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Innovating Professional Development in Higher Education

Case Studies

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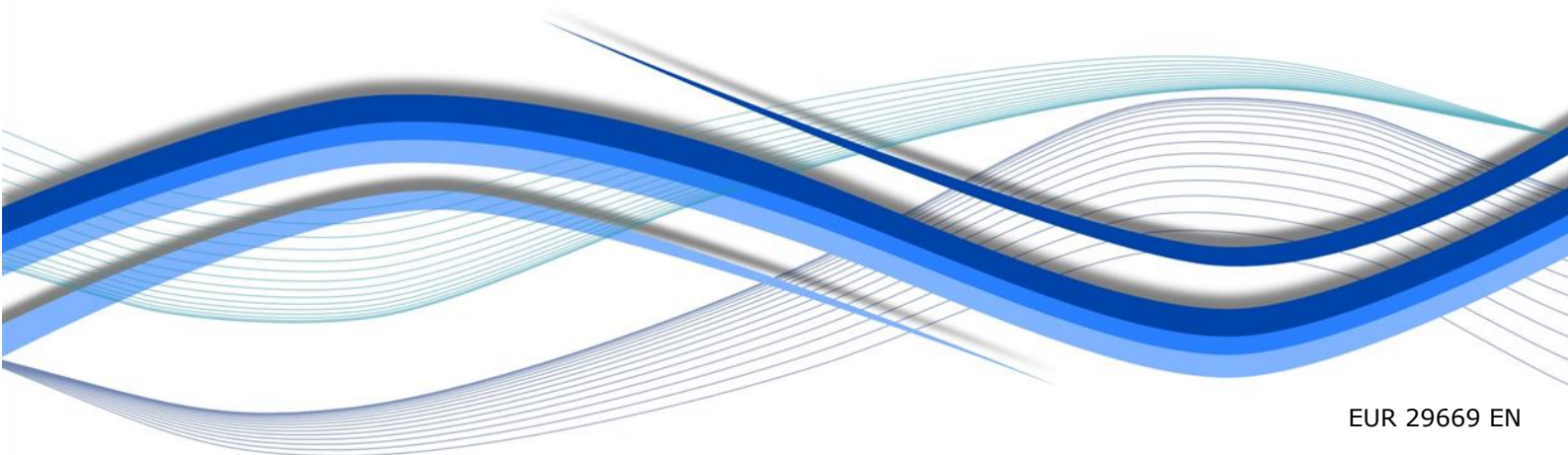

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Title:

Innovating Professional Development in Higher Education: Case Studies

Abstract:

This report contains a literature review and in-depth analyses of eleven case studies involving innovative practices for the professional development of academics. The goal is to highlight not only what is new in current practices but also the future prospects for higher education institutions in Europe and the challenges they face. It accompanies the Science for Policy report 'Innovating Professional Development in Higher Education: An Analysis of Practices', JRC 2019.

Contents

Foreword

Professional development (PD) is known to be one of the key determinants for improving the quality and relevance of education and learning. There are, however, quite a number of barriers and limitations to effective professional learning among academics working in higher education. This Technical Report contains the background literature review as well as a detailed analysis of 11 case studies. It complements the Science for Policy Report 'Innovating Professional Development in Higher Education: An Analysis of Practices', JRC 2019.

This study was undertaken on behalf of DG Education and Culture. Education policy at the European and MS levels is very aware of the challenges and opportunities that PD in higher education brings about. Communications of the European Commission on an agenda for the modernisation of Europe's HE systems ([1]) and on a renewed agenda for HE ([2]) both emphasise the need for systematic investment in teachers' continuous professional development. In the latter the Commission commits to stepping up strategic support for HE teachers, doctoral candidates and postdoctoral graduates through Erasmus+ to help them develop pedagogical and curriculum design skills through targeted opportunities for staff mobility for pedagogical training and strengthened cooperation between teacher training centres across the EU.

In 2019 the JRC releases a similar report on innovating PD for teaching professionals in compulsory education: 'Innovating Professional Development in Compulsory Education: examples and cases of emerging practices for teacher professional development'.

Both studies provide evidence that can support education policymakers at all levels in re-thinking the continuous professional development of educators. The evidence is not only focused on digital learning opportunities, it embraces non-digital professional training as well. Unsurprisingly, however, analogue and digital activities are increasingly becoming blended.
Both studies are part of the JRC research on 'Learning and Skills for the Digital Era', which since 2005 has undertaken more than 20 major studies on these issues, resulting in more than 120 different publications. Recent work has focused on the development of digital competence frameworks for citizens (DigComp), educators (DigCompEdu), educational organisations (DigCompOrg) and consumers (DigCompConsumers). A framework for opening up higher education institutions (OpenEdu) was also published in 2016, along with a competence framework for entrepreneurship (EntreComp). Some of these frameworks are accompanied by self-reflection instruments, such as SELFIE, focused on digital capacity building in schools.

Additional research has been undertaken on Learning Analytics, MOOCs (MOOCKnowledge, MOOCs4inclusion), Computational thinking (Computhink) and policies for the integration and innovative use of digital technologies in education (DigEduPol). In 2017, a report on the potential of blockchain in education was released, and more recently, in November 2018, a report on the impact of Artificial Intelligence on learning, teaching and education.

More information on all our studies can be found on the JRC Science hub: https://ec.europa.eu/jrc/en/research-topic/learning-and-skills.

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[2]

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This report is based on a number of in-depth interviews with stakeholders in Member States. Interviewees provided key insights and valuable information both for the analysis and the case studies produced in this report. Their engagement made this research possible:

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1. Introduction

This is a technical report that accompanies the Science for Policy Report 'Innovating Professional Development in Higher Education: An Analysis of Practices'. Whenever possible, these reports should be read alongside one another. This technical report contains a literature review of professional development (PD) of academics in higher education, and in-depth case studies that showcase different ways in which higher education institutions (HEIs) innovate when developing PD activities. The Science for Policy Report contains a summary of the cases along with a cross-case analysis which is useful for identifying patterns, challenges, successes, and the most innovative ideas. The analysis is based on interviews, cases, and the literature review. It is also significant that the outcomes of the analysis enabled the authors to design policy recommendations at three levels: for HEIs, for Member States and for the European Commission itself.

Another aspect of this study is that it deals with the 'professional development of academics', which is to a certain extent an under-researched field. In the literature and during the research process there has been no clear distinction between the terms 'professional development' (PD), 'continuous professional development' (CPD), and 'training and development' (T&D). Instead, they were used interchangeably by the various interviewees and in the academic articles consulted. In the context of higher education, 'training' can mean 'pre-service' training for doctoral students, aimed at developing pedagogical skills, and also training in the sense of on-demand learning opportunities, aimed at developing skills such as new teaching methodologies or the use of specific tools or digital technologies.

It is not the aim of this study to provide ultimate definitions for these concepts, nor to limit their use to any specific context. Instead, mirroring what happens in the real world, all the above terms are used in this study, in an attempt to reflect the instances in which they were encountered. But, for the sake of simplicity, professional development (PD) will be considered more generic, a type of umbrella term. Overall, there was no focus on training for pre-service academics (PhD students).

2. Literature review

There is common agreement that high-quality education is fundamental to the development and growth of individuals and society as a whole. The Communication on a 'Renewed Agenda for Higher Education' (European Commission, 2017) of 2017 presents an argument that having good university teachers is crucial for high-quality higher education (HE). However, the same Communication states that "too many higher education teachers have received little or no pedagogical training and systematic investment in teachers' continuous professional development remains the exception. National and institutional strategies to improve career opportunities and rewards for good teachers are becoming more common but are far from standard." (European Commission, 2017, p. 5).

Professional development (from now on PD) is widely recognised as a necessary condition for the competitiveness of individuals and organisations. This means that the insufficient PD (often also referred as continuous professional development – CPD) of academics creates a considerable risk to the quality of higher education and, consequently, to society as a whole. Based on this, the aim of this literature review is to investigate the PD of academics in more detail. This systematic literature review covers a total of 49 publications. Based on recent literature, the need of academics' professionalism has been growing. PD for academics has become a necessary condition for the competitiveness of higher education institutions (HEIs). This seems to be because of some contemporary trends, such as the massification of higher education, the spread of student-centred approaches and the growing importance of modern digital technologies.

Moreover, it is stated that the need for PD arises because the professional success of individuals no longer lies in the job or organisation they work for, but in the skills, knowledge and experiences they have. Based on these, it can be assumed that in our contemporary society academics actively participate in professional development activities, especially given that such activities aim to produce professional success and increase the competitiveness and prestige of HEIs. However, the current state of PD of academics contradicts such theoretical expectations. In most cases academics participate in PD activities only rarely, or unsystematically. This contradiction between theoretical assumptions and factual reality supports the reasoning of this literature review.

The reasons behind academics' lack of PD have not been systematically investigated. The aim of this literature review is therefore to answer the following question: what are the main obstacles to academics' participation in continuous professional development? In addition to this main question, the more 'practical' aspect has also been investigated in parallel: how can the obstacles to academics' participation in PD be overcome? Furthermore, the scientific literature analysed how the PD of academics is conceptualised and what the impact of innovative PD activities is.

The literature review revealed some main findings. First of all, the definitions of PD in HE (usually referred as CPD) used in the scientific literature tend to refer to strengthening the educational skills of academics. Furthermore, it is interesting that the positive impacts of PD are often mentioned as an indispensable part of the definition itself. Several obstacles to academics' participation in PD were mentioned in the articles addressed: academics are unwilling to move away from traditional teaching practices; academics are not required or motivated to develop their teaching skills; academics do not have enough time to develop their teaching skills; HEIs do not have the financial, organisational, and knowledge capacity to develop effective PD schemes. This literature review analyses in more detail these specific obstacles, the reasons behind them, and practices that have successfully addressed them. A systematic literature analysis confirmed the statements of Kennedy (2014) and Chalmers and Gardiner (2015) that the literature on PD of academics remains fragmented and under-theorised. Even though a consistent theory was lacking, the systematisation of separate ideas and statements allowed for identification of the main obstacles for academics' participation in PD.

Nevertheless, the evidence from the literature was not enough to provide a comprehensive answer to how the obstacles for academics' participation in PD might be overcome.

2.1 Methodological approach to the literature review

This literature review has been carried out based on Petticrew and Roberts' (2008) method for systematic reviews in the social sciences. It is one of the most frequently used approaches for literature reviews. Its focus is on the selection of the most relevant sources. This methodology involves five main steps:

1. Formulation of research questions.
2. Definition of the search terms and selection of appropriate databases.
3. Selection of inclusion and exclusion criteria, which guide the further literature search.
4. Evaluation of the scientific quality of publications found using predefined quality criteria. Studies that do not meet quality requirements are excluded from the literature review.
5. Extraction of relevant information from publications that meet the criteria.

Each step is described in more detail below.

Step No. 1: Formulation of research questions

Based on the findings of the initial literature review about the PD of academics, the main research questions were formulated as follows:

- How is the PD of academics defined in the academic literature?
- What is the current context and situation of the PD of academics in the EU?
- What are the obstacles to academics' participation in professional development?
- What kind of examples can be found in the EU of academics' continuous professional development that has overcome these obstacles ([3])?
- What is the impact of the PD of academics ([4])?
- The main purpose of this literature review is to find information that is relevant to these questions.

Step No. 2: Selection of the search terms and appropriate data bases

Apart from the academic literature, applied research, surveys, and evaluations on the topic were also considered. OECD and European Commission databases were selected as the main sources for the search of the studies (e.g. Eurydice, JRC, OECD Talis). Furthermore, the sources contained not only secondary but also primary sources – strategies, communications, and laws related to the PD of academics. The webpage of the European Commission was chosen as the main database for the search of the relevant policy documents as it provides not only documents that are relevant at the European level but also English versions of national documents of EU countries (e.g. National strategies for higher education).

([3]) In particular, during the investigation of this question, there was a focus on how higher education institutions have been supporting academics in innovative teaching practices in HE, and what actions by Member States (MS) would be helpful in order for academics to achieve the necessary competences for innovative teaching and research dissemination.

([4]) While collecting information to answer this question, specific attention was paid to the question of how academics' training in digital technologies and pedagogical practices could become a part of career progression paths.

Several keywords and their combinations were used for the search of relevant sources. The keywords used were the following: '(continuous) professional development', 'innovation/innovative', 'pedagogical/teacher learning', 'higher education', 'teaching skills', 'university', 'academics', 'pedagogical training', 'pedagogical development', 'teaching development', 'teacher development', 'professional growth'.

Step No. 3: Selection of the inclusion and exclusion criteria

Criteria that are described in this step made it possible to exclude some potential sources without reading an entire paper. Thus, it significantly increased the effectiveness of the literature review process. A few minimum requirements for the sources were:

- ✓ References must be published within the last five years. This criterion was selected because the field of professional development in higher education is changing rapidly.
- ✓ References must be either in English, Finnish, Swedish, French, German, Russian, or Lithuanian
- ✓ Full-text version must be available.

Not only articles published in scientific peer-reviewed journals but also other scientific publications such as books or book chapters were included in this review. The reviewed literature was not limited to European publications and sources but also included global publications, although simultaneously making sure that information was drawn from European outputs as much as possible.

The first three steps of the literature review allowed for creating a list of sources identified as a starting point for the literature review. Additionally, there were strategies adopted to identify additional relevant sources:

Four interviews with PD experts were conducted. The experts identified additional research reports that are related to the topic of PD. Furthermore, their knowledge aided the identification of the most relevant aspects of PD to which particular attention should be paid during the literature review.

In addition to scientifically documented sources, data (presentations, summaries) from various conferences related to the topic of PD in HE was analysed. Furthermore, references to academic papers identified during the literature review were analysed in order to ensure that no crucial literature was excluded from the review. The social network analysis method was applied to review the references ([5]). However, no further references that meet our minimum requirement criteria were identified.

Step No. 4: Evaluation of the scientific quality of publications, using predefined quality criteria

All sources that were not excluded from the review due to inclusion criteria had to pass a quality check. The quality of the articles was checked using 11 quality criteria drawn from Petticrew and Roberts. Quality criteria were not applied to policy documents.

Table 1. Criteria for the evaluation of the scientific quality of publications

Category	Quality criteria
General	1. Is the research objective clear?

([5]) Social network analysis is a method that uses graph theory to analyse social constructs. It can be used to describe work groups, organisations, business webs, and other networks. In the context of this study, it contributes towards assessing which papers are referenced the most by the academic literature in this field. The whole reference analysis process is performed through the following steps: extracting references from all academic papers identified during literature review; building a social network by using the extracted references and an algorithm written in R; finding academic papers in the network that are often referenced but which we did not analyse.

Category	Quality criteria
	2. Is the research done using the chosen method capable of finding a clear answer to the research question?
Selection sample	3. Was enough data gathered to ensure the validity of the conclusions?
	4. Is the context of the research clear? (country, participants)
Method	5. Do the researchers state the research methods used?
	6. Do the authors give an argument for the methods chosen?
	7. Do the researchers take into account other variables that have an influence?
Data analysis	8. Is the data analysed in an adequate and precise way?
	9. Are the results clearly presented?
	10. Do the researchers report on the reliability and validity of the research?
Conclusion	11. Is the research question answered using empirical evidence from the research that was done?

Source: Based on Petticrew and Roberts (2008) and Gast et al. (2017)

Following the strategy proposed by Gast et al. (2017) each criterion was evaluated on a 3-point scale: 0, 0.5, or 1 point. To be included in the review, articles had to have a combined score of at least 5.5 for the 11 criteria, at least half of the maximum amount of points possible.

The first four methodological steps resulted in a list of 49 publications that were chosen as the basis for this literature review. These publications were reviewed in further detail and systematically analysed.

Step No. 5: Extraction of information relevant to the research questions

Finally, all the data that help to answer the main questions of this literature review were extracted from the sources that met all of the above-mentioned criteria. This information was compared and systematised.

2.2 Conceptualisation of PD of academics

The topic of the PD of academics cannot be investigated without a clear understanding of the PD concept itself. Thus, one of the main aims of this literature review was to investigate how the PD of academics is described in the scientific literature. The analysis revealed that a unanimous understanding of the definition does not exist, and that different variants of the concept can be found in the scientific literature. This is determined by the three main challenges identified by comparing concepts used in the literature. First of all, 'PD of academics' or 'CPD of academics' are not the only terms used to describe the processes of academics' learning. In some research, PD of academics is replaced by the term 'professional learning' (e.g. King 2014; Malik, Nasim & Tabassum 2015, Darling-Hammond, Hyler & Gardner 2017), 'technological, pedagogical, and content knowledge (TPACK) of faculty' (Kim, D., & Kim, W., 2018), or 'faculty training' (Jacob, Xiong & Ye 2015). In most of the articles these terms are used as synonyms of 'CPD'. Secondly, the term 'professional development' is used not only in the scientific literature but also in practice. At first sight its meaning can seem quite obvious. Because of this, some researchers working on topics related to the PD of academics do not conceptualise the term in their articles (e.g. Töytäri et al. (2017). Therefore, in these cases, the concept depends on the interpretation of the reader.

The third challenge that arises while conceptualising the PD of academics is that the definition is 'multi-dimensional'. The definition might contain several aspects in itself –

answers to a few questions might be (and are) combined to describe the PD of academics. Based on the analysis of the literature, there are four main aspects that are usually addressed in descriptions of PD concepts:

- Who is the main subject of the PD?
- How does it happen (PD as the process)?
- What skills are targeted during the PD (PD as the content)?
- What are the (expected) results of PD?

Experts choose which of these aspects should be addressed in their definitions (e.g. some of them interpret PD as the process not mentioning the results, while other definitions include all four aspects). Furthermore, the answers to these questions vary (e.g. some definitions describe PD as a well-structured process, while others interpret informal and unintentional learning as part of it). Later in this chapter the definitions of academics' PD are grouped based on whether they include the four above-mentioned questions, and if so, how they answer them. The aim of this chapter is to systematise the academic discourse on the question 'What is the PD of academics?'

The literature is consistent about who the main subjects are – the teaching staff working in higher education. Despite the fact that slightly different terms are used to describe the same group of people, the teaching staff of universities are mentioned in the absolute majority of the definitions in the analysed literature. For instance, Kneale et al. (2016a) use the term 'academics' when referring to the subject of PD in their definition. Malik et al. (2015) write about the 'capability of staff'. 'Teachers' are described as the main subjects of the PD in HE by Aškerc & Kočar (2015), Postareff & Nevgi (2015), Whitworth & Chiu (2015), and Darling-Hammond et al. (2017). Overall, the term 'university teachers' is used most often in the definitions of PD in the literature analysed for this literature review. The analysis of how the subject of PD in HE is described in the scientific literature reveals two main tendencies. Recently there have been some non-scientific articles emphasizing that HEIs pay too little attention to the PD of their administrative staff, which is just as necessary as the PD of academics ([6]). However, the PD of non-academic staff is not mentioned and not analysed in the scientific literature. The reviewed articles focused only on the PD of academics. Furthermore, the usage of the term 'teachers' in the HE context shows that the literature focuses on the PD of the teaching staff of universities rather than academics who work only with research.

Another important component of the definition of PD is the types of processes interpreted as the PD of academics. An analysis of the literature revealed that when looking at PD as a process, a division exists in the approaches of researchers investigating this topic. There is no consistency when it comes to the question of whether informal and unintentional practices of learning can and should be referred to as part of PD. Some researchers use a wider definition of PD that includes informal learning activities or the learning that happens unintentionally by performing different work activities. For instance, Malik et al. (2015) in their definition claim that "professional development encompasses all types of facilitating knowledge opportunity, ranging from university degrees to formal assignments, conferences and informal learning opportunities located in practice". Similarly, according to the British Higher Education Academy (HEA), PD in HE comprises "any activity targeted to strengthen and extend the knowledge, skills and conceptions of academics" (Kneale et al., 2016a). But other definitions interpret the PD of academics exclusively as the organised, structured and intentional practices of learning. Dysart & Weckerle (2015) do not provide a specific definition of professional development but mostly refer to it as organised training and programmes – "centralized professional development opportunities". Based on the definition used, Darling-Hammond et al. (2017) seem to follow a similar idea. They conceptualise professional learning as "a

([6]) For instance, EIEA news (2017), Unity on campus: professional development for administrative staff. Available at: https://www.eaie.org/blog/unity-campus-professional-development-administrative-staff.html [accessed on 09.07.2018].

product of both externally provided and job-embedded activities". However, the definition of professional development Hammond et al. use is narrower than the definition of professional learning. They define the process of professional development as a "structured professional learning". To sum up, there is no clear agreement in the academic literature about whether the unstructured and unintentional actions that result in learning for academics can be described as PD activities.

Furthermore, it is essential to investigate which skills are the targets of PD practices in the definitions that are used in the academic literature. First of all, a wide spectrum of skills might be useful at work. Most of the definitions provided do not mention that the skills that are being strengthened during the PD practices need to be directly related to the work positions of the learners. This means that PD "refers to the skill and information attain for both personal development and profession advancement" (Malik et al. 2015, p. 171). The POD (Professional and Organisational Development) Network supports this idea and provides a classification of the most important levels of learning for HE staff's educational development:

- Faculty development – focus on the individual member of staff and the tasks specific to the pedagogical role, such as teaching methods, class organisation, evaluation, learning technologies (e.g. training on technologies and pedagogical practices), design and presentation, and other.
- Instructional development – focus on the course and curriculum. This includes appropriate course structures, teaching strategies, the course in the overall institutional curriculum, and overall is more content based.
- Organisational development – focus on maximising the effectiveness through development of personal skills such as communication or stress-management. This is based on the philosophy contending that if there is an effective and efficient faculty support structure, the teaching process will thrive ([7]).

Finally, an analysis of the conceptualisation of PD (often referred to as CPD[8]) in academic literature revealed one more specific aspect of the object. In the majority of definitions the CPD of academics is interpreted not only as a process but also, simultaneously, as a product. This means that the (expected) results of CPD practices are mentioned not as a separate question but as an indispensable part of the definition itself. The definition formulated by Malik et al. (2015, p. 169) is closer to the understanding of CPD as a process rather than a product. They define CPD in the university context as "a process of improving and increasing capability of staff (…) to upgrade [their] content knowledge and educational skills". Based on this definition, it is expected that academics' skills will be strengthened during the process. Other definitions used further in the aspect of results – CPD are interpreted as activities that will not only extend the knowledge of academics but will also have an impact on their behaviour. For instance, it is claimed that CPD in HE comprise any activity targeted to strengthen and extend the knowledge, skills, and conceptions of academics in a way that will lead to changes in their way of thinking and their educational behaviour (Kneale et al., 2016a). The definition by Darling-Hammond et al. (2017) makes another step forward – an activity can be described as CPD if it also has a positive impact on students' learning: CPD as "a structured professional learning that results in changes to teacher knowledge and practices, and improvements in student learning outcomes". The fact that the impact of CPD is often included in the definitions leads to two important observations. Firstly, it seems that, based on the definitions mentioned above, activities that initially aimed to improve the skills of academics but were unsuccessful do not meet the definition of CPD. Second, the definitions mostly emphasise the impact on teaching and not on the research practices or the career progress of the academic staff. This means that the most important aspect of CPD is to

([7]) The Professional and Organizational Development (POD) Network in Higher Education. *What is Educational Development?* Available at: https://podnetwork.org/about-us/what-is-educational-development/ [accessed 05.08.2018].

