of the present reflection

The research dimension of the DLC has been documented in this paper by revisiting and reporting fragments of 2009-Cycle and 2017-Cycle. McKenney and Reeves (2019, p. 44) mention that one "practical contribution of educational design research is the development of expertise among project participants". We feel that this is indeed very true for the DLC. The 2017-Cycle largely benefitted from previous experiences and expertise of the DLC at the faculty, at the university and within the DLC's professional network. This is the reason why it was deemed important to place projects the scholar is involved it at the Faculty of Translation and Interpreting within the broader landscape of her different responsibilities and competences (Table1).

DLC is not listed as an occupation in normative documents. Competences' frameworks like the French one (Ministère-de-l'Enseignement-supérieur-de-la-Recherche-et-del'Innovation, 2016) for instance do not mention DLC as an occupation but do mention jobs which are similar on some dimensions (e.g. p. 176). The latter lists the following main competences: coordination of pedagogical activities; coaching and counselling; promoting innovation; and, steering projects and partnerships. Armao Méliet (2017), drawing from another French competences' framework, identifies similar and additional competences for an occupation that is again close: know legal regulations; monitor innovation; demonstrate instructional design and technological proficiency; and, demonstrate communication and leadership skills.

Let us underline that most of these competences are also those expected from the consultant and designer roles of the DBR researcher. The profession of the DLC resonates with the variation of competences of the DBR researcher recently broken down into consultant, designer and researcher (McKenney & Brand-Gruwel, 2018). For instance, the consultant role requires coaching and counselling and the designer role requires instructional design proficiency (McKenney & Brand-Gruwel, 2018).

Regarding transversal competences, Stein and Anderson (2017), reporting about the role of a distance education administrator in a small-scale e-learning course, conclude that the key role of this actor revolves around three soft skills: relationship-building, bridging and mediating. In turn, these competences are very similar to the "crosscutting competencies" identified for the DBR researcher: orchestration, empathy, flexibility and social competence (McKenney & Brand-Gruwel, 2018, p. 14).

Following what precedes, we come to the conclusion that the research dimension of the DLC and the role of the DBR researcher show similarities. Both professionals frame and study the problem; both support design with research; and both rigorously investigate solutions (McKenney & Brand-Gruwel, 2018, p. 14).

Drawing back on the concepts of expertise (Grundmann, 2017), of knowledge brokering (Meyer, 2010; Schlierf & Meyer, 2013), and adding to them soft skills (McKenney & Brand-Gruwel, 2018; Ritzhaupt & Kumar, 2015), one way of understanding the DLC's researcher dimension, in relationship to the other dimensions of the role, is depicted in Figure 7.

Expertise regarding the five dimensions – pedagogical, technological, administration, change agent, research – is at the centre, displayed within the hard-line circle. It represents the basics needed to professionally claim to be a DLC. The second circle – knowledge brokering - captures the interface role essentially carried out by the DLC. The outer circle attests the importance of possessing and mastering a toolbox of soft skills for this mediating profession. Lines are dotted because skills associated to each dimension are less permeable than for the expertise concept and related competence.