[8] Continuous Professional Development (CPD)

have a positive impact on students' learning by strengthening academics' skills and encouraging them to change educational practices.

2.3 PD of academics: state-of-the-art

Another tendency that was consistently noticeable in the literature is the growing need for professionalism on the part of academics. Based on the literature, the PD of academics has become a necessary condition for the competitiveness of the HEI as well as for the academic as an individual in the modern context of higher education. Three main tendencies are most often mentioned as drivers for the (expected) growing demand for PD in HE: the modern phenomenon of mass higher education and the spread of a student-centred approach, the Fourth Industrial Revolution and the growing importance of modern technologies, and the changes in the nature of professional competition where individual skills are becoming the main determinant.

2.3.1 Massification and marketisation of HE

In the reviewed literature, the first explanation for the growing demand for the PD of academics is the massification of higher education. Around 50% of young people now go to university. Furthermore, because of globalisation, students have increasing opportunities to choose from the most suitable HEIs from all over the world (Aškerc and Kočar 2015, p. 160). Thus, competition between universities has become much stiffer, and there are more competitors than there used to be a few decades ago. Consequently, new measures are necessary in order to stay competitive in the global HE market. Aškerc and Kočar (2015) argue that one of the strategies that is (or might be) taken by HEIs is the maximisation of effectiveness – 'doing more with less'. PD encourages academics to apply more effective teaching practices (e.g. ones that allow them to work with larger groups of students).

Other researchers (e.g. Jacob, Xiong & Ye 2015, Fahnert 2015, Kneale et al. 2016a) explain the growing need of PD practices because of the emergence and spread of student-centred approaches. For instance, Kneale et al. (2016a) claim that the "HE landscape is evolving as students are more frequently positioned as 'consumers of' rather than 'partners in' HE". This trend is often referred to as the marketisation of HE, which has recently become a widely discussed and contested phenomenon (see, for example, Marginson, 2016; Ball, 2018). Supporters of marketisation underline the need for direct interaction between universities and students (rather than with the government acting on the students' behalf) (Brown, 2015). This is expected to make universities more flexible, more efficient and more responsive to the needs of society, the economy and students, since students are the ones that 'know best' and should be empowered to act as customers (Hall, 2017). Other arguments in favour of marketisation include the need to cover the growing costs of enlarging HE systems (as a result of the massification of HE) and competitive demands for public support (e.g. healthcare) – therefore private contributions might be necessary to maintain education quality (Brown, 2015). On the other hand, the opponents of marketisation claim that too much competition might be damaging since competing for status tends to lead to uncontrolled and unjustified price rises, as observed in the US HE sector (Brown, 2015). As a result, HEIs might be tempted to charge students far more than necessary to provide a good education. This might lead to HE becoming elitist and neglecting the positive social and cultural externalities of broad and free access to HE such as reduced economic inequality, or positive effects on democracy and human rights (Marginson, 2016).

Regardless of the actual pros and cons of the marketisation of HE, most authors agree that "there is no turning point from this process" (Hall, 2017) and that "promoting student-centred teaching (…) is critical for the future" (Jacob, Xiong & Ye, 2015). Most importantly, the impact of the marketisation of PD seems to be strong. Fahnert (2015) explains the mechanism of how the PD of academics becomes an indispensable part of the student-centred approach. Learners wish to receive the best teaching. Thus, they

perceive HE teacher training as having considerable value (Fahnert, 2015). This was illustrated by the UK Higher Education Policy Institute and the HEA Student Academic Experience Survey results in 2015. The results of the survey revealed that staff being trained in how to teach was the highest priority for 39% of all students, while staff being active in research was a lower priority, with 54% of all students ranking it last (Buckley, Soilemetzidis and Hillman 2015). Consequently, Jacob, Xiong and Ye (2015) stated that the HE systems with the best-developed PD schemes are the ones with customer-oriented goals. Such HE systems include student-centred models in the UK, Ireland and the Netherlands (HE systems most strongly associated with high study fees and thus greater responsibility towards the client). On the other hand, the cases of Sweden, Norway and Finland show that a student-centred approach and a well-developed PD can derive not only from commercialisation, but also from their focus on a high-quality education as a driver for economic and societal development.

To sum up, as a result of the massification and marketisation of HE, HEIs are becoming more concerned about meeting the needs of students in order to become more competitive in the market. Based on the logic mechanisms that are described in the literature (see, for example, Hall, 2017), the PD of academics is expected to increase the global competitiveness of HEIs by increasing the effectiveness of the academics' work and implementing a more student-centred approach.

2.3.2 Other drivers for PD

Moreover, the increased need for the PD of academics in the analysed literature is also explained by the growing importance of digital technologies in education. For instance, in the Changing Pedagogical Landscape study (Haywood et. al 2015) it is argued that technology is becoming a crucial part of modern higher education. For example, the demand for LMS (Learning Management Systems) and MOOCs (massive open online courses) has been growing rapidly. However, a considerable number of academics lack the necessary skills and competences, and are unable to introduce modern technologies in the courses that they teach (Dysart & Weckerle 2015). In other words, innovation in teaching at the HE level is happening at a much slower pace than digital technology availability (Haywood et. al 2015).

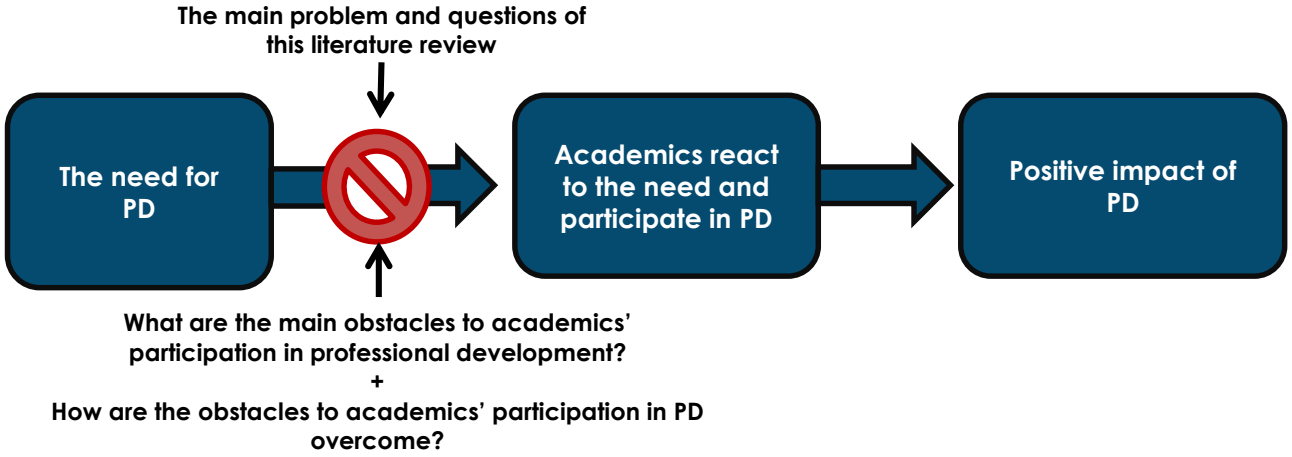
PD is essential not only to ensure the competitiveness of an HEI but also from the perspective of an individual academic. Megginson and Whitaker (2017) state that the need for PD arises because the professional success of individuals no longer lies in the job or organisation they work for but in the skills, knowledge and experience that they have within themselves. According to them, professional development practices are a major investment that academics can make for their own development. Postareff and Nevgi (2015) follow a similar idea and claim that professional development courses are great opportunities for academics to improve their teaching skills. Within this perspective, academics who wish to be professionally successful are expected to be especially interested in PD and to devote a considerable amount of time to it.

2.3.3 Academics' participation in PD: expectations and reality

So far, the literature suggests that the need for the PD of academics has grown recently. It is often seen as an effective tool of higher education institutions to better position themselves and attract students. Attention paid to the quality of teaching is also indispensable for a student-centred approach. Finally, it is suggested that individual competitiveness of academics is determined by the skills and competences they have. Moreover, based on the fact that most of the definitions of PD are linked in one way or another to results, PD is expected to be directly linked to a positive impact on HEIs' reputations. Thus it is expected that academics will actively participate in professional development activities to ensure both their professional success at the same time increasing competitiveness and prestige of the HEI at which they work. However, the current state of the PD of academics contradicts this expectation. In most of the cases, academics rarely participate in PD activities and if so, they do it unsystematically.

Consequently, the positive expected results of the PD tend not to be reached (see the Figure 1).

Figure 1. The illustration of the main scientific problem and questions of the literature review



In the 2017 Communication on a 'Renewed Agenda for Higher Education' (European Commission, 2017) it was argued that "too many higher education teachers have received little or no pedagogical training and systematic investment in teachers' continuous professional development remains the exception". For instance, in the study by Aškerc and Kočar (2015), academics from Slovenia were surveyed. The results of the survey revealed that only 31.4% of respondents had participated in higher education pedagogical training. According to Töytäri et al. (2016) much of the learning is taking place at work and is informal and unintentional in nature. The lack of academics' participation in PD leads to the main problem and question of the literature review (see Figure 1 above). Based on the literature, there is considerable need for the PD of academics. PD is also described as a useful tool for the professional success of academics. However, academics often participate in PD activities quite passively and the main reasons for that are unclear. This mismatch of expectations and reality raises the question: what are the main obstacles to academics' participation in professional development? An attempt to answer this question based on the ideas presented in the reviewed literature is the main focus of the further sections. In addition, a more 'practical' aspect will also be investigated in parallel: how might the obstacles to academics' participation in PD be overcome?

2.4 Obstacles to academics' participation in PD

Based on the literature, obstacles to academics' participation in PD exist on all levels: from individual attitudes through to HEIs' strategies and priorities to national HE policies. Four main obstacles are identified: 1) academics' unwillingness to move away from traditional teaching practices, 2) lack of formal requirements or incentives for teaching development at HEIs, 3) lack of time for PD among university staff, and 4) lack of financial, organisational, and institutional capacity to develop effective PD schemes at the HEI level. We also account for underlying reasons for the prevalence of these obstacles, attempting to explain why they exist and bring in some possible solutions suggested in the literature.

2.4.1 It is challenging for academics to move away from traditional teaching practices

It is widely recognised in the literature that teaching traditions and academics' research experience are deeply rooted in the HE environment (Aškerc and Kočar, 2015; Dysart & Weckerle, 2015; Postareff & Nevgi, 2015; Kim & Kim, 2018). Consequently, academics are used to traditional teaching methods and find it challenging to commit to learning and applying new approaches to teaching. Even though this conservatism is sometimes interpreted as one of the strengths of HE in general, it can be an obstacle to delivering better quality education through innovative and effective teaching methods (Postareff & Nevgi, 2015).

The reasons for such an attachment to established teaching traditions are twofold. One group of researchers emphasise the idea that academics are often unaware of innovative teaching practices or of the weaknesses of some traditional methods with regard to students' motivation. They tend to stick to established and 'safe' methods because they often lack the knowledge of more effective and attractive approaches to teaching. According to Dysart and Weckerle (2015), academics' unawareness of innovative teaching practices derives from the fact that, in most European HE systems, academics are not exposed to formal training on pedagogical or technological practices. Consequently, as Kim and Kim (2018) argue, even though academics are typically considered to be experts in their research domains, they have limited knowledge of educational sciences and pedagogical theories and practices. Old reliable teaching methods therefore seem to be a safer option, and are too often the only one.

There is other research that opposes this idea, stating that academics are aware of alternative teaching methods. The argument is that academics are often resistant to implementing innovative teaching methods because of a strong attachment to tradition. For instance, a study by Watty, McKay and Ngo (2016) revealed that 93 per cent of academics interviewed indicated resistance as a key obstacle to technology adoption in academic teaching. Haywood et al. (2015) suggest that such resistance is a result of certain strong cultural forces prevalent in closed academic communities (research discipline, faculty, etc.) that put tradition before innovation. Accordingly, Bovill et al. (2016) argue that academics' teaching is influenced by their own experiences as students, and that habits regarding existing practices and solutions are inherited from colleagues. As a result, the perceived risk associated with innovation is high. Additionally, Postareff and Nevgi (2015) note that changing their teaching behaviour requires an academic to shift their role from that of expert in their field to novice in another area (pedagogy), which is often an uncomfortable change. They also draw attention to the so-called "intermediate phase trap", acknowledging that people in their mid-career have a fear of making commitments and tend to avoid change.

Therefore, it is crucial to ensure sufficient support for academics in order for them to gain the ability and willingness to change. This is important in light of comprehensive evidence for the low effectiveness of so-called 'sit-and-listen' lectures (Haywood et al., 2015). The introduction of innovative practices into HE (especially in aspects such as ICT use, active learning, student engagement, feedback and assessment) is expected to raise teaching quality and the student experience (Dysart & Weckerle, 2015; Kim & Kim, 2018). Additionally, academics who are more willing to take risks in their teaching achieve better results in terms of career progress, teaching quality, and students' outcomes (Postareff & Nevgi, 2015). Therefore, it is crucial to raise awareness of academics in this regard, as well as their understanding of innovative teaching in order to overcome resistance to implement innovative teaching methods.

For tackling academics' resistance to innovative methods, some of the key recommendations for HEIs and policymakers include:

- Provision of educational programmes to improve academics' teaching competences (Dysart & Weckerle 2015; Kim & Kim, 2018);

- Increasing awareness of the importance of innovative teaching, effective dissemination of knowledge and research in pedagogy results, and stronger promotion of available PD programmes (Watty, McKay & Ngo, 2016);
- Encouragement of and rewards for teaching excellence (Haywood et al., 2015);
- Stronger focus on training young professionals (e.g. PhD students). Since they are novices they tend to accept pedagogy as a new field of expertise, learn it along with their disciplinary content, and match with one another (Ibid.).

2.4.2 Innovative teaching practices are often not a requirement for hiring or for career progression in HEIs

Even if academics are aware of innovative teaching methods and would be willing to commit to develop their teaching skills and practices, they often lack encouragement to do so. The lack of teaching-related criteria for the appointment of academic staff or incentives for the development of pedagogical skills throughout their careers has the result of diminishing motivation to learn and innovate. Fahnert (2015) acknowledges that in most developed economies worldwide, academic teachers are not required to be qualified in didactics, unlike in any other educational context, from primary through secondary to vocational education. Accordingly, Aškerc and Kočar (2015) argue that the same problem prevails in Europe – academics are rarely obliged to prove their teaching competences through any formal certification. The system of promotion and remuneration is also, in most countries, skewed towards scientific outputs rather than teaching performance. Quite often the salaries of academics depend on their publications and amount of teaching hours, not on the quality of their teaching (Graham, 2015; Kim & Kim, 2018). Similarly, promotion and reward schemes are still mainly connected to achievements in research and administration (Fahnert, 2015).

Some researchers argue that such an underappreciation of teaching in comparison to research is related to the challenges of establishing robust criteria for teaching excellence (Cashmore, Cane and Cane, 2013). Measuring research outputs is quite straightforward (e.g. number of citations, number of articles published in top journals) while teaching performance is more subjective and intangible (Graham, 2015). Therefore, inadequate and subjective assessments might sometimes seem unfair and thus, are avoided by most institutions.

However, most literature highlights a deeper issue within the HE sector that underpins the lack of focus on teaching. Research has a higher status than teaching in HE because it is a source of prestige at the institutional level (Blackmore, 2016). Gibbs (2016) argues that due to national policies in many countries (e.g. Research Excellence Framework in the UK), research-related accomplishments had gained dominance in the past and powerfully shaped the values and strategies of universities. At present, the problem is aggravated by, for instance, global university rankings that principally measure research outcomes (Gibbs, 2016). As a result, the attention of managers and academics is diverted to scientific rather than educational activity. It is often argued that as long as research has a higher priority, teaching will never get enough attention and resources from universities or academics (Blackmore, 2016). In the same vein, the European Commission (2013) notes that even though this paradigm has shifted slightly in recent years, in many European HE systems there is still inadequate attention paid to teaching in comparison to research.

Many voices across the literature recognise the lack of bargaining power of students as an important reason for the disparity between teaching and research (Fahnert 2015; Kneale et al. 2016a). Ultimately, students care about the quality of education they receive via teaching. For instance, one survey revealed that only 26 per cent of students consider it very important that teachers should currently be active researchers (the lowest score across the board), while teachers' knowledge of their subject, teaching skills

and pedagogical training were seen as the most important factors ([9]). Nevertheless, in HE systems that are not student-centred and where students are treated as 'products' rather than 'customers' of HE, their voices tend to remain unheard and their needs unmet (Fahnert, 2015). On the other hand, the HE systems with best-developed PD schemes are the ones with customer-oriented goals (see, for instance, Jacob, Xiong & Ye, 2015; UCU, 2016). Fahnert (2015) points out that this is usually associated with high tuition fees (and thus a bigger responsibility towards the 'student as client'), as in the UK's student-centred HE system. However, the author also notes that Sweden, Norway and Finland managed to achieve comparable advancements in PD schemes without charging the students any fees. Such progress is ascribed to a national approach that treats high-quality education as a driver for economic and societal development.

Recommendations on how to better balance the two HE functions (i.e. research and education) and provide motivation for academics to develop their teaching are offered at the HEI level. A study by Aškerc and Kočar (2015) shows that universities with better-defined requirements and rules regarding pedagogical training had the lowest percentage of teachers without even basic theoretical pedagogical education. Graham (2015) suggests that HEIs should work on improving the transparency of promotion schemes and providing information about teaching-based promotion in a more efficient manner. However, as shown before, HEIs themselves rarely have the motivation to promote innovative teaching. Therefore, the necessity of national legislation and broader institutional support is often underlined. The UK is described as a pioneering and benchmark country for its structured teaching professionalisation system (Walder, 2014). A stronger separation between research and teaching is pursued through a number of state institutions such as the Office for Students (OfS) and the Teaching Excellence Framework (TEF) introduced alongside the Research Excellence Framework (REF) (Blackmore, 2016). Additionally, the UK Higher Education Academy (HEA) has established the UK Professional Standards Framework for teaching and supporting learning in higher education, which sets clear and unified principles that can be used across the sector. HEA also provides a benchmarking guide to assist HEIs in enhancing teaching-based academic promotion processes (Fahnert, 2015).

However, an apparent issue at the national level is that the funding for HE is static or declining in most EU countries (EUA, 2014). One of the ways to overcome the financial obstacle, especially salient in countries with less developed and underfunded HE systems (Central and Eastern Europe in particular), is engagement with EU-funded initiatives such as the Eramsus+ mobility programme. Even though the programme's impact on improving teaching and student learning is disputed, it is proven to benefit academics in terms of international networking, recognition of different cultures, education systems and teaching methods, and development of social, communication and group work skills (Karakuş et al., 2017).

Another example is the European University Association's (EUA) European Forum for Enhanced Collaboration in Teaching (EFFECT) programme. Under EFFECT, EUA and its 11 partners from across Europe work to facilitate the exchange of experience and effective practices in terms of academics' teaching-related PD ([10]). EFFECT operates across two main working areas: development of materials and methodologies for academics' PD, and design and implementation of strategic, centralised approaches to teaching enhancement.

Additionally, EUA's Teaching and Learning Initiative creates a network of European universities focused around four thematic peer groups, all dedicated to academic PD ('Promoting active learning in universities', 'Continuous development of teaching

([9]) See: *The 2016 HEPI / HEA Student Academic Experience Survey.* Available at: http://www.hepi.ac.uk/wp-content/uploads/2016/06/Student-Academic-Experience-Survey-2016.pdf [accessed on 27.07.2018].

([10]) See: http://www.eua.be/activities-services/projects/current-projects/higher-education-policy/effect accessed on 06.08.2018].

competences', 'Career paths in teaching' and 'Evaluation of teaching and learning') ([11]). The purpose of the initiative is to better engage with relevant university communities, provide opportunities for peer-learning and the exchange of good practices.

Such European schemes contribute to knowledge diffusion on an international level, foster inter-university networking and, most importantly, provide opportunities for universities in less developed HE systems to learn from and catch up with the top performers in the sector.

2.4.3 Academics are busy and lack time for PD

The imbalance between research and teaching on institutional level has obvious consequences in individual attitudes of academics. Firstly, certain values and expectations as well as official requirements and remuneration or promotion schemes result in teaching being seen as less important to successful academic careers than research (Postareff and Nevgi, 2015). Therefore, most academics commit themselves strongly to research within their own discipline and consider that their success as an esteemed expert will be based solely on work that they carried out as researchers of a particular subject.

Secondly, academics often struggle to balance their workload and often simply lack time for PD (UCU, 2016). Most academics have more than one job: they are lecturers, supervisors, researchers, etc. Thus, they often find themselves in the situation where they need to choose where to spend their time: for their core activities for which they are rewarded (research) or for 'extracurricular activities' such as teaching-related PD (Jacob, Xiong & Ye, 2015). Consequently, even if PD activities are available at the university, a high take-up is not expected. This trend is especially problematic in HE systems that are more and more oriented towards students, especially the UK. The University and College Union reports that as a result of rising student expectations, the teaching-related workload of academics has significantly increased at a cost of research activities and professional development (UCU, 2016). Many academics are alarmed that additional duties related to teaching, combined with still-essential research work, have made their workloads unmanageable.

One solution to the overload of work and the overlap of teaching and research roles can be found in the work of Blackmore (2016). He views the current duality of the academic profession as ineffective and suggests either the separation of teaching and research (e.g. through the expansion of teaching-only roles at universities) or, ideally, linking teaching and research closely together in so-called 'complex learning'. In practice it would mean that, for instance, public funding for research should require an explanation of its benefit to teaching (Blackmore, 2016). Whilst the latter might seem too utopian and difficult to conceptualise and implement, the former strategy applied increasingly often across European HE systems. In the UK, the position of Graduate Teaching Assistant (GTA) is common. GTAs are supported by the HEA, e.g. through Associate Fellowships of the Higher Education Academy (AFHEA) that recognise their compliance with the UKPSF ([12]).

A simpler solution, easy to implement at the HEI level, is to provide materials and courses online, giving academics the flexibility to use them anytime it suits them and from their own laptops. The aforementioned success of an increased take-up of courses offered by the University of Oxford's OLI happened in large part due to a blended learning strategy. A study by Jacob, Xiong & Ye (2015) shows a 77 per cent increase in online course take-up, compared to (a still high) 39 per cent increase in participation in overall development courses.

([11]) See: http://www.eua.be/policy-representation/higher-education-policies/eua-learning-teaching-initiative [accessed on 06.08.2018].

([12]) See: https://www.heacademy.ac.uk/individuals/fellowship/associate-fellow#section-3 [accessed on 31.07.2018].

2.4.4 HEIs do not have sufficient capacity to develop effective PD schemes

Even assuming that HEIs are motivated to provide better-quality education and manage to prioritise teaching and incentivise staff to develop their pedagogical skills, there are still serious obstacles to effective PD provision. HEIs often lack the skills (e.g. staff expertise in pedagogies) and capacity (e.g. technologies) necessary to implement effective PD programmes, while external expertise is often regarded as expensive and thus unjustified (Dysart & Weckerle, 2015). More importantly, HEIs do not have either sufficient knowledge of which practices work or the know-how necessary for the implementation of a successful PD programme. Chalmers and Gardiner (2015) argue that academics' PD is a very recent and largely under-researched topic, especially in terms of outcomes of teacher development programmes on enhancing teaching and student learning. Kennedy (2014) points out that the existing literature is predominantly small-scale, characterised by theoretical incoherence. The literature fails to produce coherent findings and does not provide an evidence base that could inform the practice. Therefore, even in some more developed HE systems, where PD is rapidly evolving, decision makers often lack guidance on how to successfully implement it.

Some attempts to foster research on innovative teaching and effective PD for academics have been made by HEIs. For instance, members of the Dublin City University's Digital Learning Research Network produce an impressive number of publications and scholarly outputs on new models of teaching each year (36 outputs in 2018) ([13]). A broader and recently emerging approach to research and its impact is described by Fanghanel et al. (2016). Scholarship of Teaching and Learning (SoTL) encompasses engaging with the literature on teaching and learning, reflecting on teaching methods, and disseminating research outcomes with a view to enhancing student learning. The SoTL outputs are not limited to conference presentations or journal articles (traditional research outcomes) but also include evaluated teaching materials, software, videotapes and workbooks, scholarly blog posts, websites that support learning of students or colleagues, etc. (Fanghanel et al., 2016).

Despite the limited evidence, there are some general rules that are widely agreed upon in the literature and provide a good starting point for the design and development of PD practices in HE. Therefore, successful PD programmes should:

Be repeatable or of sustained duration. A study by Cordingley et al. (2015) shows that short-term programmes were only enough to change teaching positively in very specific and narrowly defined aspects, while one-off events did not have a positive impact at all. Similarly, Darling-Hammond, Hyler & Gardner (2017) argue that for PD to be effective it must provide academics with adequate time to learn, experiment, implement and reflect upon new strategies and practices.

Offer feedback. The long implementation time should be related to feedback, follow-up and consolidation activities that facilitate reflection and help academics move towards the successful implementation of new practices (Dysart & Weckerle, 2015; Darling-Hammond, Hyler & Gardner, 2017).

Incorporate active learning. Stewart et al. (2014) state that passive learning is insufficient to create changes in participants' teaching habits. Additionally, Darling-Hammond, Hyler & Gardner (2017) argue that active learning engages academics in the same way they should engage their students. Therefore, teaching academics are more likely to implement such a mode of teaching after experiencing it themselves.

Support collaboration. So-called 'communities of practice' (small groups of academics working within the same discipline and teaching similar types of content) are believed to foster knowledge and good practice dissemination within a faculty (Stewart, 2014; Dysart & Weckerle 2015). Darling-Hammond, Hyler & Gardner (2017) underline that they not only contribute to sharing technical knowledge or skills within the community but also

([13]) See: https://www.dcu.ie/nidl/research/overview.shtml [accessed on 06.08.2018]

positively change the culture of an entire department, institution, or even district or sector.

Provide expert support. Cordingley et al. (2015) put a special emphasis on external know-how that, combined with internal expertise, provides multiple perspectives and challenges established views. Darling-Hammond, Hyler & Gardner (2017) underline that coaching is also very effective when focused on academics' individual needs.

Be designed for participants' needs. Postareff & Nevgi (2015) call for taking a more personalised approach to PD provision, accounting for sociocultural differences among academics and differences in approach towards pedagogy. Similarly, Cordingley et al. (2015) view recognition of differences between individuals, their beliefs, starting points and environment as crucial for bringing about an improved outcome.

Overall, we find that obstacles to academics' participation in PD exist on an individual, institutional and systemic level and are strongly inter-related. Academics' lack of motivation and time to develop their teaching derives from the universities' expectation that they should focus on research rather than education. This imbalance between research and education functions derives from long-established norms and policies on a systemic level skewed towards the scientific outputs of HEIs. Even though the literature recognises a trend of shifting the focus from research to teaching on all levels, these changes happen almost exclusively in the most developed and student-oriented HE systems (Chalmers & Gardiner, 2015). Most European countries still rely on a traditional teacher-centred approach and fail to embrace changes (Jacob, Xiong & Ye, 2015).

2.5 Impact of innovative PD models

The professional development of university staff can lead to substantial benefits for both academics and students but its impact and value are highly complex. There is not necessarily a causal relationship between PD and changes in teaching and learning. The results of PD depend on internal and external factors including individuals' motivation to learn, the culture of the institution or faculty, and PD providers' experience and attitude (Postareff & Nevgi, 2015; Stewart, 2014). Additionally, the transfer of learning into practice is a long-term matter and therefore difficult to measure accurately. However, Guskey (2014) argues that while the relationship between PD and skills and student outcomes is complex and multifaceted, it is not random or chaotic. The assessment of the impact of PD must take a broad approach and not to be limited to measuring quantifiable elements (e.g. numbers of scientific publications or the number of hours spent in courses).

However, the impact of PD is still often explained as a linear and causal relationship. It follows the logic that a participant becomes a better teacher by attending a course (Kneale et al., 2016a). In fact, the most common teachers' development in HE evaluation practice are the so-called 'happy sheets' – post-event questionnaires that focus on participants' immediate satisfaction with the event (Kneale et al., 2016a). Therefore, even when PD programmes are evaluated, the assessments (e.g. questions on the surveys) rarely go beyond the participant's immediate reaction rather than the impact of the practice. While these provide some feedback for the organiser, they contribute very little to the actual understanding of the impact PD have. To capture the whole complexity of the impact of PD, using a range of quantitative and qualitative methods such as questionnaires, interviews, reflections, focus groups, and journals is essential (Kneale et al., 2016b).

Consequently, there is very little robust evidence on the impact of PD programmes on enhancing teaching and learning (Cordingley et al., 2015; Whitworth & Chiu, 2015). The existing literature is scant and often confusing or contradictory. Some studies have concluded that there is little evidence regarding the impact of teacher development on teaching practice and even less evidence of impact on student learning (Yoon, Duncan, Lee, Scarloss, & Shapley, 2007). Others suggest an indirect but positive relationship in

both of these cases (Luft & Hewson, 2014; Guskey, 2014). Additionally, while the ultimate goals of PD are the growth of teaching expertise and pupils' learning (King 2014), some research suggests that effective PD for academics potentially benefits additional aspects such as institutional culture and academics' career progression (Stes et al., 2013; Chalmers and Gardiner, 2015).

Conceptual and behavioural changes in teaching practices and quality of teaching include changes in academics' attitudes towards teaching and learning, improved knowledge on learning and teaching, improved teaching skills, and the application of these in their teaching practices. These changes in teaching practices should impact students' learning outcomes such as students' internalisation of course content and their learning achievements. Additionally, PD provision can affect the institutional culture by increasing social capital, productivity, and thus the reputation of a university, as well as enact changes in attitudes, values, goals, and practices shared within an HEI. Finally, participation in PD might also impact the career progression of academics by developing teachers professionally through the acquisition of skills, establishment of new networks, or directly through the use of teaching-related reward or promotion schemes.

2.5.1 Expected impact on teaching quality

The impact on teaching quality can be expected in several ways. Firstly, Ravhuhali, Kutame & Mutshaeni (2015) report that teachers' professional development broadens their pedagogical knowledge and enhances the quality of teaching. Through the development of knowledge and competences, PD enhances participants' self-confidence and self-efficacy as teachers (Kneale et al., 2016a; Wall, 2013). This induces a stronger belief in their own power and increased willingness and ability to take risks and try new methods and tools (see Postareff & Nevgi, 2015). This can enhance teaching and learning experience, efficiency, and lead to higher achievements. Academics are also more willing to adapt into their teaching good practices that they enjoyed as learners (Darling-Hammond, Hyler and Gardner, 2017). For instance, experiences of active learning in PD encourage them to design and implement the same style of learning for their students. Using a variety of innovative tools – such as multimedia materials, online courses, active learning, and peer mentoring – provides academics with a clear vision of the best and most suitable practices for their course. Research shows that PD enhances teachers' abilities to predict students' approaches, anticipate errors, and determine the best instructional strategies for particular students (Ravhuhali, Kutame & Mutshaeni, 2015; Wall, 2013). Therefore, their pedagogic knowledge increases (e.g. in terms of giving feedback, using a specific innovation or working with particular subject-based concepts).

Innovative PD methods frequently involve less traditional types of practices than classroom-based teaching. Collaborative working and professional networks increase academics' enthusiasm for professional development, which leads to further and sustained learning (Kneale et al., 2016a). Jacob, Xiong & Ye (2015) argue that the synergies created through interactions with others of similar professional development needs encouraging constant reflection and continual improvement in teaching practices. This sustainability or repetitiveness of PD activities, in turn, provides academics with adequate time to learn, practice, implement, and reflect upon new teaching practices. Positive outcomes of PD often emerge long after the PD programme has finished, and after periods of relative discomfort in trying out new approaches. Finally, personalised PD allows recognising differences between individuals and their starting points. This can lead to targeted strategies of content, methods, and tools designed for a particular student population to support their achievement (Darling-Hammond, Hyler and Gardner, 2017). There are, therefore, a wide variety of domains of teachers' work and experience that are likely to be affected through PD practices.

2.5.2 Expected impact on students' performance

Research assessing the impact of PD on students is scarce, mostly due to the difficulties in quantifying the impact and isolating the causality of the complex processes of student

learning (Kneale et al., 2016a). Nevertheless, teachers' repetition of new information and skills in a way that changes their performance is expected to enhance students' mastery and experience (Cordingley et al., 2015). Ravhuhali, Kutame & Mutshaeni (2015) report that teachers' professional development improves learners' understanding. Consequently, innovative PD for teaching academics can potentially increase students' academic achievements (Whitworth & Chiu, 2015; Cordingley et al., 2015). While student learning is often quantitatively associated with performance in exams, it can also manifest itself in critical thinking, working in teams, solving problems, etc. (Kneale et al., 2016a; Guskey, 2014; Whitworth & Chiu, 2015). However, the relationship between students' achievements and teachers' professional development is not necessarily causal and can derive from changes in the way students absorb information.

Firstly, students' perceptions (e.g. student satisfaction with teaching and course content, commonly measured by student feedback forms) may change due to the use of new teaching methods or tools. Secondly, the use of new teaching and learning tools can increase students' engagement. It has been reported that PD sharpen teaching skills in the classroom and helps teachers keep up with developments in the class and keep students engaged (Ravhuhali, Kutame & Mutshaeni, 2015). Engagement can take various forms – increased time and effort students devote to educationally purposeful activities, face-to-face contact, reciprocity and cooperation between students and academics, usage of active learning techniques, etc. Finally, PD can encourage changes in study approaches, e.g. shifts between surface and deep learning, a systematic approach to studying, use of a range of approaches to study, collaboration with other students, information literacy, ICT literacy. Therefore, while PD practices for teaching staff do not necessarily result directly in higher achievements for students, it is extremely likely that PD has an impact through changes in students' experience and behaviour.

2.5.3 Expected impact on institutional culture

While the institutional culture of a particular HE institution to some extent determines the extent and modes of the PD provision, it might also be affected by it (Stefani, 2013). Research shows that prolonged and extended professional development interventions featuring multiple iterative activities are extremely important for significant organisational change (Cordingley et al., 2015; Kneale et al., 2016a). PD can act as a stimulator of conversations across groups that are not normally in dialogue (e.g. common initiatives with administrative staff or/and students or/and other stakeholders). This is of high importance as it can lead to a consideration of diverse opinions when making decisions. Additionally, it creates a comfortable environment, basis for inquiry and reflection (Darling-Hammond, Hyler and Gardner, 2017). This diverse, multi-directional interaction is likely to diversify and yield new ways of handling knowledge in the institution, improving the experience of learning and work (Töytäri et al., 2016).

Increased awareness of the available PD initiatives, their importance and their effects among staff can encourage the overall culture of professional development in the institution. In addition to PD, policies, strategies, hiring processes, promotion schemes, and awards related to teaching can increase the importance attributed to teaching tasks and hence academics' motivation to excel at teaching. This is important, as HE teaching is perceived as a highly significant factor when choosing a university (especially in high-fee countries such as the UK) (Fahnert, 2015). Institutions benefit from skilful and efficient staff as this provides an image of progressiveness and commitment to the development of its people (Wall, 2013). Therefore, the innovative PD of academics is a competitive advantage, which can result in enhanced competitiveness of an institution and often leads to increases in funding and reputation (Brusoni et al., 2014). Evidently, the PD of teaching academics will not only change institutional culture but also have positive economic effects.

2.5.4 Expected impact on careers progression

Research on the impact of PD on teachers' career progression is particularly scant, despite the fact that a connection between professional development and excelling in careers appears especially strong. The impact of PD on career progression might be considered twofold. Firstly, it might derive directly from enhanced teaching skills combined with new promotion and reward opportunities. This includes success in receiving teaching-related grants and awards, promotion based on teaching quality, and academics becoming experts and leaders in the field of teaching excellence (Wall, 2013; Kneale et al., 2016a).

Secondly, PD activities have many indirect implications for academic work in relation to personal development in general and to research work in particular. Maintaining PD records demonstrates a commitment to the profession and enriches one's CV, and participation in PD make academics aware of the importance of reacting and adapting more readily to a dynamically changing professional world (Wall, 2013). These can benefit their career progression, whether by means of internal promotion or an external job search. Additionally, intra- and inter-university collaboration and networks enhance knowledge-sharing opportunities that might be used for research purposes (Wall, 2013). Finally, participation in innovative PD offers academics both challenges and opportunities. Teachers are challenged by new theories and are continuously involved in a process of going beyond the borders of their discipline and pedagogical field (Postareff & Nevgi, 2015). These can provide a sound basis for personal development.

It is important to note that often the impact PD generates depends on the type of methods used when carrying out the professional development practice. For instance, Darling-Hammond, Hyler and Gardner (2017) report a variety of different impacts on students' performance resulting from, for example, content- versus student-thinking-focused practices, and multimodal and active learning versus static, control classroom models. Other studies point to differences in students' performance when lecturers have undertaken compulsory and non-compulsory PD (see Kneale et al., 2016a). This adds to the complexity of the subject matter and highlights the importance of contextualising the PD practices.

Overall, the evidence base for the impact of providing innovative PD for teaching academics in HEI is insufficient. This is mostly due to the complexity of the processes of teaching and learning. In light of internal and external influences, it is not only difficult to evaluate but even to identify the causality of changes in teaching and learning. In failing to grasp the complexity of the matter, most of the evaluations carried out in a linear and simplistic manner – they evaluate the immediate reactions of participants, missing out on the various ways in which students, staff and the institution itself can potentially be affected. The literature suggests that in order to comprehensively understand the overall impact of providing innovative PD for teaching academics, that impact must be analysed in four domains: teaching quality, students' performance, institutional culture, and academics' career progression. There are various potential indicators of each, which further suggests that in order to capture the complexity of the impact of PD, a range of quantitative and qualitative methods such as questionnaires, interviews, reflections and focus groups must be used.

The review has highlighted systemic gaps in the research into the impact of PD in higher education. There is a need to identify the complexities and range of contexts in which the impact of PD might be determined and evaluated. This might reduce the complexity and challenges of collecting and assessing related evidence. Furthermore, the discussed areas of impact have been researched highly disproportionately. Particularly scant is the literature on the impact of PD on institutional culture and teachers' career development. Furthermore, it would be beneficial to clarify the other sources of influence that may be of significance with regard to teachers' PD.

2.6 Conclusions

Higher education systems around the world are facing three new tendencies: the massification and marketisation of higher education, resulting in the spread of a student-centred approach, and the growing importance of modern digital technologies. The advantages and disadvantages of these changes (especially the marketisation of HE) are disputable. However, it is clear that in light of these changes, the need for professionalism on the part of academics has grown and became a necessary condition for the competitiveness of the institution and an individual's career progression. Nonetheless, research shows that despite this expectation, academics' participation in PD is infrequent and takes place unsystematically. This literature review has therefore addressed the question of what the main obstacles to academics' participation in professional development are, and how these obstacles are overcome in HEI.

It was identified that the PD of academics is a multidimensional concept, often encompassing the subject, type of process, skills targeted, and/or expected results. Importantly, results or impact is an extremely important dimension of the term, as many authors define PD as only the practices that have brought about a positive impact. According to the literature, an impact from PD is possible in various domains, such as individual teaching competences, students' experience and performance, institutional culture, and academics' careers paths.

The obstacles to academics' participation in PD that potentially prevent these positive impacts have also been identified. There is literature showing that for various reasons many academics are still attached to the most traditional teaching methods (e.g. 'chalk and talk') and not willing to commit to learning innovative methods. Some authors argue that this is due to academics not having been exposed to innovative teaching practices. However, others state that the reason is the academics' strong attachment to tradition, rooted in strong cultural forces still prevalent in close academic communities. Furthermore, the lack of teaching-related criteria for the appointment of academic staff and the lack of incentives for the development of pedagogical skills throughout their careers results in a lack of motivation to learn and innovate. This is in the context of research still being seen as more important than teaching when it comes to building a successful academic career, which duly leads, in part, to the next obstacle – the lack of time. Academics struggle to manage their workload and hence devote time to PD. Finally, many HEIs lack the skills (e.g. pedagogical expertise) and capacities (e.g. technology) necessary to implement effective PD programmes.

While the literature on the PD of academics has been expanding, it is still extremely fragmented, failing to address certain important issues within the topic. Firstly, the lack of a widely agreed definition of PD for academics is an important issue, as it makes the term as wide or as narrow as the authors, or sometimes even the reader, wishes. This prevents the field from comparable scientific outcomes. Furthermore, the impact of PD is researched highly disproportionately. Particularly scant is the literature on the impact of PD on institutional culture and teachers' career development. Finally, while it is possible to identify the obstacles to academics' PD, there is a significant gap in the research on how the known obstacles are targeted in practice and whether these strategies of PD are successful. Consequently, HEIs or academics who are interested in PD can get only a small number of ideas or inspiration while investigating the literature on the topic. It means that the current literature does not provide the evidence base that can inform the practice. Future research should therefore address this issue.

3. Cases studies of innovative PD practices

3.1 The Sipping Point – Enabling the Power of Communication among Academics

Dublin City University (Ireland)

Abstract: The Teaching Enhancement Unit (TEU) at Dublin City University (DCU) provides an opportunity for academic staff to interact with each other and learn from their colleagues about aspects of teaching practice. To achieve this, TEU organises The Sipping Point – an informal, campus-wide community where staff across all disciplines meet for one hour once a month to discuss and share ideas about topical challenges in teaching, assessment, and student engagement. The Sipping Point is unique compared to more common and formal PD practices where recognised experts of pedagogy teach academics. In contrast to that format, Sipping Point sessions enable the power of communication: academics take on the roles of teachers and learners at the same time.

Interviewees:

- Dr Mark Glynn, Head of DCU Teaching Enhancement Unit at DCU
- Ms Clare Gormley, Academic developer of DCU Teaching Enhancement Unit. Main initiator and organiser of the Sipping Point
- Dr Emma Finlay, Participant in The Sipping Point

Introduction

The Sipping Point is an initiative implemented by the Teaching Enhancement Unit at Dublin City University. It is an informal, campus-wide community that was set up to enable staff across all disciplines to learn from colleagues about different aspects of teaching practices. For one hour a month, a group of academics meet to discuss and share ideas around challenges in teaching, assessment, and student engagement. Sessions are organised during lunch breaks and catering is provided. Every session has a different topic related to teaching practices (e.g. group work, students' assessment, feedback practices). At the beginning of each session, two or three academics present innovative teaching methods they use. Each presentation lasts for up to 5-10 minutes and is followed by an open discussion. There is also a private online community for members to continue their conversations in between sessions.

The main innovation with The Sipping Point is the idea that the core responsibility of organisers of the PD activities is only to 'nudge' academics to start talking – to **enable the power of communication.** PD practices usually aim to produce ideas about what skills should be strengthened and how that should be done, but The Sipping Point is much more informal and less structured. It aims to create an environment where academics can share their experiences about teaching practices. The Sipping Point discussions work as a spark that increases academics' enthusiasm to learn more and to become better teachers.

Context

DCU has a reputation as Ireland's university of enterprise. This multi-campus university is currently home to over 17,000 students and roughly 2,000 academic and administrative staff (Interview, Glynn, 2018). The university develops high-quality, high-value learning and is determined to hold its position as Ireland's most innovative and

market-driven university ([14]). DCU has a Teaching Enhancement Unit (TEU), a department that is responsible for the PD of academics related to teaching and learning (Interview, Glynn, 2018). The TEU is a service unit that provides support and advice to academic staff in order to improve the learning experience for the students of DCU ([15]).

All PD practices implemented by the TEU are "separate, but closely connected" as they are part of a single strategy – the Teaching & Learning Strategy ([16]), identifying major priority work streams for the TEU (Interview, Glynn, 2018). The TEU organises three types of PD activities. Firstly, it organises The Sipping Point as a "non-formal professional development option" ([17]). Secondly, the TEU offers a number of accredited modules (courses) for the academics of DCU, in which they follow strict requirements, are assessed, and get a qualification (Interview, Finlay, 2018). Thirdly, the TEU provides a series of one-time, one-theme workshops for academics, lasting 1-2 hours and covering a wide variety of areas related to teaching and learning. In addition, DCU academics participate in a Teaching and Learning Day – an annual event organised specifically to encourage academics to share their examples of effective teaching practices.

The TEU **organises both supply- and demand-driven PD activities**. The supply-driven PD practices mean that the TEU experts decide on the most relevant topics and practices, allowing academics to choose from a variety of available PD activities. For instance, the 'Introduction to Teaching', 'General Assessment' and 'Online Assessment Techniques' workshops are supply-driven. But the majority of PD activities organised at DCU are demand-driven. The academic and administrative staff ask the TEU questions and describe the challenges they are facing. In response, the TEU experts organise courses or workshops that target those specific challenges. For example, a leader of one of DCU's faculties expressed the faculty's wish to use more video-based teaching practices, which were constrained by a lack of necessary skills. The TEU then organised a two-hour workshop on the use of video techniques specifically for that faculty (Interview, Glynn, 2018).

In addition to organising PD activities, DCU applies policies aimed at supporting academics' PD and the implementation of innovative teaching practices. Academics nominated for the President's Awards for Excellence in Teaching may receive financial grants for their outstanding contributions (Interview, Gormley, 2018). The vast majority of PD activities organised by the TEU take place during working hours. However, academics who spend their personal time on external PD activities "get their time back" (e.g. an academic who has participated in an external PD workshop during the weekend can ask for two days off work, Interview, Glynn, 2018). Moreover, DCU academics can apply for extra funding for their PD (e.g. academics who decide to take paid PD courses outside DCU can apply for compensation) (Interview, Glynn, 2018). Furthermore, the TEU actively supports The Scholarship of Teaching and Learning by assisting teams of academics. Finally, the website of TEU has a 'Quick Guides' section where resources for staff covering a wide variety of areas related to teaching and learning are provided ([18]).

The aim of The Sipping Point is to create conditions for academics to share their experiences with their colleagues and "get people talking".

The Sipping Point is one of the most recent PD practices at DCU, its first session having taken place in April 2017. Its aim is to create conditions for academics to share their experiences with their colleagues and "get people talking" (Interviews, Glynn; Gormley, 2018). Clare Gormley, its main initiator, **came up with the idea of The Sipping Point when academics were continuously describing to her the lack of opportunity for interaction with other lecturers** (Interview, Gormley, 2018). Based

([14]) See Irish Universities Association (2018) Dublin City University. https://www.iua.ie/the-irish-universities/university-profiles/dublin-city-university/ [accessed on 25 August 2018]
([15]) See https://www.dcu.ie/teu/index.shtml [accessed on 8 September 2018].
([16]) ibid
([17]) ibid
([18]) ibid

on interviews with the organisers and participants, this initiative addresses two obstacles that often prevent academics' participation in PD activities. The main obstacle that is effectively addressed by The Sipping Point is the lack of time to participate in PD activities. Secondly, Sipping Point discussions increase the intrinsic motivation of academics. More particularly, the initiative addresses the lack of awareness of what might be interesting and relevant from other people's practice, and also the fear of failure (Interview, Glynn, 2018) ([19]).