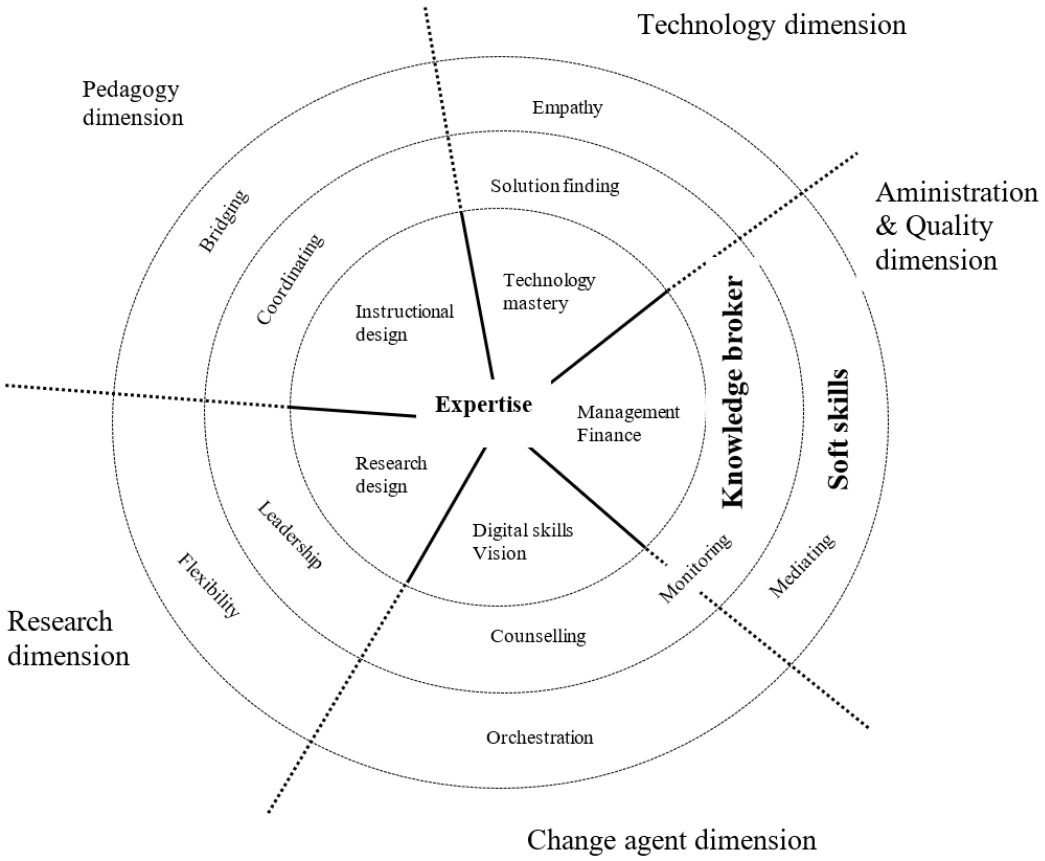

Figure 7: The DLC's five dimensions of activity projected on core competences

Discussion and conclusion

It seems important to continue the discussion on the value created by the DLC's research dimension, in other words, the value that lays within "brokered knowledge" (Meyer, 2010, p. 118). In effect, standing between two worlds, the DLC experiences a sort of mobility and that is the reason why we will now open a new avenue: the DLC's profession with regard to international scientific mobility. The literature has already identified drivers at different levels – individual researcher, institution, policy. At the individual level, drivers are about accessing, sharing, influencing and improving. At the institutional level, drivers are related to accessing and utilising excellent and complementary knowledge, securing funding, and working towards the reputation and visibility of the organisation. At the policy level, drivers are are related to the expected scientific benefits in terms of excellence, innovation, contribution and access (Boekholt, Edler, Cunningham, & Flanagan, 2009).

In the case of this paper, the DLC's situation could be analysed with the prism of international mobility. Indeed, international aspects are present: the 2009-Cycle and the 2017-Cycle are international programmes offered by one of the most international faculties of the University of Geneva[3]. In addition, all major stakeholders – the 2009-Cycle leader, the 2017-Cycle leader and the DLC – have backgrounds in two countries.

Furthermore, in a similar approach as the initiative by McKenney and Brand-Gruwel (2018), investigating with more depth and width the variation of the DLC's roles and competences is important to gain insights in this occupation. Especially since the demand for DLCs is increasing (Careerexplorer, No date) and will probably continue to increase with digital education expanding. It has been demonstrated that when a role is socially important and embedded (Turner, 2001), it is important to study it systematically, individually and in relationship to other professions and roles.

3 The Ecole d'Interprète de Genève was created in 1941 in direct relationship to the League of Nations https://www.unige.ch/lejournal/numeros/journal163/article-9/

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