Implementation

The content area of The Sipping Point sessions is very broad. Examples of recent topics include students' attendance challenges, sustainable assessment approaches, online quizzes, plagiarism, the digital literacy of the staff, learning spaces, and how to encourage reading and reflection. All sessions are related to 'universal' teaching practices and are not specific to particular disciplines. Thus, the main 'target' of the practice is faculty development as it focuses on individual members of the staff and tasks that are specific to their pedagogical roles (Malik et al. 2015, p. 171).

According to the organisers, The Sipping Point is mainly based on **"discussions"** (Interview, Glynn, 2018). Clare Gormley describes The Sipping Point as a "semi-structured informal" practice. The practice is delivered onsite at DCU. Every month The Sipping Point sessions take place on different campuses of DCU so that academics working in different buildings do not have to travel too far every time. Additionally, participants in The Sipping Point can connect to the online platform where they can share information relevant to the topic of the week or continue their discussions after the session. Furthermore, representatives of the TEU upload their summaries of presentations and sources (e.g. articles, books or videos) that were mentioned during the discussion so that academics who were unable to participate can familiarise themselves with the topic. However, according to the organisers, the online platform and forum are "supplementary resources" and are used only as a "back-up" as the main point of the practice is to have "face-to-face" discussions (Interview, Gormley, 2018).

The funding for the practice is provided by DCU. The TEU decides how to distribute the budget allocated to the PD of academics. The budget of The Sipping Point was EUR 757 in total for the academic year (Interview, Glynn, 2018). This sum is enough to buy coffee and sandwiches for the participants and to order souvenir mugs for the presenters of the sessions. The organisers of The Sipping Point claim that the main challenge faced during the implementation of the practice is attracting more participants to the sessions (Interview, Glynn, 2018) ([20]).

> *The budget of The Sipping Point was EUR 757 in total for the academic year. This sum is enough to buy coffee and sandwiches for the participants and to order souvenir mugs for the presenters of the sessions.*

Results

The TEU pays a lot of attention to the evaluation of results and the impact of The Sipping Point. The evaluation is mostly based on feedback from the participants. The TEU collected the participants' feedback and evaluated primary Sipping Point results after the first half-year of the practice's implementation. Participants were invited to a focus-group discussion where they were asked to evaluate the benefits of the practice and to propose possible improvements (Interview, Gormley, 2018). After the first year of the practice, in the summer of 2018, Clare Gormley started conducting more "formal" and comprehensive evaluations. The final results will be available in November 2018. The aim

([19]) Strategies for how these obstacle obstacles are addressed are described in detail in the chapter 'Strategy for addressing obstacles to CPD'

([20]) The strategy that is used to face this challenge is described in detail in the chapter 'Challenges and prospects'.

is to evaluate the "broader population" by carrying out a survey of all of The Sipping Point participants who have attended to date (Interview, Gormley, 2018).

The Sipping Point works to "spark" interest: participants leave sessions with new ideas, insights into possible teaching strategies, the enthusiasm to find out more, and knowledge of where to look for information.

Organisers and participants agree that The Sipping Point has a different impact on participants' knowledge compared to more common and traditional PD practices. Respondents to The Sipping Point participants' survey claim that they improved their knowledge about teaching practices, such as tools available on Moodle, innovative assessment and teaching methods, audio feedback systems, the enhancement of students' engagement, the effective organisation of group work, etc. (Interview, Gormley, 2018). However, Sipping Point participants do not acquire the expertise, solution(s), or comprehensive knowledge on how to apply innovative methods as the duration of the sessions is too short. Instead, The Sipping Point works to "spark" interest (Interview, Glynn, 2018): participants leave sessions with new ideas, insights into possible teaching strategies, the enthusiasm to find out more, and knowledge of where to look for information (Interview, Glynn, 2018).

Representatives of the TEU claim that The Sipping Point sessions really helped them become better informed about effective and unusual teaching practices implemented by academics at DCU. Experts at the TEU sometimes direct participants of Sipping Point sessions to learning materials that they use in accredited courses. This also increases participants' interest in other PD activities. Furthermore, some academics decided to write papers about their innovative teaching practices due to discussions in The Sipping Point sessions. According to the head of TEU, it is likely that these papers will be used as materials for accredited courses and workshops (Interview, Glynn, 2018).

The organisers and participants of The Sipping Point have not yet noticed any direct impact on academics' career paths. However, interviewees claim that The Sipping Point can be expected to have indirect effects that would be useful to the careers of academics. For example, the TEU has encouraged academics to spread their knowledge of innovative teaching methods by writing papers. In the long term these presentations and research may have a positive impact on academics' careers at DCU (Interview, Glynn, 2018). Furthermore, organisers notice that the confidence gained by participating in The Sipping Point could increase participants' confidence in their teaching in ways that might encourage them to apply for a promotion (Interview, Gormley, 2018). Finally, The Sipping Point might have a positive impact on academics' career paths by 'sparking' interest and enthusiasm to become a better teacher, but it is still too early to comment whether The Sipping Point has a real impact on teaching quality.

Academics mostly talk about future plans to implement new methods because of The Sipping Point (Interview, Gormley, 2018). However, some respondents to the recent TEU survey and the interviewees (Interviews, Gormley; Finlay, 2018) claimed that The Sipping Point increased their intention to use technology in teaching and assessment and encouraged them to try new activities, such as online quizzes, video tools for the students' assessment, and alternative approaches to enhance group work. Increased knowledge about the existence of different innovative teaching methods creates favourable conditions for an increase in teaching quality. More specifically, one of the interviewed participants revealed that one of the sessions encouraged her to incorporate online quizzes into her courses. This academic noticed that the introduction of online quizzes encouraged her students to study more actively throughout the semester (Interview, Finlay, 2018). Moreover, knowing more innovative teaching practices gives academics new ideas on how to solve challenges on the spot and how to improvise (Interview, Finlay, 2018). Responding to the survey question about its impact on practice, one of the respondents said, "I feel attending the sessions helps develop a more adventurous approach to teaching, learning and assessment. It makes me and the team

more likely to try different types of strategies." No other impacts on student learning were identified.

Analysis of the practice

Innovation in this PD practice

The main innovation with The Sipping Point is the idea that the core responsibility of the organisers of PD activities is only to 'nudge' academics to start talking to each other – to **enable the power of communication.** According to the literature on the PD of academics, informal interaction between academics and informal PD activities are often expected to happen without the intervention of any institutions. For instance, it might be expected that academics actively communicate with their colleagues and share their experiences between lectures. However, the reality is different. Because of their busy schedules, academics rarely have the opportunity to talk to their colleagues. Reacting to this, the organisers of The Sipping Point decided to create favourable conditions for the informal interaction of DCU staff. In the context where the most common forms of academics' PD practices are lectures, formal workshops and courses, The Sipping Point is a unique idea.

The Sipping Point is also innovative compared to more common PD activities where academics are perceived as students and 'listeners' while ideas and knowledge are presented by recognised experts of teaching methodology. During The Sipping Point sessions academics take on two roles at once: they teach and learn from their peers at the same time. Formal and more common PD practices often encourage the perception that innovative methods are applied only by experts in teaching and not by "simple academics" (Interview, Glynn, 2018). Thus, according to the head of the TEU, one of the unique features of The Sipping Point is that instead of the same expert talking at every PD activity, they hear and talk with their colleagues – people to whom they can relate (Interview, Glynn, 2018).

Strategy for addressing obstacles to PD

According to the organisers and participants, The Sipping Point **addresses the obstacle of a lack of time,** which often becomes the main obstacle to academics' participation in PD activities (Interview, Glynn, 2018). More formal PD practices are usually quite time-consuming and may seem like a big commitment. For instance, modules of accredited courses available at DCU are 125 hours each. Additionally, participants in formal accredited courses are required to read literature and do 'homework' between sessions. Therefore, academics are able to participate in formal courses only from time to time. Constant participation could mean that they would not have enough time to perform all of their professional duties. In contrast to time-demanding formal courses, The Sipping Point was designed as a one-hour session organised once per month during lunchtime. There is no commitment to continuously participate in The Sipping Point or to do additional work prior to or after the sessions (Interview, Finlay, 2018). It is therefore fully compatible with the busy schedules of academics.

The Sipping Point was designed as a one-hour session organised once per month during lunchtime. There is no commitment to continuously participate in The Sipping Point or to do additional work prior to or after the sessions. It is therefore fully compatible with the busy schedules of academics.

As a result of its compatibility with the schedules of academics, in some cases The Sipping Point becomes an alternative to more formal PD activities. It is better that academics who do not have the time for longer PD courses at least participate in an informal one-hour discussion about teaching practices once a month, rather than spending no time at all on their PD. However, one of the success factors of The Sipping Point is that more often it works not as an alternative to more formal PD practices but as an effective addition to them. According to the organisers of the practice, The Sipping

Point "works great" with other PD activities (Interview, Glynn, 2018) as "one feeds the other" (Interview, Gormley, 2018). Based on Megginson and Whitaker (2017, p. 5) the continuity of the learning process is a necessary condition for its effectiveness. Participants and organisers describe The Sipping Point as a practice that creates perfect conditions to continue the conversation between other, more formal PD activities and to share learning experiences. For instance, workshops on a particular topic are 1-2 hour sessions and can often be 'information-centric' – people hear one point of view and do not have the opportunity to discuss what they have learned, whereas participants in The Sipping Point do have this opportunity. Furthermore, academics who applied new teaching practices because of participation in an accredited course can tell others about them during their presentations at The Sipping Point (Interview, Finlay, 2018). To sum up, academics at DCU still actively participate in formal PD activities, but in situations when they cannot spend so much time on learning and cannot start a new accredited course, The Sipping Point fills the PD gap.

The other well-known obstacle to academics' PD that is addressed by The Sipping Point is the lack of intrinsic motivation. More particularly, sometimes academics do not learn because they are simply unfamiliar with the existence of innovative teaching practices. Based on an interview with Dr Mark Glynn, academics who do not interact with their colleagues and confine themselves to their daily routines and disciplines often "do not know what they do not know". The Sipping Point aims to solve this problem by showing that good practices and innovative teaching methods are effectively applied by other academics working at the same university (Interview, Glynn, 2018). During the Sipping Point sessions academics become aware of the existence of new teaching methods and that encourages them to want to learn more. Organisers noticed that participation in The Sipping Point sessions has positive spill-over effects and may encourage academics to sign up for other PD activities (Interviews, Gormley; Glynn, 2018). This happens in different ways. First of all, during the discussions and presentations, participants in The Sipping Point often refer to other PD practices they have participated in, the literature they have read for other PD practices, or other accredited courses or workshops. Seeing that their colleagues are satisfied with more formal PD courses and workshops encourages academics to participate in them (Interview, Gormley, 2018). Additionally, due to The Sipping Point discussions, academics build stronger relationships and become more interested in peer-coaching. After hearing about new teaching methods, some academics ask to observe their colleagues' classes to see how their methods work (Interview, Glynn, 2018).

One of the strengths of The Sipping Point that ensures the 'wide spread' of the ideas is that academics who represent different disciplines participate in the same discussions**.** Generally, academics are mostly exposed to their colleagues from the same faculties. For this reason the academics' expertise in teaching practices is usually deeply rooted in their own field or discipline and rarely travels outside the faculty. Due to The Sipping Point connecting academics working in different disciplines, academics are "challenged by new theories of teaching and learning and they are involved in a continuous process of going beyond the borders of their own discipline and pedagogical field" (Postareff & Nevgi, 2015, p. 40). According to Töytäri et al. (2016), the interaction of academics having different experiences and working in different disciplines is likely to diversify and yield new ways of handling knowledge at the institution, improving the experience of learning and work. Additionally, it creates a comfortable environment along with a basis for inquiry and reflection (Darling-Hammond et al., 2017).

Another factor in the success of The Sipping Point is more contextual – related not to the practice as itself but to the working principles of the organisers. TEU emphasizes the importance of communication and personal relations not only by organising The Sipping Point but also in their general PD strategy. The staff of TEU claim that their role revolves around relationships since they, as the experts responsible for the PD of academics, can only be helpful if academics trust them and express their challenges to them (Interview, Glynn, 2018). The academics at DCU feel absolutely free to write an informal email or go to the TEU office with any questions that they have (Interview, Finlay, 2018). The

Sipping Point is important for maintaining good relations between the TEU and the academics at DCU. According to one participant, the opportunity for regular communication with the staff of the TEU is one of the main factors that motivate her to participate in this initiative (Interview, Finlay, 2018).

Challenges and prospects

The organisers of The Sipping Point claim that the main challenge is attracting more participants to the sessions (Interview, Glynn, 2018). The number of participants varies significantly by session, from just a few to more than 20. The organisers emphasise that they do not intend to have "mass numbers" of academics attending the sessions because this would reduce the sense of informality (Interview, Gormley, 2018). Nevertheless, they put in a lot of effort to ensure that each topic is relevant for at least a few of the academics at DCU. The main strategy for meeting this challenge is to ensure the demand-driven nature of the initiative.

The Sipping Point is an example of an entirely demand-driven initiative. First of all, the very idea of The Sipping Point was a reaction to the need for greater communication that had been expressed by DCU academics (Interview, Gormley, 2018). Moreover, topics for the sessions are suggested and chosen by the academics themselves. Finally, activities are constantly altered in reaction to feedback from participants. For example, during one of the feedback sessions the participants stated that it would be helpful if short abstracts of every presentation and more information about the context of the topic were uploaded on the online platform and emailed to potential attendees in advance. The organisers of the practices implemented these changes immediately.

The demand-driven nature of the learning is another reason for the success of The Sipping Point. It proves that academics can be encouraged to participate more actively in PD activities if practices reflect their needs.

PD experts claim that reacting to the different needs of academics is one of the most effective tools to increase academics' motivation to participate in PD (Postareff & Nevgi, 2015; Cordingley et al., 2015). In addition, based on the Tannenbaum et al. (1993) theory, training is effective only if participants fully understand why specific competences might be beneficial for them. Thus, the fact that the topics of The Sipping Point sessions are chosen by academics themselves increases the probability that at least some academics will find the topics relevant, attend the session, and will be motivated to apply new knowledge and ideas that were presented during The Sipping Point discussions. Another advantage of the demand-driven activities is that they can be (and usually are) more specific and programme-based compared to supply-driven practices (Interview, Glynn, 2018). Thus, they reflect the existing differences in teaching different disciplines. Recognition of the differences between individuals, their beliefs, starting points, and environment is crucial to bringing about an improved outcome (Cordingley et al., 2015). Because the topics of The Sipping Point sessions are announced in advance, academics can choose when to attend based on their personal experiences and needs. For instance, academics who are using the most modern digital technologies can choose to skip the session related to that subject. Moreover, groups of academics might have specific PD needs. For example, a small group of lecturers may be interested in a specific teaching method (e.g. the usage of online quizzes). So it might not be effective to organise an accredited formal course on this topic, but the TEU can assign one of The Sipping Point sessions to that particular topic, and interested academics can meet to discuss it. To sum up, the demand-driven nature of the learning is another reason for the success of The Sipping Point. It proves that academics can be encouraged to participate more actively in PD activities if practices reflect their needs.

The idea of The Sipping Point can be easily adapted to different contexts. The budget of The Sipping Point is especially small – less than EUR 800 per year. The practice takes advantage of the experience and expertise of different academics working at DCU,

meaning there is no need for external experts. No specific resources are needed, only a space where academics can meet and the initiative of staff members willing to organise the sessions. This shows that informal discussions similar to The Sipping Point can be easily implemented in other HEIs. So why not invite academics from different HEIs for a cup of tea and a discussion with their colleagues?

Conclusions

The Sipping Point organisers' innovative idea of creating conditions where academics can learn from their colleagues seems to be effective. Organisers and participants both claim that The Sipping Point has exceeded their expectations. It was designed as a one-hour session organised once per month during lunchtime. Therefore it is fully compatible with the busy schedules of academics and addresses the obstacle of the lack of time, which often becomes the main obstacle to academics' participation in PD activities. Furthermore, academics who confine themselves to their daily routines and disciplines often "do not know what they do not know", and that discourages their participation in PD practices. The Sipping Point aims to meet this challenge by making academics familiar with the existence of innovative teaching methods that are being effectively applied by their colleagues. The example of The Sipping Point also shows that academics can be encouraged to participate more actively in PD activities if practices reflect their needs – or in other words, if they are demand-driven. The Sipping Point ignites a spark among DCU academics, making them want to learn. It is therefore a good source for other HEIs wishing to encourage their academics to use innovative teaching practices.

Information summary: The Sipping Point

Table 2. The Sipping Point information summary

Background	
Short general description of the practice (What is it about?)	The Sipping Point was set up as a somewhat informal, campus-wide community to enable staff across all disciplines to learn from colleagues about aspects of their teaching practices. For one hour once a month, a group of like-minded practitioners meet up to discuss and share ideas around topical challenges in teaching, assessment, and student engagement. There is also a private online community for members to continue their conversations between sessions.
Context of the practice	The practice is organised by the Teaching Enhancement Unit at Dublin City University (DCU). PD practices organised at DCU: — Formal accredited courses — Workshops (both supply- and demand-driven) — The Sipping Point — Teaching and learning day
Why was this practice initiated?	— To "get academics talking about teaching" by creating favourable conditions for their communication.
What obstacles to academics' participation in professional development are addressed?	— The lack of intrinsic motivation (more particularly, lack of awareness of what might be interesting and relevant from other people's practice; fear of change/failure) — The lack of time
Main 'target' of the practice	Faculty development
Content area	Especially wide, with a focus on innovative pedagogies
Processes	

Type of practice	— Face-to-face informal discussions — Online platform (as additional practice)
Nature of PD	Semi-structured, informal
Delivery	— Mostly onsite (work-based) in HEI — Online platform only as 'supplementary resource'
Type of course material used	Different types of material are uploaded on the online forum after each session (summaries of presentations, links to the materials and research relevant to the topic, etc.)
Provider	Formal education institution
Funding	— Volume (in EUR) – EUR 757 for the whole academic year — Funding is provided by DCU to the TEU — Free courses (public costs), paid by the university — Period of funding – from April 2017, ongoing
Main challenges faced during implementation of the practice	Internal (staff related) – trying to increase the number of participants
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	DCU policies to encourage academics' PD and to use innovative teaching practices: — The President's Awards for Excellence in Teaching — Teaching and Learning Day annual showcase event — Academics can "get the time spent for the PD back" by asking for free days — Funds for the PD of academics — Help of TEU
How are the results and the impact of the practice measured?	— Focus-group discussion with participants in the practice that was organised after the first half-year of The Sipping Point — Formal, externally approved research that is being conducted by the initiator of The Sipping Point – Clare Gormley. The main method of data collection – survey of participants.
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	— Academics claim that they have significantly improved their competences and knowledge because of their participation in The Sipping Point sessions. As one survey respondent put it, "It is good to feel that I'm having the same challenges as other people and dealing with them in an effective way. It is good to feel that I can rate myself against other people's approaches … because that possibility isn't really readily available to me otherwise." — Participants identified that The Sipping Point increased their knowledge about tools available on Moodle, innovative assessment methods, audio feedback systems, innovative teaching methods, the enhancement of students' engagement, the effective organisation of group work, etc.
What is the impact of PD on academics' career paths?	— No direct evidence of impact of the practice on the career paths of academics was identified. — Indirect (expected) impact: — The experts of TEU become familiar with innovative teaching practices that are implemented by the academics of DCU. — Academics are encouraged to write the research or present their innovative teaching practices at conferences. — Conversation with other academics increases their confidence

	in professional success.
What is the impact of PD on the quality of teaching?	— It is too early to comment whether The Sipping Point has a real impact on teaching quality. — Some participants identified new teaching practices that they have decided to implement as a result of The Sipping Point sessions: — The Sipping Point increased their interest in using technology in teaching and assessment — Increased knowledge about the existence of different innovative teaching methods — Knowing more innovative teaching practices gives academics new ideas as to how to solve challenges on the spot and how to improvise.
What is the impact of PD on students' learning?	It has not yet been evaluated.

3.2 The University Pedagogical Support – UNIPS

The University of Turku (Lead) and seven other Finnish universities

Abstract: UNIPS is a digital solution for developing academics' pedagogical competences. It consists of small online modules that are adapted to the needs of academics and doctoral students. These kinds of modules had not previously been developed for the PD of academics in Finnish universities. UNIPS modules include online materials that are always available for academics' self-study. The modules can be converted into 1 ECTS courses through adding an online collaborative phase to the self-study. UNIPS is a flexible solution from the participants' perspective and it enables universities to provide pedagogical support to a large number of their staff and doctoral students. Eight Finnish universities are involved in designing and implementing the online modules. The UNIPS case aims to illustrate how academics' PD can be enhanced through an online solution that does not require, once developed, a huge investment of financial or staff resources.

Interviewees:

- Dr Mari Murtonen, Senior researcher, Project leader of UNIPS
- Ms Kalypso Filippou, Doctoral student, Participant in UNIPS modules

Introduction

University Pedagogical Support (UNIPS, unips.fi) is a digital solution for academics and doctoral students. The goal is to develop their pedagogical competences by offering flexible, open and research-based online pedagogical training. UNIPS is an open environment that is always available for academics.

The UNIPS contains small online modules that can be used to develop academics' pedagogical competences. It can be flexibly used for different formal or informal purposes. The modules can be used for three purposes:

1) Completion of a 1 ECTS course, which consists of two phases: the self-study phase of one module in the online learning environment, and a collaborative phase including online discussions and online collaborative document editing. This formal completion of a course is the primary purpose of UNIPS.
2) The materials of the modules can be used as part of other pedagogical courses or training. The materials include audio-visual materials, glossaries, quizzes and short videos.
3) These materials can be freely used for self-study (Interview, Murtonen, 2018).

Eight Finnish universities ([21]) are involved in planning and implementing UNIPS online modules. The University of Turku is leading the project. In the current phase, a selection of modules has been developed and offered as formal courses for the staff of the University of Turku. Other participating universities will begin offering the modules as formal courses, including the self-study phase and collaborative phase. The universities can freely decide which modules they want to offer as formal 1 ECTS courses.

The UNIPS case describes an online solution to support academics' PD when financial and staff resources are limited for providing face-to-face pedagogical development courses. First, the context for which UNIPS has been developed is described, followed by a description of the content and implementation of UNIPS. Next, the participants' experiences of studying in the UNIPS environment, as well as the research results of the effects of UNIPS on participants' conceptions of teaching, will be presented. Finally, an analysis of the innovativeness of UNIPS in addressing common obstacles to academics' PD, as well as challenges and the prospects of UNIPS, will be addressed.

([21]) University of Turku, Aalto University, Hanken School of Economics, University of Jyväskylä, University of Oulu, University of Eastern Finland, Lappeenranta University of Technology and Tampere University of Technology.

Context

The University of Turku offers pedagogical and other professional training courses for its staff members on a regular basis. The university has a Centre of University Pedagogy at the Faculty of Education, which organises pedagogical training courses that may comprise 1-60 ECTS. The University of Turku strategy encourages staff with teaching duties to participate in short (10 ECTS) pedagogical training, but participation is not compulsory (Interview, Murtonen, 2018).

There are no formal requirements in terms of pedagogical education for teaching and research staff in Finnish universities. However, all universities in Finland offer professional development options for their staff. For example, in a special issue of the Finnish Journal of University Pedagogy 1/2014 (Murtonen & Ponsiluoma, 2014), all Finnish universities report how they organise their pedagogical training for academics. Typically, these pedagogical courses started in the 1990s. In most universities pedagogical training is not compulsory, but staff with teaching duties are encouraged to participate in short (10 ECTS) pedagogical training.

The UNIPS is a digital solution for developing academics' pedagogical competence. It contains small modules that are used to develop academics' and doctoral students' teaching competences.

The UNIPS addresses several obstacles to academics' participation in professional development in the Finnish context. Firstly, especially in small and medium-sized universities in Finland, there has been a lack of financial and staff resources for organising pedagogical face-to-face development programmes. Secondly, academics at the beginning of their teaching career, as well as doctoral students, have had difficulties in entering face-to face pedagogical development programmes because of the limited intake of participants (typically 20-25 academics per year are admitted to the basic 10 ECTS pedagogy course in each university). Typically those who actively teach and already have several years of teaching experience are given priority to participate in face-to-face programmes (Interview, Murtonen, 2018). Thirdly, international English-speaking staff have not had the opportunity to take part in pedagogical training because the face-to-face training has been typically provided in Finnish. Fourthly, most universities offer intensive, 10 ECTS courses, which require a significant investment of time and effort from the participants (Interview, Murtonen, 2018; Interview, Filippou, 2018). **UNIPS responded to these challenges by offering short, easy-access online modules in English** that were developed in collaboration between eight above-identified universities. Once developed, the modules can be repeatedly used to reach a large number of academics (Interview, Murtonen, 2018). The modules can be freely used for self-study of all academics in all universities without the need for any licence. The eight universities also offer the modules as 1 ECTS courses, which include a collaborative phase in addition to the self-study, and this is something that is provided only by the eight universities involved in UNIPS. However, if some other university wants to add collaborative elements to the modules, they can design them, but UNIPS does not provide support for this.

Implementation

The UNIPS is a **digital solution (unips.fi) for developing academics' pedagogical competence**. It contains small modules that are used to develop academics' and doctoral students' teaching competences. UNIPS modules include self-study materials (e.g. audio-visual materials, short videos, journal articles, glossaries, quizzes). Each UNIPS module also suggests that the participants should do further reading (mainly scientific articles or books) that they can use to deepen their knowledge of a particular topic. If a collaborative phase is included in the self-study, the modules form a 1 ECTS course. During the self-study phase, participants work with the self-study materials (e.g. videos, journal articles, glossaries, quizzes) and write an essay reflecting their own thoughts about the studied themes. In the small group phase, participants are divided

into small groups (typically four to six participants). In these groups, participants share and comment on each other's essays online, using Google Docs™. The essays can also be collaboratively edited (Interview, Murtonen). This collaborative phase has received positive feedback from the participants as it increases interaction between the participants from different disciplines (Interview, Murtonen; Interview, Filippou).

The main aim of the practice is pedagogical development for individual academics. However, UNIPS can also serve organisational development through educating a large number of academics, thus enhancing the quality of teaching and learning at an organisational level (Interview, Murtonen, 2018).

Various kinds of digital materials are provided in UNIPS modules: audio-visual materials, glossaries, quizzes and short videos.

The eight universities will provide UNIPS modules for their own staff members. Each university can decide how they utilise the modules: 1) For the formal completion of a 1 ECTS course including the self-study phase and collaborative phase, 2) as part of other pedagogical courses or training, or 3) as self-study materials for academic staff. Completion of a 1 ECTS course requires approximately 27 hours of work. Academics can flexibly choose when and how many modules they complete (Interview, Murtonen, 2018).

When formally completing a 1 ECTS course, the participants can do the self-study phase and the collaborative phase within a given timeframe (typically 1.5 months). In the self-study phase the participants familiarise themselves with the online materials and complete a given individual task. In the collaborative phase they participate in online discussions with the other participants and online collaborative document editing. The collaborative phase needs to be organised by the organising institution and therefore participants must register for UNIPS modules.

The UNIPS budget for 2017-2019 is approximately EUR 1,800,000. The Finnish Ministry of Culture and Education provided EUR 1,350,000 for the project and the universities co-fund the remaining 25% of the budget. Around half of this budget is allocated to the University of Turku as the coordinator of the project and the other seven participating HEIs share the other half of the budget. All universities use the funding for creating UNIPS modules. Additionally, the University of Turku conducts research into the project. UNIPS modules are free of charge for the participants (Interview, Murtonen, 2018).

UNIPS is one of the three divisions within the larger thematic project of the Finnish Ministry of Culture and Education, "Enhancing pedagogical and digital teaching and supervision skills in higher education".([22]) The funds allocated by the ministry come from the Government Key Project funding system (Interview, Murtonen, 2018). The Finnish government aims to reform society and to reinforce economic growth through projects in five strategic priority areas, one of which is the development of tertiary education. ([23]) UNIPS belongs to this priority area.

The challenges faced during implementation mainly concern the technical solutions. Firstly, the universities discussed how to register students in each university to UNIPS modules. The solution was to use the universities' own platforms for their own students, while UNIPS has its main platform for offering the course materials. Another challenge is to keep the costs low after the funding for the project ends. Each university will be in charge of updating the content of the modules they are responsible for, which requires an investment of working time and skilled staff who are able to update the content and the digital solutions. The amount of time depends on how big the changes are that the universities want to make in the modules. The current technical implementation of the UNIPS webpage (unips.fi) is created based on the open source Content Management

([22]) Webpage of UNIPS (2018). Available at: unips.fi [accessed on 25 August 2018].
([23]) Ministry of Culture and Education, Finland (2016). Key Projects Reform Finnish education. Available at: https://minedu.fi/documents/1410845/4150027/Key+projects+reform+Finnish+education/ecf0ed3d-7249-4b31-abaf-189af35e197a/Key+projects+reform+Finnish+education.pdf [accessed on 1 September 2018].

System (CMS) WordPress™, which is considered a cheap solution (approximately EUR 200 per year). The aim is that UNIPS modules become a part of the participating universities' academic development in a sustainable manner so that the funding allocated to academic development would cover the costs of UNIPS.

Results

UNIPS has been praised for the ease of use of the online learning environment, highly motivating content and digital solutions (e.g. videos, quizzes, glossaries), and the online participants' discussions and collaborative document editing. In addition, the possibility of completing courses at the very beginning of a teaching career in English is a strength of UNIPS (Interview, Filippou; Interview, Murtonen).

Scientific research has been conducted on the effects of UNIPS courses on participants' conceptions of teaching (Vilppu, Murtonen & Postareff, 2018). The participants were asked to interpret short video clips of teaching situations before and after participating in 1-3 UNIPS modules. These interpretations reflected the participants' conception of teaching. Furthermore, quantitative data are collected from the participants before and after completing the modules through a survey measuring participants' approaches to teaching and self-efficacy (Vilppu, Murtonen & Postareff, 2018).

Recent research (Vilppu, Murtonen & Postareff, 2018) shows that the concepts of teaching of academic staff and doctoral students changed from a teacher-focused to a learning-focused direction after they completed three 1-credit UNIPS modules during a short five-week period among relatively novice academics (i.e. those with fewer than two years of teaching experience and doctoral students). Academics with teacher-focused conceptions understand teaching as imparting information from the teacher to the students, while academics with learning-focused conceptions view teaching as constructing knowledge with the students through interaction (e.g. Kember & Kwan 2000; Prosser, Trigwell, & Taylor 1994). The results suggest that even a short pedagogical training has the potential to affect participants' conceptions of teaching, especially when the participants are not very experienced in teaching. Thus, based on these results, it could be suggested that pedagogical training should be offered before the academic staff begin teaching tasks at the university. Offering pedagogical training to new or future staff through UNIPS-type solutions could change the traditional practice of novice teachers performing their first teaching tasks without any pedagogical support (Vilppu, Murtonen & Postareff, 2018; Interview, Murtonen, 2018).

The experiences have been encouraging, with both the quality and quantity of pedagogical training having increased due to UNIPS modules. On the basis of research, the UNIPS solution is **effective in changing conceptions of teaching among novice staff**. The results showed that participants' interpretations of the teaching situations moved in a more student-centred direction after completing a UNIPS module, specifically among academics with little teaching experience (Vilppu. Murtonen & Postareff, 2018). It is expected that academics' knowledge of teaching and learning, as well as their teaching and assessment skills, can be improved through UNIPS modules (Interview, Murtonen), but so far evidence of this does not exist. However, feedback on the modules has been positive and academics report that they have gained new ideas for their teaching and have found the content highly motivating (Interview, Filippou, 2018; Interview, Murtonen, 2018).

The impact of UNIPS on the quality of teaching will be a theme for further research. The quality of teaching in the units that organise pedagogical training has improved due to UNIPS modules because they are designed by a large group of experts in pedagogy. It is very likely that UNIPS improves the quality of teaching of the participating academics but currently there is no available research on this. The knowledge and competences of the participants have developed because staff members and doctoral students can now be provided with basic pedagogical courses at the time that they need them (Interview, Murtonen, 2018; Vilppu, Murtonen & Postareff, 2018).

It is likely that UNIPS has effects on students' learning because the improved teaching skills of the participants are likely to support an improved learning experience for students. However, scientific research needs to be conducted in order to prove this (Interview, Murtonen, 2018).

Analysis of the practice

Innovation in this PD practice

The UNIPS provides a new kind of solution to enhance the PD of academics by offering accessible and timely pedagogical support for academics and doctoral students via short online modules. This enables universities to engage a large number of academics in different career stages in pedagogical development. Moreover, eight Finnish universities collaborate in designing UNIPS modules, bringing together a large group of experts in university teaching and learning. The eight universities can flexibly use the modules according to their needs: as materials for academics' self-study; as parts of other pedagogical courses; or as formal 1 ECTS courses including a collaborative phase where participants can interact with other academics from various disciplines. UNIPS is also flexible from the participants' perspective, as they can use the self-study materials whenever and wherever is most convenient for them. UNIPS is particularly beneficial for universities that have limited financial and staff resources for offering face-to-face development courses for their staff, which is the case in many Finnish small and medium-sized universities. These kinds of online modules were not previously available to academics and doctoral students at Finnish universities, which have typically offered lengthy face-to-face pedagogical development courses for a limited number of academics.

The eight universities can flexibly use UNIPS modules according to their needs: as materials for academics' self-study; as parts of other pedagogical courses; or as formal 1 ECTS courses

Strategy for addressing obstacles to PD

UNIPS provides solutions for common obstacles to promoting academics' PD concerning the quantity and quality of PD activities.

Increased quantity and better quality. UNIPS has succeeded in increasing the amount of pedagogical courses offered to academic staff at the University of Turku (other universities are also now beginning to offer UNIPS modules). Before UNIPS, only about 25 academics per year participated in a basic pedagogy course for teaching at higher education level (10 ECTS). Nowadays approximately 250 academics per year study UNIPS modules (at least 1 ECTS) at the University of Turku, including international staff.

Before UNIPS, only about 25 academics per year participated in a basic pedagogy course for teaching at higher education level (10 ECTS). Nowadays approximately 250 academics per year study UNIPS modules (at least 1 ECTS) at the University of Turku.

When UNIPS is fully implemented in the other participating universities during autumn 2018-spring 2019, the volume of academics studying is likely to increase considerably. UNIPS encourages pedagogical experts in different universities to collaborate in designing UNIPS modules. Typically 2-3 universities are involved in designing one UNIPS module. These universities have specific expertise in the content area of the module. This ensures the high quality of UNIPS modules (Interview, Murtonen, 2018).

The UNIPS modules are developed in collaboration between the eight above-identified Finnish universities. This makes it possible to design high-quality modules by bringing pedagogical experts from different institutions to design the modules together (Interview, Murtonen, 2018). The contents deal with basic elements in university pedagogy and are based on

pedagogical research. Participants also learn digital competences through studying in the online environment. At the moment, UNIPS modules focus on ([24]): 1) becoming a university teacher, 2) developing lecturing and supporting students' expertise, 3) planning of teaching, 4) course design skills, 5) competence-based teaching and curriculum, 6) standards, guidelines, and quality assurance in teaching and learning, 7) group processes in learning, 8) utilising the ideas of flipped learning, 9) pedagogics in digital learning, 10) designing small private online courses (SPOCs) and massive open online courses (MOOCs), 11) creating and utilising working life contacts in learning and teaching, and 12) entrepreneurial teaching and learning (Interview, Murtonen, 2018). These research-based UNIPS modules help academics to gain an in-depth understanding of the processes of learning and teaching. In addition to enabling participants to learn core content related to teaching and learning in HE, they also learn digital competences through studying in the online environment because UNIPS itself uses digital methods and materials (such as videos, online discussions, online glossaries, online document editing). This helps the participants to implement similar elements in their own teaching (Interview, Murtonen, 2018; Interview, Filippou, 2018).

These research-based UNIPS modules help academics to gain an in-depth understanding of the processes of learning and teaching.

Easily available and accessible. Many universities offer pedagogical training for their staff, but in most cases participation is voluntary. Academics with a heavy workload often find it difficult to take part in intensive face-to-face pedagogical development programmes. Thus, the challenge has been that the pedagogy courses have been available only to those staff members who can participate in relatively lengthy courses including several face-to-face seminars (Vilppu, Murtonen & Postareff, 2018). Offering easily accessible modules that are available for all staff members, as well as timely pedagogical support to staff before their first teaching tasks, promotes the development of teaching competences. In addition, the quite common feeling of not being offered help when starting as a university teacher (Murtonen & Vilppu, 2018) could be reduced, because UNIPS provides pedagogical support for academics who are taking their first steps as teachers (Murtonen, Interview, 2018; Vilppu, Murtonen & Postareff, 2018).

The UNIPS modules are available for all academics in different stages of their career. Also, early-career academics and doctoral students can complete UNIPS modules.

The UNIPS modules are **available for all academics at different stages of their career**. Also, early-career academics and doctoral students can complete UNIPS modules. This has previously been a challenge in Finnish universities, as the courses have mainly been provided for more experienced academics. Doctoral students can now include the credit points of UNIPS towards their doctoral degree. Thus, UNIPS encourages doctoral students to develop their teaching skills (Interview, Murtonen, 2018; Vilppu, Murtonen & Postareff, 2018).

Challenges and prospects

The challenge concerning technical solutions (described earlier in the descriptive part) ensure that all participating universities can maintain UNIPS modules in the future. In addition, any other universities can use the self-study materials through the UNIPS webpage (unips.fi). CMS WordPress™ has proved to be easy to use and maintain. It is publicly available and thus can be adopted by any institution (Interview, Murtonen, 2018). In the future, the participating universities will need to invest time and staff resources for updating the content and the digital elements of the modules, if there is a need to revise them. The amount of time depends on how significant the changes that universities want to make in the modules are.

([24]) Webpage of UNIPS (2018). Available at: unips.fi [accessed on 25 August 2018].

The challenge concerning the maintenance of UNIPS after the project funding ends is addressed through giving responsibility for updating the UNIPS module to the university that has been designing the module. If new modules are to be designed, universities need to fund them or find new financial resources. The aim is that UNIPS modules become part of the universities' academic development in a sustainable manner so that the funding allocated to academic development in universities would cover the costs of UNIPS (Interview, Murtonen, 2018). For example, at the University of Turku, the Centre for University Pedagogy will use its staff resources to develop new modules in the future because the modules will be integrated as parts of the 60-credit studies in university pedagogy that give the academics a formal teaching qualification.

The aim is that UNIPS modules become part of the universities' academic development in a sustainable manner.

The UNIPS modules are available on the UNIPS webpage (unips.fi) and can be freely used by HEIs and individual academics. The content of UNIPS modules is based on contemporary international research on teaching and learning in HE and is therefore suitable for academics in different cultural contexts. New modules could be created to better meet the demands of academics and HEIs in different contexts (Interview, Murtonen, 2018).

UNIPS could be expanded to a European level to further enable development of UNIPS both in Finland and more widely in Europe (Interview, Murtonen, 2018). A funding application for a larger project (UNIPS for Europe) has been submitted to the Erasmus+ programme.

Conclusions

The UNIPS provides solutions for common challenges in promoting academics' continuous professional development. UNIPS can reach a large number of academics in different career phases and thus it offers possibilities for higher education institutions for improving the quality of teaching and eventually the quality of student learning. UNIPS provides the possibility to develop pedagogical competences in a flexible, collaborative online environment that is easily accessible for all academics, regardless of their nationality or career phase. Offering pedagogical training through UNIPS modules for novice staff helps them to adopt teaching methodologies that enhance students' active knowledge construction instead of performing their first teaching tasks without any pedagogical support. Academics' digital competences can also be improved by offering them the opportunity to study in an online digital learning environment and through offering modules which specifically aim to enhance their digital competences. UNIPS has the potential to be used at a European level to advance the professional development of academics and to increase collaboration between academics from different countries. Also, the content of UNIPS modules could be further developed in collaboration with pedagogical experts from different European countries.

Information summary: UNIPS

Table 3. UNIPS information summary

Background	
Short general description of the practice ()	The University Pedagogical Support, UNIPS (unips.fi), is a digital solution for university staff and doctoral students, aimed at developing their pedagogical skills. The UNIPS for Europe contains small modules (mainly 1 ECTS) that can be used to develop academics' teaching competences.
Context of the practice	The University of Turku offers pedagogical and other professional training courses for its staff members on a regular basis The Centre of University Pedagogy at the Faculty of Education

	organises 1-60 ECTS pedagogical training
Why was this practice initiated?	The UNIPS was developed based on the needs of small and medium-sized universities in Finland that had little financial and staff resources for offering PD to their staff. The online modules reach a large number of academics, including international staff.
What obstacles to academics' participation in professional development are addressed?	— Lack of intrinsic motivation (completion of 1 credit modules might increase academics' intrinsic motivation for teaching) — Lack of time — Resistance to change (easy access and short 1 credit modules that are easy to complete) — Poor financial and staff resources — Language obstacles (PD opportunities available in English for international staff)
Main target of PD	— Faculty development — Instructional development — Organisational development
Content area	— Digital competences — Innovative pedagogies B asics of university teaching and learning
Processes	
Type of practice	— Online courses — Individual and collaborative tasks
Nature of PD	— Formal (e.g. leads to a qualification, described in National Qualification Framework) — Informal (can be used in both formal and informal ways)
Delivery	— Digital only — Blended
Type of course material used	— Didactic materials (audio-visual materials, flip charts, drawings, demonstrative objects, etc.) — Digital
Provider	Formal education institution
Funding	Volume (in EUR): 1,300,000 EUR for years 2017-2019. Type of funding: — Free courses (public costs), paid by: — The funder is the Finnish Ministry of Education and Culture. Universities do participate in costs, with around a 25% share. Period of funding (Until when is funding available?): 2017-2019
Main challenges faced during implementation of the practice	— Mainly technical issues such as how to register students to UNIPS modules in each participating HEI. — Another key challenge is that of keeping down the costs of the UNIPS platform.
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	The University of Turku offers pedagogical and other professional training courses for its staff members on a regular basis. The university's Centre of University Pedagogy at the Faculty of Education organises 1-60 ECTS pedagogical training for all those willing to participate. University of Turku strategy is that all staff is encouraged to participate in short (10 ECTS) pedagogical

	training but participation is not compulsory.
How are the results and impact of the practice measured?	— Feedback is collected in all courses — Scientific research has been conducted
What is the impact of PD on the learning of academics? Have participants significantly improved their knowledge and competences?	Knowledge and competences have developed. All staff members and doctoral students can now be provided with basic pedagogical courses at the time they need them. This is a clear advance for professional development options in Finnish universities. Based on research, UNIPS is very effective in changing the conceptions of teaching of beginning staff. The quantitative measures from each university will eventually describe how many more students this solution can educate.
What is the impact of PD on academics' career paths?	When filling academic posts, academics are evaluated on the basis of their scientific competence and teaching competence. UNIPS supports the development of teaching competence and thus can have an impact on career paths.
What is the impact of PD on the quality of teaching?	The Research results (Vilppu. Murtonen & Postareff, 2018) showed that participants' interpretations of teaching situations moved in a more student-centred direction after completing a UNIPS module, specifically among academics with little teaching experience, indicating a change in teaching conceptions.
What is the impact of PD on students' learning?	It is likely that academics' improved teaching skills have positive effects on their students' learning processes and outcomes.

3.3 A pool of resources: The International U4 Network

Ghent (BE), Groningen (NL), Göttingen (DE), and Uppsala (SE) universities

Abstract: The U4 network emerged as the culmination of a history of cooperation between Ghent, Groningen, Göttingen, and Uppsala universities. The network differs from large university associations as a small and operational network, covering all HEI members – students, academics and management. The network works as a pool of resources – it uses partners' complementary strengths in order to increase the scale of innovative and specialised mobility, research, professional development and other activities. Finally, the bottom-up approach to project creation allows the network to adapt to participants' time constraints and needs.

Interviewees:

- Oskar Pettersson, Vice-Chancellor's Office, Planning Division, Uppsala University, one of the key contacts at the U4 Network
- Geir Gunnlaugsson, Division for Quality Enhancement, Academic Teaching and Learning, Uppsala University, Coordinator of IPT&L project

Introduction

The U4 is a network of four comprehensive European research universities, namely Ghent, Groningen, Göttingen and Uppsala. All these universities share a history of cooperation that has culminated in the establishment of the U4 Network, which has turned into one of the universities' most important strategic partnerships (EAIE, 2015). The network stands out from large university associations as a small and operational network for all: the students, academics and management staff of the participating universities. It uses partners' complementary strengths and pools various types of resources in order to increase the scale of innovative and specialised mobility, research, professional development and other activities (Webpage of the U4, About, 2018). It offers a variety of projects addressing cross-curricular skills, teaching in multilingual and multicultural settings, dealing with the diversity of learners of ESL (English as a Second Language), work-based learning, and innovative pedagogies among others. Furthermore, its bottom-up approach ensures the offer of a wide variety of subjects and a constant adaptation to the needs of its participants.

The main aim of this case study is to analyse the network and the mechanisms helping it to overcome known obstacles to academics' participation in PD, its strengths and weaknesses, and the potential for it to be adapted in different contexts. The background to the network will be described, then one of its ongoing projects – International Perspectives on Teaching & Learning (IPT&L) – will be presented in more detail. The analysis will investigate the strategies of the network and their strengths and weaknesses, as well as the challenges the network faces and its future prospects.

Context

All of the participating universities have been paying considerable attention to the PD of their staff, ensuring thorough support from the institutions for academics to innovate in their curriculum and methods.

Ghent, Groningen, Göttingen, and Uppsala universities were already involved in some form of collaboration for a significant period of time prior to the establishment of the U4 network (Interview, Pettersson, 2018). This is partly due to their similarities – they all are comprehensive, research-dominated universities with similar rankings, established traditions, and situated in very strong university cities (Interview, Pettersson, 2018). All

of the participating universities have been paying considerable attention to the PD of their staff, ensuring thorough support from the institutions for academics to innovate in their curriculum and methods.

For instance, **Uppsala University's (Sweden)** initiatives include mandatory courses for newly appointed academics and PhDs, advanced courses (e.g. on thesis supervision), prizes for teaching expertise, funds related to educational development, and a mentor system (Interview, Pettersson, 2018). **Groningen university (The Netherlands)** offers training programmes, courses on leadership, and careers orientation. It also organises group-specific activities, such as mentoring for female academics. Women are still underrepresented at the more senior levels of academia and in some disciplines (frequently in fields related to science, technology, mathematics and medicine), so mentoring is expected to ensure a smoother career path for women (Meschitti, Lawton Smith, 2017). Finally, teaching academics have to prove their excellence through the national University Teaching Qualification (UTQ) scheme ([25]). **The University of Göttingen (Germany)** provides a qualification programme for teaching and administrative staff. Additionally, the 'Train the Trainer!' programme offers academics support in the form of events and materials on a wide variety of teaching techniques (e.g. visualisation, vocal) ([26]). Finally, **Ghent University (Belgium)** pays particular attention to professorial career paths and offers a career screen in its digital human resources application Apollo™. Academics can also receive consultations with regard to their career development and the list of available courses ([27]). This shows that while the participating universities put emphasis on different aspects of the professional development of their academics (general and specific competences training, national and organisational-level qualifications, awards for innovative practices, continuous informal support (mentoring)), they all have a support system for academics wishing to enhance their teaching skills and/or careers.

In light of this, the directors of the aforementioned universities have realised the opportunity stemming from the combination of commonalities and history of collaboration. It became obvious that by pooling the resources of the four universities there is the potential for benefitting all participating HEIs (Interview, Pettersson, 2018). Therefore, the U4 did not aim to address a specific issue but was attempting to grasp the existing opportunity by establishing **a supportive platform for joint collaboration initiatives in education, research, and institutional management** ([28]). Therefore, the initiative was initiated at the top management levels of the universities and based on the already existing analysis and joint programmes (Interview, Pettersson, 2018).

The U4-cooperation was organised around four academic clusters, each hosted by one partner university: Humanities (Ghent University), Social Sciences, Economics and Law (Göttingen University), Medicine and Pharmacy (Groningen University), and Science and Technology (Uppsala University). Additionally, the cluster of Institutional Management covers all institutional-level activities and is managed by all participating universities collaboratively.

The main idea of the initiative was that it should be a comprehensive an all-encompassing network, **involving administrative, research, and educational staff** (Interview, Pettersson, 2018). Therefore, the **U4-cooperation was organised around four academic clusters, each hosted by one partner university:** Humanities (Ghent University), Social Sciences, Economics and Law (Göttingen University), Medicine and Pharmacy (Groningen University), and Science and Technology (Uppsala University). Additionally, the **cluster of Institutional**

([25]) See: https://www.rug.nl/about-us/work-with-us/that-is-why/professionalisation/?lang=en [accessed on 25 August 2018].
([26]) See: https://www.uni-goettingen.de/en/train+the+trainer%21/556110.html [accessed on 25 August 2018].
([27]) See: https://www.ugent.be/en/work/career-aspects/careerprofessorialstaff.htm [accessed on 25 August 2018].
([28]) See: http://www.u4network.eu/index.php/network/about-u4 [accessed on 25 August 2018].

Management covers all institutional-level activities and is managed by all participating universities collaboratively. The network is project-based and multidimensional. It runs projects of all scientific disciplines, for all levels of education and all fields of university staff (selected projects are described in Table 5). The projects are usually established in a bottom-up manner – participating universities' employees are invited to submit their ideas for projects (Interview, Pettersson, 2018). This results in an open space for trying out new or traditional methods of practice.

The most common areas addressed by the projects involving teaching academics are **cross-curricular skills** (e.g. project Lectures), **teaching in multilingual and multicultural settings** (e.g. projects Academic Leadership Programme, DAAD Programme 'Strategic Partnerships', the IPT&L, Manual for joint programmes), **dealing with the diversity of ESL learners** (e.g. projects Academic Leadership Programme, DAAD Programme 'Strategic Partnerships', the IPT&L, Manual for joint programmes), **work-based learning** (e.g. projects, lectures, peer-review), and **innovative pedagogies** (e.g. projects DAAD Programme 'Strategic Partnerships', Peer-review, Lectures, the IPT&L). It has been noted that the content areas are not fixed – there is constant revision, and therefore successful fields are continued while the less successful are cancelled (Interview, Pettersson, 2018). This strategy ensures that the network remains up to date with the needs of academics.

Implementation

The same logic is applied to the types of practices. The most common practices identified are **observation visits to other educational institutions** (most of the projects hold their events in different institutions each time), **peer observation** (e.g. project Peer-review), **education conferences, seminars** (e.g. project lectures, research networks), **individual or collaborative research** (e.g. research networks such as Cultural Transfer Research, Digital Humanities, Ethics of Family, Legal Research Network, Medical Law etc), **workshops** (held by most of the projects). It has been recognised that the U4 network has held the most conferences (17), summer schools (12), and workshops (123) out of all the strategic partnerships recognised by the German Academic Exchange Service (DAAD) ([29]).

Similarly, there is no single method of delivery (blended and onsite (work-based) are most frequently used) or style of PD (the degree of formality depends on the project). However, there are two constants in the organisation of the projects: **a provision by one of the participating universities**, and the activities' funding method. **The 'sending' university funds the travel and accommodation of their own outgoing staff, while the 'host university' covers any organisational costs related to the activity** ([30]). Thus, the U4 has chosen not to restrict the content or delivery methods of its projects in order to encourage comprehensiveness. Nevertheless, organisational matters such as provider and financing follow the same logic throughout, which ensures the clear process of organisation.

The ongoing U4 project: – International Perspectives on Teaching & Learning (IPT&L)

One of the projects of special relevance to this study is the IPT&L. It was established in light of the internationalisation universities were facing. HEIs saw **internationalisation becoming an issue in their classrooms, requiring shifts in language and behaviour to accommodate students with multiple cultural backgrounds**, which, in turn, prompted changes in curricula. There were numerous different approaches and ideas on how to approach such changes among the partners. Therefore, the project organisers saw the U4 as an opportunity to establish activities for academics to meet

([29]) See: http://www.u4network.eu/index.php/news/2665-the-u4-network-is-an-outstanding-international-network [accessed on 25 August 2018].
([30]) See: http://www.u4network.eu/index.php/network/funding [accessed on 25 August 2018].

each other, ask questions, analyse cases, and seek successful solutions (Interview, Gunnlaugsson, 2018).

The IPT&L focuses on organising an international degree programme. Specifically, **it aims to encourage discussions that would lead to initiatives including English-taught degree programmes, diversity as a resource, adjustment of policies to realise the vision of internationalisation, implementation of fit-for-purpose support for students and staff** ([31]). It covers topics including interaction, expectations, assessment and group work, with a focus on the ways these are influenced by culture in intercultural teams ([32]). Therefore, the programme develops pedagogical skills like designing, executing and assessing lessons, and is of a faculty type.

The project is delivered at conferences lasting two or three days. These events are rather exclusive: only five highly recommended people from each university participate (Interview, Gunnlaugsson, 2018). The conferences are **organised in a highly structured manner**; participants must prepare by reading certain books and papers on specific topics, and present cases from their home university (Interview, Gunnlaugsson, 2018). The programme is led by highly experienced leaders and facilitators ([33]).

IPT&L is an example of the open U4 atmosphere for sharing ideas, experiences and good practices.[34] While it involves a small number of representatives from each university, it provides the opportunity to raise important matters for participating HEIs and thus works as a collaboration platform. Additionally, it is one of the formal initiatives set up by the Network. All participants receive a **formal certificate at the end of the practice**. This has a particular impact on Uppsala's academics' career paths as the employment statutes in Sweden require at least 10 weeks of formal pedagogical training if one wishes to apply for any formal academic position (Interview, Gunnlaugsson, 2018).

One interviewee noted that **organisers struggle to maintain the momentum**. After returning to their home duties, academics often struggle to remain active members of the IPT&L alumni network (Interview, Gunnlaugsson, 2018). This illustrates how deeply embedded certain obstacles to academics' participation in PD are, even with the help of successful initiatives.

Results

While the network has not yet identified a way to appropriately measure its impact on teaching quality or students' experience, some indicators of the **U4's success can be seen in the numbers of collaborations encouraged or established by the network**. Oskar Pettersson, the person responsible for U4 person at Uppsala University, emphasised the importance of the amount of EU funds attracted to projects with some or all of the U4 partners involved (Interview, Pettersson, 2018). There are currently 11 ongoing EU projects run by the network. Additionally, in 2017 the U4 organised 391 short-term visits, over 50 joint U4 activities, 12 U4 summer schools, and many other activities ([35]).

Analysis of the practice

Innovation in this PD practice

([31]) See: http://www.u4network.eu/index.php/network/projects/165-international-perspectives-in-teaching-and-learning [accessed on 25 August 2018].
([32]) See: http://www.u4network.eu/index.php/network/projects/165-international-perspectives-in-teaching-and-learning [accessed on 25 August 2018].
([33]) See: http://www.u4network.eu/index.php/network/projects/165-international-perspectives-in-teaching-and-learning [accessed on 25 August 2018].
([34]) See: http://www.u4network.eu/index.php/network/projects/165-international-perspectives-in-teaching-and-learning [accessed on 25 August 2018].
([35]) See: http://www.u4network.eu/index.php/network/about-u4 [accessed on 25 August 2018].

The U4 network is a novel approach to university partnerships and an innovative way of addressing the known obstacles preventing academics from participating in PD. Firstly, it is a small network with a history of cooperation among its members. These characteristics aid close connections at all levels and foster efficient and non-bureaucratic communication, which facilitates a smooth development of activities (EAIE, 2015). Secondly, pooling resources allows using partners' complementary strengths to offer a wide variety of high-level activities and constantly adapt to the needs of participants ([36]). This flexible yet emphasised approach to PD helps the network to address the known obstacles to academics' participation in PD activities. **Pooling of resources and a bottom-up approach ultimately leads to the network's comprehensiveness.**

Strategy for addressing obstacles to PD

Pooling resources

A lack of human, financial and other types of resources for PD is an important issue for any university. **HEIs often lack the skills (e.g. pedagogical expertise) and capacity (e.g. technology) necessary to implement effective PD programmes**, while external expertise is often regarded as expensive and thus unjustified (Dysart & Weckerle, 2015). Additionally, a visible outcome of academics' PD programmes on enhancing teaching and student learning is still a largely under-researched topic (Chalmers and Gardiner, 2015). This means there is insufficient knowledge of which practices work and insufficient know-how for the implementation of successful PD programmes.

One of the main aims of the U4 Network is to work as a platform for pooling resources and sharing the best of each institution. **This encompasses funds, facilities, expertise and responsibilities.** The method of funding used for the network's projects' activities ensures that none of the participating universities has a greater financial burden than the others do. Furthermore, events are hosted in different institutions on a rolling basis, allowing participants not only to share the costs of the events but also to take advantage of differences in each other's facilities, such as libraries, learning and teaching centres.

Accordingly, activities are facilitated by experts from participating universities, providing an opportunity to share their expertise in their respective fields. Interviewees noted that the universities, while similar in many aspects, are different in their experience and approach to certain issues, e.g. it was mentioned that the University of Groningen is more advanced with regard to internationalisation (Interview, Gunnlaugsson, 2018). Finally, it was also noted that it is important to pool managerial resources to keep the network running smoothly. Splitting up responsibilities into academic clusters ensures that the network remains manageable and does not lose its focus, as each university has control over the activities of only one of the clusters.

Splitting up responsibilities into academic clusters ensures that the network remains manageable and does not lose its focus, as each university has control over the activities of only one of the clusters.

There are various benefits for academics from this strategy. However, two of them, namely **top-level expertise and mobility, are highly important factors in overcoming academics' resistance to participation in PD**. Firstly, exploiting participating universities' competence areas ensures that academics receive only top-level expertise and teaching in projects. Secondly, pooling facilities ensures that every project involves the mobility of academics ([37]). The mobility adds another dimension to the experience of the participants, as the academics gain not only theoretical and practical knowledge but also personal experiences, contacts, and broaden their horizons.

([36]) See: http://www.u4network.eu/index.php/network/about-u4 [accessed on 25 August 2018].
([37]) See: http://www.u4network.eu/index.php/network/about-u4 [accessed on 25 August 2018].

This can significantly increase their intrinsic motivation to participate in PD and seek an aspiration to change (Kneale et al., 2016).

The IPT&L is an example of the strategy of pooling funds, expertise and facilities working in practice. Firstly, as part of an administrative unit of the network, it is collaboratively run by all participating universities rather than being the responsibility of a particular institution (Interview, Gunnlaugsson, 2018). This allows for the pooling of the expertise of the PD organisation from the very first steps of the project. Furthermore, events run at different institutions every time, meaning that the facilitation and facilities are shared by all. Finally, the very nature of the practice and its delivery forces participants to pool their experiences and expertise. As mentioned above, the practice consists of both pre-workshop readings and preparation and a discussion of selected cases of internationalisation during the workshop. Therefore, each participating institution must share its positive or negative experiences and present solutions to their own and other cases. Thus, overall, one of the main characteristics of the U4 is precisely that it is a platform for pooling various types of resources that so far seems to be functioning successfully and allowing institutions to provide their academics with the highest-level facilities, expertise, and practices.

Bottom-up approach

The lack of knowledge and/or capacities for a successful and efficient PD provision at the bottom may lead HEIs to opt for a top-down approach, where the anticipated PD needs are delegated down from the higher officials to the general staff and academics. However, the U4 Network has taken a different route – a bottom-up approach. **Participating universities encourage their staff to suggest project activities that they feel would be useful for them** (Interview, Pettersson, 2018). This, over time, has created an extensive list of activities, which in turn provides a wide variety of choice in terms of the content, amount of time required, types of delivery, and so on. This tackles several obstacles to academics' participation in PD, such as lack of time and lack of motivation.

A lack of time is one of the most frequently mentioned issues that academics face, even when they are willing to take part in PD. Academics often struggle to balance their workload and often simply lack time for PD (UCU, 2016). Most academics have more than one job: they are lecturers, supervisors, researchers, etc. They therefore often find themselves in a situation where they need to choose how to spend their time: on their core activities for which they are rewarded (research), or on 'extracurricular activities' such as teaching-related PD (Jacob, Xiong & Ye, 2015).

However, **the flexibility of the U4 addresses this matter by offering a variety of options, projects of different lengths, and various types of events**. For instance, the network hosts short-term but intensive programmes such as the Academic Leadership Programme, the DAAD Programme 'Strategic Partnerships', and the IPT&L. Another time-saving option is research networks (e.g. Digital Humanities, Ethics of Family, Legal Research Network, etc.) that are based on mutual agreements on meetings/workshops and independent work that allows for adapting the participation rate to academics' timetables ([38]).

There are several potential reasons for the lack of motivation among academics to participate in PD activities. Resistance could be the result of strong cultural forces prevalent in closed academic communities (research discipline, faculty, etc.) that put tradition before innovation (Haywood et al., 2015). As a result, the perceived risk associated with innovation is high (Bovill et al., 2016). Additionally, changing teaching behaviour requires academics to go from being an expert in their field to being a novice in another area (pedagogy), which is often an uncomfortable transition (Postareff and Nevgi, 2015).

([38]) See: http://www.u4network.eu/index.php/network/projects [accessed on 25 August 2018].

The U4 offering of such a wide variety of different projects implies that each academic is likely to find something that would suit their needs, backgrounds and interests. Alternatively, academics are encouraged to start a collaborative project themselves.

However, since the U4 offers such a wide variety of different projects, that implies that each academic is likely to find something that would suit their needs, backgrounds and interests. Alternatively, academics are encouraged to start a collaborative project themselves. Oskar Pettersson noted that since most of the projects are application-based, receiving academics' interest in particular projects shows that a lack of motivation is at least partly overcome in participating universities (Interview, Pettersson, 2018). The flexibility of the methods used allows academics to choose a type of practice they are comfortable with, which could range from informal research collaborations to formal activities leading to certificates and qualifications.

The IPT&L is another example of a bottom-up approach and its benefits. While it is a highly structured and clear activity, encompassing intensive workshops and conferences, it is still based around the issues arising from the universities themselves and the challenges faced by participating HEI employees (Interview, Gunnlaugsson, 2018). Thus, this 'theoretical' preparation ensures a high level of expertise throughout the events, which is supplemented by discussions where people from different universities collaboratively seek answers to the issues they have been experiencing ([39]). According to Geir Gunnlaugsson, the impact of this approach is visible during workshops. By this point **some participants are bringing case materials based on actions planned during previous workshops, which allows them to demonstrate the developments at their home university at the next workshop**. This indicates that bottom-up activities encourage the continuation of development processes and reflection on what has already been achieved.

In this way, the approach taken by the **U4 network and its projects fulfils at least three of the requirements for an efficient PD practice** suggested in the literature. Firstly, it **supports collaboration**: as all of the projects span all of the participating universities, activities involve academics from different universities and research backgrounds. So-called 'communities of practice' (i.e. small groups of academics working within the same discipline and teaching a similar type of content) are believed to foster knowledge and good practice dissemination within a faculty (Stewart, 2014; Dysart & Weckerle, 2015). Consequently, the U4 **provides external expert support** (shared events facilitation) that is likely to provide multiple perspectives and challenge established views (Cordingley et al., 2015). Finally, the U4 projects can be **designed for the participants' needs** – or even designed by the participants themselves. A more personalised approach to PD provision, taking into account sociocultural differences among academics and differences in approach towards pedagogy, is crucial in order to achieve an improved outcome (Postareff & Nevgi, 2015; Cordingley et al., 2015). Therefore, the bottom-up approach taken by the U4 network can help overcome multiple issues with academics' participation in PD.

Challenges and prospects

No substantial risks to the financial sustainability of the U4 Network were identified. The funding model allows for flexible participation, since there are no official requirements for the number of events organised by a participating HEI. Thus, if organising a project event would be too much of a financial burden, the university would not be obliged to go through with it. Thus, **the network is financially sustainable**, as long as each university devotes at least some funds towards covering the travel and maintenance costs.

([39]) See: http://www.u4network.eu/index.php/network/projects/165-international-perspectives-in-teaching-and-learning [accessed on 25 August 2018].

The U4 Network has not faced major issues during its implementation. **The only challenge noted was a lack of interest at the initial stages of the network.** As it was established from the top down, employees were not aware of the existing initiative straight away. Partly this challenge was overcome naturally as time went by and an increasing number of people took part in the initiative. Furthermore, EU funds attracted through participation in joint programmes (e.g. LOTUS+, NOHA, MEME, OpenAIRE2020, and others) have heightened awareness of the network and the possibilities it offers. Finally, the network has strengthened its communication through its website, newsletter, etc (Interview, Pettersson, 2018). The current state of the U4 indicates that the above activities have overcome the initial lack of awareness.

This structure of the U4 may be replicable in different settings, especially in Belgium or in France (Interview, Gunnlaugsson, 2018). There are many collaborations between universities that have existed over a period of time, connecting universities of similar backgrounds in different or even the same countries. These HEIs may find it useful to apply this small and structured network's approach with the bottom-up logic. Furthermore, it may work even better between universities in the same linguistic context (Interview, Gunnlaugsson, 2018). Overall, the way the U4 operates is fully compatible with and could be assigned as a "model character" for the European Universities Initiative of the European Commission, encouraging the fostering of bottom-up networks of universities across the EU ([40]).

Conclusions

In conclusion, the U4 can be described as a successful PD practice. While originally established as formal cooperation and a platform for pooling resources, it has been achieving more than this due to the nature of the network and the approach it has taken. Firstly, the pooling of various types of resources works particularly well in this network. This may be because of the context – the similar characteristics of participating universities and their history of collaboration institutionalised through this network. Secondly, there are also implicit impacts of the activities of the network. As the organisers have decided to take a bottom-up approach to the establishment of the projects, this has a twofold impact. First, it has created a large base of various projects that have the potential to allow each academic to find his or her own fit – whether or not they have issues with time or motivation. Secondly, this approach fulfils a requirement for an effective PD practice by being designed for participants' needs while still encouraging collaboration and providing external expertise.

Information summary: U4 network

Table 4. U4 information summary

Background	
Short general description of the practice (W)	The U4 Network is a strategic partnership that works as a platform for pooling resources and exchanging good practices. It is organised around four academic clusters: Humanities; Social Sciences, Economics and Law; Medicine and Pharmacy; and Science and Technology. Apart from the academic domain, the cluster of Institutional Management covers all of the cooperation initiatives at the institutional management level.
Context of the practice	The U4 Network was founded in 2008 by four comprehensive European universities of similar size and with similar profiles, and also a history of cooperation: Ghent, Groningen, Göttingen and Uppsala.
Why was this practice	— To broaden the universities' educational offer, international

([40]) See: http://www.u4network.eu/index.php/news/2665-the-u4-network-is-an-outstanding-international-network [accessed on 25 August 2018].

initiated?	experiences, research outputs through a platform for joint cooperation initiatives in education, research, and institutional management. — To institutionalise their cooperation as preferential partners. — To strengthen the international position and visibility of the individual HEIs through intensive cooperation.
What obstacles to academics' participation in professional development are addressed?	— Poor resources — Lack of intrinsic motivation — Lack of time
Main target of PD	— Faculty development — Instructional development — Organisational development
Content area	— Wide - the network aims to be comprehensive and thus cover as many content areas as possible — There is some focus on internationalisation, teaching in multicultural settings
Processes	
Type of practice	Wide and flexible. Most of the projects involve practices such as observation visits to other schools, education conferences or seminars, individual or collaborative research on topics of interest, workshops, etc.
Nature of PD	Varies by project
Delivery	— Blended — Onsite (work-based) in HEI — Onsite (work-based) out of school
Type of course material used	Varies by project
Provider	Formal education institution
Funding	— Volume (in EUR) – varies by participating university — The costs are shared between the participating universities: the 'sending university' funds the travel and accommodation of the own outgoing staff; the 'host university' covers any organisational costs related to the project — Free courses (public costs), are paid by the university — Period of funding – from 2008, ongoing
Main challenges faced during the implementation of the practice	Internal (staff-related) – a lack of interest during the initial stages of the project
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	**Uppsala University**: — Prizes, distinctions and medals for individuals whose academic or other pursuits have promoted research, education or the development of Uppsala University — Academic Teacher Training Courses — Excellent Teacher Title **Groningen University:** — Internal training programme — University Teaching Qualification (UTQ) support programme

	— Mentoring project for female academics **Göttingen University:** — Qualification programme for teaching and administrative staff — International mobility programmes — Train the Trainer! Programme **Ghent University**: — HR application Apollo™ – career screen, consultations, information on training courses — Variety of training courses — Language courses
How are the results and the impacts of the practice measured?	— EU funds attracted to projects with U4 partners involved — Varies by project
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	— Can vary by project. — Expected impact: • Skills of teaching in international classrooms (IPT&L) • Designing appropriate classes for multicultural groups of students (IPT&L)
What is the impact of PD on academics' career paths?	— Can vary by project. — Expected impact: • Mobility experience • Networking with other universities – better awareness of career opportunities
What is the impact of PD on the quality of teaching?	Unknown (no evaluation conducted).
What is the impact of PD on students' learning?	Unknown (no evaluation conducted).

Information about selected projects

Table 5. Information about selected projects

Project	Description	Implementation
Academic Leadership Programme	The U4 Academic Leadership programme is a training course for **top-level executives** in university management. The programme allows university leaders (both from academia and administration) to **strengthen their skills in leadership** and to **learn more about university management** in today's increasingly international, complex and competitive environment. It focuses on **complex university organisation structures, increasing specialisation and professionalisation of roles**, that put emphasis on **reporting, analysing, monitoring, and evaluation**. The programme spans a two-year period and is comprised of four three-day meetings. Each session deals with a theme hosted by one of the four universities, including: Developing Academic Talent, Creating Transparency and Accountability in European Universities, Leading Top-Quality Universities, Managing Change and Preparing for	— Faculty / Organisational development — Training course; conferences / seminars — Onsite (work-based) in and Out of HEI

Project	Description	Implementation
	the Future.	
Cultural Transfer Research	The U4 network Cultural Transfer Research includes researchers with different backgrounds and expertise. It aims to build an EU **network in cultural transfer studies** and to initiate research and collaboration by organising workshops and preparing applications for EU-funding. Through the internet forum SOCTAT (Studies on Cultural Transfer and Transmission) members can inform the community about new books, conferences or start a discussion topic.	— Instructional development — Network; workshops; e-forum — Blended
DAAD Programme 'Strategic Partner-ships'	For its academic collaboration in the U4, the University of Göttingen received grant money from DAAD totalling almost to EUR 935,000 in the period from 2013 to 2016. With this support the partner universities have aimed to promote the international academic research of their doctoral candidates, further develop joint research projects, and identify new areas of cooperation in research and education. A total of 17 mutual summer schools and specialist conferences are planned, along with workshops on joint research projects and potential new areas of collaboration. Moreover, the partner universities want to increase the number of their joint **international degree programmes and provide continuing education in intercultural competences to their administrative staff**. The main milestones will include Joint Staff Development which will encompass **qualifying staff to improve international academic administration and manage international study programmes.**	— Instructional development — Summer schools; conferences; training — Onsite (work-based) in and out of HEI
Digital Humanities (DH4U4)	The DH4U4 network aims to stimulate the exchange of knowledge and expertise in **the field of digital humanities** through collaborative project proposals, staff exchanges, joint supervision, joint doctoral training and co-publications in the field.	— Instructional development — Network. Exchanges. Joint research. Supervision — Onsite (work-based) in and out of HEI
Ethics of Family	This research network on Family Ethics brings together researchers from the U4 Network. At workshops, participants discuss new technologies, compare **different legal and ethical approaches on an international level, and debate the normative concepts of late parenthood in light of a family-ethics approach**.	— Instructional development — Network. Workshops. — Onsite (work-based) in and out of HEI
IPT&L	The programme International Perspectives in Teaching and Learning (IPT&L) is an interactive two-day programme for teaching coordinators and curriculum developers in international programmes, providing training on **'what it takes to organise a good degree programme' from an international point of view.** IPT&L focuses on how **culture influences teaching and learning around a specific set of intercultural themes** addressing topics such as **interaction, expectations, assessment and group work**.	— Faculty development — Training course — Onsite (work-based) in and out of HEI

Project	Description	Implementation
	Day 1 - effects of internationalisation and globalisation on curricula. Day 2 - teaching and communicating in an international classroom setting.	
Lectures	U4 lectures promote teaching mobility within the U4 network by organising top-level guest lectures on a regular basis. The U4 lectures are conceived as **lectures with an academic character covering a scientific subject with human, cultural or social relevance, yet approached from a broad or multidisciplinary point of view,** and accessible to a broad audience including non-specialists. The U4 lectures offer students, staff, and alumni the opportunity to broaden their horizons in an international perspective and to get acquainted with themes outside of their own disciplines, presented by top lecturers, researchers or ambassadors from one of the U4 partners and outside.	— Instructional development — Lectures — Onsite (work-based) in and out of HEI
Legal research network	The LRN aims at improving the international profile of its members, strengthening (thematic) research cooperation of its staff, and promoting the international scientific perspectives of its young researchers. LRN thematically is a **general network in law**. The annual conference and summer school are organised around specific themes that are approachable from different fields of legal research.	— Instructional development — Network Conferences. Summer Schools — Onsite (work-based) in and out of HEI
Medical law	The Medical Law network connects researchers from U4 universities and addresses a **multitude of topics within medical legal studies.** The project highlights the differences in **legal approaches to these subjects in different national legal systems** and therefore encourages an intense exchange of ideas and approaches across national borders. The framework of Medical Law has established a cooperation and exchange between professors, postdocs, and doctoral students and holds regular workshops.	— Instructional development — Network. Workshops. — Onsite (work-based) in and out of HEI
Manual for joint programmes	A handbook for the **development of joint degree courses** integrating all partners will be available soon and will ease the establishment of further joint degree courses between the U4 partners. This type of approach for offering courses in multiple fields at a consortium level scarcely exists elsewhere and could provide **a model for other European universities and university networks**.	— Faculty development — Materials — Online
Multi-lingualism	The workshops investigate the dynamically-evolving processes of (urban) multilingualism as involving contact between individuals and between groups, multilingualism as raising issues of (mediated) participation in contexts oriented to socio-economic and trans-national mobility, and multilingualism as involving different stages and forms of formal/informal language learning in institutional and other contexts. Workshops are currently taking place with the aim of establishing an H2020 project.	— Instructional development — Network. Workshops — Onsite (work-based) in and out of HEI
OSMYO	The U4 OSMYO network is dedicated to studies of **the involvement of Osmoprotective Mechanisms in Idiopathic Inflammatory Myopathies and their link to**	— Instructional development — Network. Joint research

Project	Description	Implementation
	autoimmunity. By pooling and exchanging the knowhow of these relatively rare disorders, network members aim to consolidate existing scientific and clinical insight and build future international research initiatives.	— Onsite (work-based) in and out of HEI
Peer review	As a continuation of the 2010 and 2011 benchmarking/comparison exercises initiated by Ghent University, the U4 partners have engaged in setting up a rotating peer review cycle. Peer review is a valuable tool for **assessing each other's specific strengths and challenges**. It offers a framework for peer learning, knowledge exchange and self-evaluation. The peer review especially signals new approaches and new opportunities. The focus of the peer review sessions is **policy processes and activity profile**s rather than output performance and boasting figures.	— Faculty development — Peer-review — Onsite (work-based) in and out of HEI
Religious Studies Network	This initiative approaches **discursive, institutional and material processes and practices that generate and transform the boundaries and interior structures of the religious** in a historically well founded and cross-cultural way.	— Instructional development — Network — Onsite (work-based) in and out of HEI
Rever-berations of the Revolution	**Aims to explore how writers, artists and intellectuals responded to and represented revolutions taking place in other parts of the world in a variety of genres** — novels, essays, poetry, performances, art works, journalism, caricatures and life-writing — and how discussions of these uprisings impacted domestic political discourse and debate. The network is a collaboration between literary scholars, art historians and historians whose expertise spans various national traditions. The overall aim is to move away from narrow national approaches to revolution and an **exploration as to how political uprisings along with discourses and revolutionary culture often generated and resonated far beyond the borders of the states that were directly affected**.	— Instructional development — Network. Joint research — Onsite (work-based) in and out of HEI
Sustain-ability	The U4 network is an important motor for agenda-setting and enhancing know-how for individual U4 partners who have different focuses and are moving at different speeds in setting up strategies to meet global sustainability challenges. That is why the U4 sustainability network has chosen the frontrunner approach. Beyond the frontrunner projects, the U4 wants to make a difference by joining efforts in order to **turn U4 into a green network**.	— Instructional / Organisational development — Network — Unknown
Taiwan Studies Programme	The aim of this programme is to promote **the teaching and research of Taiwan Studies**. Professorial fellows from Taiwan teach a course on an aspect of **International Relations in an East Asian context**. As well as teaching and researching in the field, the fellows and the U4 network organise an annual international workshop. The workshop is an opportunity for international experts as well as PhD students to meet and	— Instructional development — Training course — Workshop. Networking — Onsite (work-based) in and out of HEI

Project	Description	Implementation
	discuss their research on Taiwan Studies and broader East Asian Studies.	

3.4 Nationally Recognised Proof of Didactic Competences – University Teaching Qualification (UTQ)

Dutch research universities

Abstract: The University Teaching Qualification (UTQ) is proof of didactic competences for academics in higher education institutions in the Netherlands. The UTQ agreement established general guidelines on which to base the certification process and the criteria on which competences must be obtained. Universities are provided with the autonomy to develop their own university-specific system and support the scheme as they see fit. The system is unique in that it arises from a mutual agreement between universities and provides HEIs with the autonomy to adapt the programme to their academics' time constraints. Furthermore, the mutual recognition of the qualification allows the government to measure teaching quality and simplifies the mobility of teaching academics.

Interviewees:

- Mirjam Bok, Centre for Academic Teaching, Utrecht University
- Jaap Mulder, Coordinator of Staff Development Higher Education, University of Groningen

Introduction

The University Teaching Qualification (UTQ, nl. *Basiskwalificatie Onderwijs*) is **proof of the didactic competences for academics in higher education institutions (HEIs) in the Netherlands** ([41]). In 2008, the agreement was signed by 14 Dutch universities, leading to the recognition of the proposed guidelines and certifications obtained by participating universities (Oude Alink et al., 2018). Following this, **each participating university developed its own training and development policy and programmes based on country-wide UTQ standards**. Currently, the UTQ is a critical part of universities' HR policies in the Netherlands, allowing HEI to assess the excellence of teaching and encouraging various PD practices in Dutch universities as a part of their own UTQ support schemes.

The UTQ is a novel approach to professional development requirements as **it arises from a mutual agreement between universities and gives HEIs the autonomy to adapt to their academics' time constraints**. This unique goal-oriented system allows participating universities to be flexible with regard to the PD that allows them to address the most important obstacles to academics' participation in PD, such as the lack of financial resources or time. **Furthermore, the mutual recognition of qualification allows the government to measure teaching quality and simplifies the mobility of teaching academics**. Embedding the UTQ in human resources (HR) policies works as both an external requirement and an internal motivating factor to increase participation in professional development. In order to further investigate this proposed project, the first part of the case study describes the teaching academics' development in the Netherlands and in the UTQ specifically. This will be followed by an analysis of the factors that make it a successful initiative as well as an overview of the challenges and prospects that the UTQ faces.

Context

The Dutch HE system is binary – it consists of research-oriented research universities and higher professional education offered at universities of applied sciences ([42]). Out of the 75 universities in the Netherlands, 14 are research universities and offer highly competitive courses at Bachelor, Master, and PhD level degrees. According to the *Times Higher Education* World University Rankings in 2018, 13 out of 14

([41]) See: https://www.vsnu.nl/en_GB/utq [accessed on 2 October 2018].
([42]) See: https://www.studyinholland.nl/education-system [accessed on 25 August 2018].

Dutch research universities appear in the top 200 universities in the world ([43]). The majority (approximately 40,000) of the academic staff in these universities are at the level of full, associate or assistant professor, or lecturer (de Jong et al., 2013).

Dutch universities established the first centres for educational development back in the 1960s.

Professional development in the Netherlands has a long history. Dutch universities established the first centres for educational development back in the 1960s (de Jong et al., 2013). This indicates that even without any official requirements, teaching quality was valued and stimulated. Since the 1990s, professional development programmes for academics in HEIs has become more student-oriented and staff development has become crucial for curriculum innovation (de Jong et al., 2013). Dutch universities can therefore be regarded as pioneers of professional development for teaching academics and innovative pedagogies.

Despite the interest in PD among academics, in the 1990s lecturers in HEIs were not required to have any pedagogical training. In this context Utrecht University faced student protests that led to the executive board's decision to put more emphasis and resources into the education of their teaching staff. The university saw this period as an opportunity to change the university's philosophy (Interview, Bok, 2018). It introduced major policy changes such as the Utrecht Educational Model, establishing a pillar of "Professional development of lecturers" ([44]). This subsequently led to various development initiatives such as educational conferences on teaching, teaching awards, and others (Interview, Bok, 2018).

The ongoing changes culminated in 1996 when **the university decided on a teaching qualification scheme that obliged all teaching staff to meet basic pedagogic requirements** (de Jong et al., 2013). **In light of the national debate on academics' education and students' complaints, other universities followed Utrecht University's example** (Interview, Mulder, 2018). Despite this, the first attempts to reach a consensus on the academics' competence profile framework were largely unsuccessful. This was due to different capabilities and ideas as to what the profile should look like (i.e. some universities focused on Problem Based Learning competences, others on ICT skills for distance education). Some universities opted for long-term mandatory courses, others for simple supervision and peer feedback (de Jong et al., 2013). A full consensus on the regulations was only reached in 2007. This was followed by an evaluation of these regulations in all the research universities and **in 2008, all research universities signed the Mutual Agreement of UTQ** (the Agreement; de Jong et al., 2013). The agreement was signed by all of the Vice-Chancellors of the universities, making it mutually recognised and thus mandatory by self-regulation (not imposed by any bodies other than the universities themselves). This has also **enabled the Dutch government to begin measuring 'lecturer quality' as one of the performance indicators for measuring the value of educational quality**. National education review committees started to look at the percentage of lecturers who have obtained the UTQ, assuming that this percentage reflects teaching quality at universities (de Jong et al., 2013).

The UTQ has also enabled the Dutch government to begin measuring 'lecturer quality' as one of the performance indicators for measuring the value of educational quality.

Additionally, the Agreement embedded the certification procedures in all of the participating universities and described the following aspects to be implemented by each university:

— Embedding the UTQ in strategic education and HR policies of the university

([43]) See: https://www.timeshighereducation.com/student/best-universities/best-universities-netherlands [accessed on 12 October 2018].

([44]) See: https://www.uu.nl/en/education/education-at-uu/the-educational-model [accessed on 25 August 2018].

- Ensuring attention to teaching skills in relevant settings (e.g. large group lecturing, supervision of research students and small group tutoring), course and programme design, student assessment, programme evaluation, and organisational and professional demands
- Provide UTQ facilities so that the university's staff can develop the required competences
- The University Board is responsible for procedure and assessments and should ensure that the procedure satisfies transparency and discretion criteria, focuses on all relevant aspects of academic teaching, and is independent from the research competence assessment (de Jong et al., 2013).

Implementation

Although the Agreement established the general guidelines on which to base the certification process and the criteria for obtaining competences, **universities were allowed the autonomy to develop their own university-specific system and support schemes as they saw fit**.

This usually consists of two parts:

- The official part, for which a qualification is awarded for a portfolio documenting achieved competences and providing examples of the practices used.
- The second part – the support schemes (various types of training, informal learning, support in writing the portfolio, etc.).

The university-specific system is reviewed every few years, ensuring that it remains effective and relevant (Interview, Bok, 2018). The most recent peer review indicated that universities believe that the national UTQ competences are still adequate and appropriate, offer a professional development framework and leave sufficient leeway for HEIs to customise the UTQ (de Groot, Kouwenaar, 2018).

The UTQ requirements are specifically designed to develop or evaluate pedagogic competences – designing courses, teaching, assessment, and evaluation.

The UTQ requirements are specifically designed to develop or evaluate pedagogic competences – designing courses, teaching, assessment, and evaluation (Interview, Bok, 2018). Thus, the target of the Agreement is faculty development. However, the content area is not limited to traditional methods of practice. Often the aims of the UTQ support schemes include the development of the didactic skills of the teaching staff in the direction of facilitating active learning (Pathirana et al., 2012), digital competences, interdisciplinarity, and internationalisation (De Groot, Kouwenaar, 2018).

The university designs its own support scheme to help lecturers obtain the skills needed to be awarded the UTQ and assist them in delivering proof that these skills have already been obtained. **It is delivered by the home university through onsite (work-based) and blended learning, with full costs covered by the university** (De Groot, Kouwenaar, 2018). **The support schemes can take many forms, including courses, supervision, mentoring, etc.** (Interview, Bok, 2018). While the activities of the UTQ implementation vary by university, they **have several factors in common**:

- Linking theory and practice by combining training and working
- Learning and trying out newly acquired knowledge and skills in the lecturers' own teaching settings
- Experience-sharing between colleagues
- Development of a vision and reflection based on theory and experience
- Use of a variety of teaching and assessment methods

- Assessment design
- Long-term PD programme ranging from three months to three years (De Groot, Kouwenaar, 2018)

At the initial stages of implementation, **the UTQ faced resistance from senior teaching staff** at the participating universities. While senior teaching staff may have had years of experience in teaching, they were still required to write a portfolio proving their competences and knowledge (Interviews, Bok; Mulder, 2018). While there was no specific strategy implemented to overcome the issue, the resistance diminished with time. One of the success factors may have been that very little pressure had been put on academics to obtain the qualification – everyone could do it in his/her own way and pace (Interview, Mulder, 2018). This did not encourage stronger resistance and thus may have led to the smoother normalisation of the UTQ scheme over time.

Results

By 2016, 58% of teaching academics had obtained the UTQ ([45]). By 2015, the highest share of academics had obtained the UTQ at Leiden University (around 90%), the lowest at the Eindhoven Technology University (less than 50%) (de Groot, Kouwenaar, 2018). While the UTQ makes it easier to quantify the UTQ-qualified share of lecturers in HEIs, **the potential impact of this on teaching quality or students' experience is difficult to measure accurately**. This is partly due to the fact that it works as a platform to increase academics' competences as well as proof of their skills and knowledge obtained earlier (Interview, Mulder, 2018). Thus, the results of the UTQ may be different for these two groups of academics, as not only their experience prior to obtaining the certificate is different but also the nature of the support they receive from their home-university differs. While the novice academics learn new didactic skills such as structuring courses and interaction with large groups of students, experienced lecturers find it beneficial to reflect and rethink the ways they teach so that they may improve further (Interview, Mulder, 2018). For instance, in a survey at the University of Twente's Faculty of Engineering Technology, 53.8% of the respondents stated that the UTQ contributed to their teaching skills to a large extent and provided them with tools and methods on how to educate (Oude Alink et al., 2018). Nevertheless, this does not necessarily translate into an impact on the quality of teaching or students' learning. However, the UTQ is expected to have some impact on these because, since the adoption of the UTQ, the quality of teaching has been rated increasingly highly at Utrecht University and the number of students and the graduation rate are at the highest levels they have ever been (Interview, Bok, 2018). However, **it is on academics' career paths the UTQ has the most straightforward impact**. As the UTQ is embedded in each university's HR policy, it plays a part in the hiring, selection and promotion processes (de Groot, Kouwenaar, 2018). Finally, as mentioned earlier, the UTQ is mutually recognised, meaning that the qualification obtained at one university is acknowledged at any other institution that has signed the UTQ agreement and thus can influence hiring and promotion. This is an important factor for lecturers' mobility as it ensures that academics' skills are recognised at the same level at any participating HEI (Oude Alink et al., 2018).

Analysis of the practice

Innovation in this PD practice

A country-wide teaching requirements' framework is a rare phenomenon in Europe and in the world in general. In most developed economies worldwide, teaching academics are not required to be qualified in didactics and are rarely obliged to prove their teaching competences through any formal certification (Fahnert, 2015; Aškerc, Kočar, 2015). The UTQ is therefore a unique approach to the enforcement of PD at HEIs. The UTQ provides HEIs with significant autonomy as it was not developed by the government but rather by

([45]) See: https://vsnu.nl/hoge-kwaliteit-onderwijs.html#eerste

universities and for universities (Interview, Mulder, 2018). One of the UTQ's success factors is its focus on the result – **the UTQ provides a goal and a framework for the practice, leaving the method for obtaining the qualification for HEIs and individual academics to choose for themselves**. Furthermore, the system of mutual recognition results in a clear positive impact on academics' career paths, which is an important motivational factor.

Strategy for addressing obstacles to PD

Goal-based system

The UTQ is a goal-oriented system by definition. **It focuses on the competences that must be achieved by each teaching academic**, rather than describing characteristics such as the amount spent on training or particular methods of learning. The key objectives of the UTQ are gaining experience and knowledge, and applying these in practice to improve teaching. Therefore, the development of capacities takes precedence over the method of obtaining the training (de Groot, Kouwenaar, 2018). This is very important as **it gives the HEIs autonomy to find the best ways of obtaining the goal, while ensuring that the methods they adopt are effective**. This is contrary to the usual situation where the PD of teaching academics is determined without understanding the needs of the participants (Darling-Hammond et al., 2017). This implies that universities can find their own particular ways of overcoming the obstacles to PD of academics, such as insufficient financial resources or a lack of time.

Being a goal-oriented system, the UTQ ensures that sufficient resources are devoted by HEIs to attain the goal. Due to this, the UTQ scheme states that facilities must be available so that university staff can develop their required competences (de Jong et al., 2013; Interview, Mulder, 2018). Universities have dedicated UTQ funds and use them to offer support schemes including courses, training, mentoring and peer-reviews. Thus, this system does not allow a lack of financial resources to become an issue, constraining academics from participating in PD. For this, **each university has its own UTQ budget, ensuring that the main courses are there and academics do not have to pay for them**. However, there are some additional courses provided for a fee. These range from EUR 75 for the Fast-Track University Teaching programme at VU University Amsterdam, to EUR 1830 for the Teaching in Higher Education course at Utrecht University (for participants from other HEIs) ([46]).

Since these support programmes are created for the teaching academics of their own universities and the HEIs are free to choose the delivery methods, it is easier to adapt support programmes to the lecturers' time constraints.

Another common obstacle faced by teaching academics with regard to professional development is the struggle to balance their workload and find some time for PD (UCU, 2016). Numerous roles they have to undertake as teaching academics and researchers put them in a situation where they must prioritise research or 'extracurricular activities' such as teaching-related PD (Jacob et al., 2015). One of the potential solutions to this is giving academics the flexibility to learn from their own space (e.g. using online materials and courses) or customising the PD programmes to their individualised needs. The individualisation and customisation of programmes have been noted as one of the most important success strategies of the UTQ (de Groot, Kouwenaar, 2018). **Since these support programmes are created for the teaching academics of their own universities and the HEIs are free to choose the delivery methods, it is easier to adapt support programmes to the lecturers' time constraints**. Consequently, universities have been offering various support schemes, ensuring that even the busiest academics are able to take advantage of educational support. For instance, at Maastricht University the UTQ is carried out not on the

([46]) See: https://learnacademy.vu.nl/nl/opleidingen-cursussen/university_teaching_qualification/f_utp.aspx, [accessed on 3 September 2018] and https://www.uu.nl/en/education/education-at-uu/the-educational-model [accessed on 25 August 2018].

institutional but on the faculty level – this helps to ensure that meetings fit well into the teaching practice and time-commitments of academics working in every faculty. Tilburg and Eindhoven Universities offer an Intensive Portfolio Programme for experienced lecturers that allows their UTQ portfolio to be virtually ready in two to three days (de Groot, Kouwenaar, 2018). An **additional strategy allowing academics to deal with the issue of a lack of time is an emphasis on self-reflection.** In order to officially obtain the UTQ, an academic must write a portfolio providing examples from their own work, showing how they meet the UTQ framework competences criteria (Interview, Bok, 2018). This can be done at their own pace, thereby providing a flexible schedule.

External success factors

The successful adoption of the UTQ was determined by external and internal factors. One of the reasons for other universities' interest in the system was contextual – a national debate on academics' education and students' complaints (Interview, Mulder, 2018). However, the government was also a relatively significant stakeholder in encouraging the adoption of the UTQ. This was partly because of the realisation of a need for the further professionalisation of academics to increase the quality of HEIs and students' performance in the Netherlands. Furthermore, governmental institutions find the UTQ beneficial for measuring lecturers' quality in the Netherlands (de Jong et al., 2013). This also made it easier to incentivise increases in the lecturers' quality. Initially, **HEIs were stimulated by extra funds from the government upon achieving the agreed share of academics with the UTQ** (Interview, Mulder, 2018). Funds were a significant and helpful factor in the encouragement of academics' PD in general and would still be useful now, in light of a decreased amount of money per student assigned by the government for universities (Interview, Bok, 2018). Additionally, **having a mandatory requirement to obtain the UTQ overcomes one of the frequently mentioned obstacles to academics' participation in PD – the lack of an external motivator or requirements** (Fahnert, 2015; Aškerc and Kočar, 2015). This indicates that governmental support can be helpful in the establishment and adoption of such or similar schemes in other countries. However, there is another reason for the wide-adoption of the UTQ – the fact that it appeared to be a logical system and "made sense" (Interview, Mulder, 2018). This is due to the internal characteristics of the system such as its focus on the goal and potential to enhance academics' career and mobility opportunities.

Challenges and prospects

The UTQ in itself has not required any financial resources since its establishment, so it is fully financially sustainable. HEIs are encouraged to organise preparation courses and additional support for those wishing to obtain the certificate. This practice requires funds, expertise and time. Therefore, the financial sustainability of support programmes may be quite demanding. HEIs are tackling the issue differently, from assigning their own funds, to requiring the participants to pay the costs themselves. Therefore, while the UTQ itself is fully financially sustainable, **the sustainability of support mechanisms for achieving the certification depends on the individual HEIs.**

The major challenge facing the UTQ is the question of how 'continuous' this form of PD is. Being goal-oriented means that the programme has a clear end-point in each academic's PD – when they obtain the qualification. This contradicts the idea of a continuing professional development as it fails to provide standardised opportunities to continue post-UTQ and may discourage lecturers from further professional development. **HEIs are now working on policies in this area to expand facilities for ongoing lecturers' professionalisation and to encourage academics to put the word 'continuous' back in their PD efforts** (de Groot, Kouwenaar, 2018). For instance, in 2000 Utrecht University developed an educational leadership programme, which is an example of post-UTQ PD that an academic can follow. It is offered to senior staff, especially those coordinating education programmes or chairing university clubs or committees. The educational leadership programme trains for formal leadership and educational science (Interview, Bok, 2018). The Open University has a Permanent Education system, mandatory for all lecturers with the UTQ. The system includes 40 hours a year (or 120

hours every three years) of full-time professionalisation. Lecturers are allowed to personalise the content of the training, but the system is based on selected competence areas (de Groot, Kouwenaar, 2018).

However, probably the most advanced UTQ development is the Senior Teaching Qualification (STQ). It targets teaching academics who have held a UTQ for a number of years and play a coordinating or leading role in HEI (de Jong, Mulder 2016). Thus, **STQ is a direct continuation of the UTQ**. In 2016, 11 out of 14 Dutch research universities had or were planning to introduce the STQ scheme shortly, however, unlike with the UTQ, the mutual recognition of qualification does not yet form an explicit objective (de Jong, Mulder 2016). Furthermore, the relationship between the STQ and a formal position and promotion is very weak. However, the STQ is connected to the strategic policies of HEIs and its core element is educational innovation (de Jong, Mulder 2016). Thus, the UTQ remains a one-off framework with no equivalent strategies for academics' professional development post-UTQ. The normalisation of the continuing professional development after the UTQ is the crucial next step for the Dutch HE system.

According to the interviewees, the UTQ system can be adapted in different contexts, as long as universities find the motivation to start discussions and manage to come to a mutual, country-wide agreement on the most important criteria for the didactic skills of their teaching academics (Interview, Mulder, 2018). Since the mutual recognition between Dutch universities a decade ago, a number of Dutch and Belgian universities have requested that their own lecturer professionalisation programmes should be included in the Dutch UTQ system (e.g. University of Antwerp, IHE Delft Institute for Water Education, KU Leuven). These universities were reviewed and approved by the Association of Universities in the Netherlands (nl. *Vereniging van Universiteiten*; *VSNU*), after which they were added to the scheme as "trend followers" (de Groot, Kouwenaar, 2018). This indicates that the system can also be adapted to different contexts. The most important factor in establishing such a scheme, or a similar one, is a simple and logical framework, ideally created by and agreed on by several universities. At least in the initial stages, government support in the form of financial incentives for a certain percentage of lecturers' obtaining the UTQ could be very helpful for a wide adoption of the practice.

Emerging themes

Impact on academics' career paths

The system of promotion and remuneration is, in most countries, skewed towards scientific outputs rather than teaching performance. Quite often the salaries of academics depend on their publications and amount of teaching hours, not on the quality of their teaching (Graham, 2015; Kim & Kim, 2018). Similarly, promotion and reward schemes are still mainly connected to achievements in research and administration (Fahnert, 2015). This reflects a deeper problem – the fact that in HEIs research usually has a much higher status than teaching, being a source of prestige at the institutional level (Blackmore et al., 2016) reinforced by national policies (e.g. Research Excellence Framework in the UK) or global university rankings that principally measure research outcomes (Gibbs, 2016).

Even though the UTQ is not enforced by law, it is mandatory by universities' self-regulation. Due to this, it is integrated in HEIs' human resources policies and educational strategies. In most Dutch universities the UTQ is required to be obtained by every teaching academic in order to obtain a permanent position at any level of professorship (Interview, Bok, 2018). Furthermore, numerous universities have adopted their career-planning policy so that teaching achievements, in general, would play an explicit role (Mulder, de Jong, 2018). Universities are encouraged to consider educational prizes, making time available for teaching duties, Comenius applications support, financial incentives (de Groot, Kouwenaar, 2018). For instance, Utrecht University offers a programme to stimulate academics' use of IT tools (courses, online assessment support, etc.) as well as a Project Investment Fund, a financial incentive for academics to establish didactics-related projects (Interview, Bok, 2018). This indicates a changing

consensus on the importance of teaching duties and the teaching abilities of university staff.

Not only does the UTQ open up promotion opportunities but it also enables mobility.

Additionally, a clear and standardised impact on academics' career paths can work as an intrinsic motivation. Not only does the UTQ open up promotion opportunities but it also **enables mobility, as it is a mutually recognised scheme, thus, the hiring process is made easier as the competences of each academic are assessed in the same way in each university**. There is an increasing interest from other universities (e.g. universities of applied sciences, foreign universities) to join the UTQ scheme (Interview, Bok, 2018). Furthermore, as an increasing number of lecturers have worked at foreign universities, it raised the issue of creating an agreement for evaluating the UTQ value of programmes abroad (de Groot, Kouwenaar, 2018). This would open up even more staff mobility opportunities and potentially increase lecturers' motivation to some extent.

Conclusions

Overall, the University Teaching Qualification is a unique development in the approach to and implementation of PD of teaching academics. Having emerged in the context of a national debate on academics' education and students' unions' activities, it has a unique and deeply embedded history. The logic of the system is its main success factor. First, it is goal-oriented, leaving the universities autonomous with regard to its implementation. This allows universities to be flexible and to address known obstacles to academics' participation in PD while still effectively achieving its quantitative targets. Furthermore, with a clear impact on career paths, the UTQ is a novel approach in the HE system, placing the emphasis on teaching rather than research and, accordingly, functioning as both an external and internal motivator for the continuous professional development of academics. However, the fact that it is goal-oriented raises questions about its long-term potential. While the UTQ support frequently offers long-term programmes, lecturers are still able to obtain it in three years. This raises the question of how to ensure the continuation of professional development post-UTQ. Universities adopt different strategies and solutions, with no single, standardised approach having yet emerged. The question remains whether such an approach is needed and possible.

Information summary: UTQ

Table 6. UTQ information summary

Background	
Short general description of the practice (W)	The University Teaching Qualification (UTQ) is a proof of didactic competences for teaching academics in higher education institutions in the Netherlands. Each participating university has developed its own training and development policies and programmes based on country-wide UTQ standards. Currently the UTQ is a critical part of universities' HR policies in the Netherlands, allowing for an assessment of academics' excellence and encouraging various PD practices in Dutch universities as part of their own UTQ support schemes.
Context of the practice	In 1996, Utrecht University decided on a teaching qualification scheme that obliged all teaching staff to meet basic pedagogic requirements. In light of the national debate on teaching academics' education and students' complaints, other universities followed Utrecht University's example. In 2008, all 14 research institutes in the Netherlands signed the mutual agreement on the UTQ.
Why was this practice	A lack of pedagogic training requirements led to negative

initiated?	assessments of teaching quality and students' complaints
What obstacles to academics' participation in professional development are addressed?	— The lack of an extrinsic motivator or requirements — Resistance to change Expected: — A lack of time — Poor resources
Main target of PD	Faculty development
Content area	Can vary in different universities, but must evaluate the competences of designing the courses, teaching, assessment and evaluation.
Processes (i.e. how the practice was implemented?)	
Type of practice	— Qualification programme — Support programmes can involve different practices, which vary by HEI.
Nature of PD	Formal
Delivery	Mostly onsite (work-based) in HEI
Type of course material used	Varies by HEI
Provider	Formal education institution
Funding	— Volume (in EUR) – varies by HEI — Funding is provided by the HEI • Free courses (public costs), paid by the university — Period of funding – ongoing
Main challenges faced during the implementation of the practice	Internal (staff related) – resistance from senior staff during the initial stages of the initiative
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	Varies by institution. For instance, Utrecht University (as the initiator of the practice) organises the following: — Educational Leadership Programme — Courses on specific topics — Honours teaching — Support with IT (courses, consultancy) — Project Investment Fund
How are the results and the impact of the practice measured?	— Peer review — Individual assessments at different HEIs or faculties
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	— Some surveys and interviewees suggest that UTQ contributes to academics' teaching skills to a large extent and provides them with tools/methods on how to educate. — Alternatively, the portfolio of UTQ provides an opportunity to reflect on one's ways of teaching
What is the impact of PD on	Impact on academics' career paths varies by institution but, due

academics' career paths?	to the UTQ being embedded in HR policies, they usually include: — Mandatory in order to get hired for academic positions — Plays a part in promotion policy — Increases the mobility of academics
What is the impact of PD on the quality of teaching?	Direct impact would be impossible to measure, but according to the National Student Survey there has been an increase in the quality of teaching during the years of the UTQ.
What is the impact of PD on students' learning?	Direct impacts are impossible to measure, as the UTQ effects are indirect.

3.5 Support for MOOC production – Centre for Learning, Innovation, and Knowledge (CLIK)

Pompeu Fabra University (Spain)

Abstract: Academics at Pompeu Fabra University (UPF) are offered support in developing a Massive Open Online Course (MOOC) through a multidisciplinary UPF MOOC team led by the Centre for Learning, Innovation, and Knowledge (CLIK). The support includes pedagogical advice on innovative teaching methods as well as technical assistance in production-related challenges. The strategy for MOOCs, embedded in the university's vision and combined with the existence of relevant know-how within the institution, has allowed this young and rather small university to achieve significant recognition and become competitive worldwide. Finally, by experimenting with the format of its MOOCs, UPF has managed to make them stand out, i.e. to make them truly innovative.

Interviewees:

- Dr Manel Jiménez-Morales, Academic Director of CLIK
- Ms Núria Saladié, Project Manager of HEIRRI (Higher Education Institutions and Responsible Research and Innovation), Tutor of the MOOC 'Concepts and Practice of Responsible Research and Innovation'
- Professor Fernando Guirao, Professor at UPF, Tutor of the MOOC 'Why the European Union? A Brief History of European Integration'

Introduction

Pompeu Fabra University (cat. *Universitat Pompeu Fabra – UPF*) offers its academic staff support in developing a Massive Open Online Course (MOOC). Assistance is provided by a multidisciplinary UPF MOOC team led by the Centre for Learning, Innovation, and Knowledge – CLIK (cat. *Centre per a la Innovació en Aprenentatge i Coneixement*). CLIK provides guidance on teaching methodologies to MOOC tutors and supervises the process of MOOC production and publication. LaFactoria+ (a unit responsible for digital production at UPF) assists academics with technical and technological challenges related to the design of the course.

The production of MOOCs is often seen as the domain of large, renowned, US-based HEIs. Therefore, this case study aims to uncover how this European university has developed a considerable portfolio of innovative online courses, and to evaluate how this practice impacts academics' professional development and their quality of teaching.

Context

UPF is a very young university established in 1990 in Barcelona, Spain. In less than 30 years it has earned a place among the best universities in Europe. It is considered the best university in Spain in many university rankings ([47]) and has also been ranked 11th among universities worldwide that are less than 50 years old (in the same ranking it was placed fifth in Europe and first in Spain ([48])). It is a medium-sized university with about 12,000 students and fewer than 600 teaching and research staff. UPF is a specialised university – it structures its studies on three main fields of knowledge, closely interconnected and structured on three campuses:

- Social sciences and humanities

([47]) See: Times Higher Education, World University Rankings 2018. Available at: https://www.timeshighereducation.com/world-university-rankings/2018/world-ranking#!/page/0/length/25/locations/ES/sort_by/rank/sort_order/asc/cols/stats [accessed on 27 August 2018].

([48]) See: Times Higher Education, World University Rankings 2018.

- Health and life sciences
- Communication and information technologies

Finally, even though it defines itself as a research-intensive university, UPF is committed to offering high-quality teaching through its own innovative teaching model based on comprehensive education and student-centred learning.

The CLIK is a central unit for the implementation of this innovative teaching model, and for the promotion and support for innovative teaching methods. Hence its mission is "to define and update Pompeu Fabra University's integral educational model, providing it with personality and distinguishing it by promoting teaching innovation, the transformation of teaching and learning processes, and the incorporation of the tools, resources and latest trends required in order to optimise teaching" ([49]). CLIK provides PD opportunities for academics across several fields:

- **Faculty training.** Faculty training includes courses, workshops and seminars about tools and resources for refreshing, improving and innovating teaching. The training scheme involves, for example, the FIDU programme (Initial Training in University Teaching ([50])), thematic training courses, and innovation workshops on the use of innovative teaching tools such as storytelling, game-based learning, etc.
- **Resources for teaching.** Tangible resources include provision of ICT tools for teaching ([51]) as well as teaching grants. CLIK publishes external opportunities for grants, scholarships, subsidies and support initiatives, and offers internal PlaCLIK grant scheme ([52]) to support quality and innovation in learning and knowledge (see also below). Intangible resources are comprised of teaching counselling, and sharing information and educational resources via the Aula Global – the UPF's online platform ([53]).
- **Innovation and knowledge.** CLIK contributes to the dissemination of knowledge by publishing educational and linguistic studies at congresses and in journals, developing strategies for implementing social responsibility aspects in teaching, facilitating students' experience through student mentoring, and, finally, assisting in the production of online learning MOOCs (the focus of this case study).
- **Conferences and congresses.** CLIK organises and recommends regular workshops, conferences and symposia related to teaching and innovation ([54]).

Even though the support for MOOC production is only one of the many activities of CLIK, it is an important one since MOOCs are part of UPF's broader strategy for innovative and student-centred teaching. The reason to implement this practice derived primarily from the necessity to adapt to "the new kind of students" (Interview, Jiménez-Morales, 2018). It is argued that millennials are more connected with new technologies, that their concentration span is shorter, and that they are more dynamic and suited to multitasking (Ibid.). Therefore, the UPF new teaching model aims to address these features so as to improve teaching and optimise the student learning experience. More directly, the MOOC offer was a response to rising expectations and the demands of students both in the general context of university competitiveness and in relation to the quickly growing reputation of UPF.

Implementation

([49]) See: https://www.upf.edu/web/clik [accessed on 28 August 2018].

([50]) See: https://www.upf.edu/en/web/clik/initial-training [accessed on 28 August 2018].

([51]) See: https://www.upf.edu/eines2/ [accessed on 8 September 2018].

([52]) See: https://www.upf.edu/web/clik/ajuts-placlik [accessed on 8 September 2018].

([53]) See: https://www.upf.edu/web/clik/teaching-aula-global [accessed on 8 September 2018].

([54]) See: https://www.upf.edu/en/web/clik/conferences-congresses [accessed on 28 August 2018].

UPF started creating MOOCs very early on, in 2012. At the beginning, the production was quite amateur and the courses were mostly on a zero-level (i.e. levelling courses prior to entering university) (Interview, Jiménez-Morales, 2018). In 2013, a first strategy for MOOCs was developed ([55]) and the first full courses were launched. MOOC development has been gaining speed since then to reach more than 180,000 students enrolled in 23 MOOCs in the academic year 2017-2018 ([56]).

Even though the initiative is coordinated by CLIK, different units of the university have subsequently joined. Therefore, the UPF MOOC team has personnel from various fields, from pedagogues to audio-visual specialists, who serve the mission of developing innovative and quality MOOCs. **There are typically three core actors in MOOC development:**

- **A lecturer** provides the idea (i.e. the topic of the MOOC) and the academic knowledge for the contents.
- **The CLIK** coordinates the whole process and leads the so-called "instructional design" – CLIK pedagogues, together with the lecturer, conceptualise the work modules and produce the educational materials.
- **La Factoria+** (a unit responsible for digital production at UPF) provides the lecturer with all the technical equipment (technology, sets, cameras, etc.) and audio-visual expertise (technicians, digital specialists, etc.).

Additionally, the Unit of Promotion and Communication helps to promote the MOOCs, a legal team provides expertise on the intellectual property of the materials, and a team of translators provide subtitles for the courses (UPF is a trilingual university, hence all MOOCs are available in at least in three languages – Catalan, Spanish and English) (Interview, Jiménez-Morales, 2018).

The UPF MOOC team has personnel from various fields, from pedagogues to audio-visual specialists, who serve the mission of developing innovative and quality MOOCs.

A budget to produce a single MOOC can vary, but it is estimated that it may cost around EUR 25,000 on average (Interview, Jiménez-Morales, 2018). However, UPF uses mostly internal resources for MOOC production so the costs are included within the budgets of university units. Any additional, external costs are typically covered by PlaCLIK grants (up to EUR 8,000 per MOOC). **PlaCLIK is an internal funding scheme aimed at fostering the design and development of innovation and quality teaching improvement projects at UPF.** The total amount for the PlaCLIK in the academic year 2018-2019 was EUR 90,000. Other funding sources include research grants and funds from national or local governments. For instance, UPF enjoyed financial help from a national programme for supporting MOOCs (up to EUR 16,000 in 2013 and to EUR 8,000 in 2014 per MOOC), but the programme has not been sustained. With its current capacity and funding, CLIK can produce more or less three MOOCs per academic year (Interview, Jiménez-Morales, 2018).

Results

This practice addresses two important obstacles for effective PD programme implementation. Firstly, UPF draws strongly on the expertise and technology that already exist within the university to create MOOCs, and realises the need to support it through internal funding. Therefore, the obstacle of lack of resources and capacity is overcome. Additionally, the successes of past MOOCs as well as the perceived benefits (e.g. in terms

([55]) See: López de San Román, M., & Torra P. (coord.) (2013). *How did we make the change. The adaptation of Pompeu Fabra University to the European Higher Education Area.* p. 132. Available at: https://www.upf.edu/documents/6602910/7420475/2013_Com+vam+fer+el+canvi+a+l%27EEES/10e63b4b-e373-d78d-e559-74fa44b7f17c [accessed on 8 September 2018].

([56]) See: https://www.upf.edu/en/web/mooc-upf/mooc [accessed on 8 September 2018].

of learning and self-development as well as a broader recognition within and outside the university) drive the demand for MOOC production among the staff and, hence, overcome the problem of lack of academics' motivation.

Thanks to this PD opportunity – the support for MOOC production – academics can develop their pedagogical, communication and digital skills, and learn how to adapt their teaching to different conditions (Interview, Guirao, 2018). It is expected to have an impact on the quality of their teaching as well – in MOOCs they have to summarise content in very short clips; they need to be concise, clear and focused. They also have to critically assess the MOOC design and communication, which helps them better understand the students' perspective (Interview, Saladié, 2018). Importantly, MOOC tutors tend to incorporate the new teaching methodologies into their in-class teaching, including the digitalisation of resources and the use of more attractive and interactive tools (Interview, Guirao, 2018). The impact of tutoring a MOOC on research performance or career progress is unclear. One interviewee claimed that MOOC authors get quite a lot of recognition and popularity, both within and outside the university. Consequently, they have often reported an increased number of citations in research that followed the MOOC course (Interview, Jiménez-Morales, 2018). Since research outputs are a main factor for the professional promotion of academics in Spain ([57]), it can be argued that the practice has also had an impact on their career progress. However, one MOOC tutor was explicit in saying that teaching (including tutoring a MOOC) does not have any relation whatsoever with his research or career (Interview, Guirao, 2018). Finally, UPF students benefit from the MOOC offer since they can catch up with some of their courses whenever they want. The university can also reach audiences outside UPF who gain access to the educational offer of UPF for free. For instance, the course 'Why the European Union? A Brief History of European Integration' has reached as many as 11,380 participants from all continents (Guirao, 2016).

MOOC tutors tend to transform the new teaching methodologies into their in-class teaching, including the digitalisation of resources and the use of more attractive and interactive tools.

Analysis of the practice

Innovation in this PD practice

Some say that the fact that courses are massive, open, and available online for free is already a measure of their innovativeness (Interview, Saladié, 2018). However, others argue that the idea of MOOCs is already well established and not innovative anymore (Interview, Jiménez-Morales, 2018). The latter argument follows the logic that it is essential to make MOOCs unique and attractive, especially in light of the quickly growing and increasingly popular and competitive online courses market. A MOOC can be regarded as a traditional tool, for example when it simply comprises a recording from a physical lecture that takes place at a university, supplemented by some simple activities (e.g. tests with multiple-choice questions). Nevertheless, new technologies (e.g. visual communications) and methodologies (e.g. game-based teaching) have the potential to make MOOCs a more unique, effective and thus innovative teaching model. The latter approach is exactly what CLIK does. They experiment a lot in terms of audio-visual format and content, but also, for example, collaborate with other stakeholders (Interview, Jiménez-Morales, 2018). For instance, recordings of the course 'The European Discovery of China' were made at the exhibition 'Ming. The Golden Empire' in Barcelona, which featured exhibits from the Nanjing Museum (China) ([58]). In other words, **UPF's technical and knowledge base not only makes MOOC production possible but**

([57]) Professional promotion of academics in Spain is made under the standards of National Agency for Quality Assessment and Accreditation (sp. *Fundación Agencia Nacional de Evaluación de la Calidad y Acreditación* – ANECA) and dos not depend on an university. Teaching is considered upon promotion to some extent, but the Agency values research much more than teaching (Interview, Jimenez-Morales, 2018).

([58]) See: https://www.upf.edu/web/mooc-upf/-/the-european-discovery-of-china#.W8OFOPaxU2w [accessed on 5 September 2018].

also enables UPF to produce courses that stand out in terms of their form and user-attractiveness.

More broadly, the development of Open Educational Resources (OER) has proved to be an efficient way for a relatively small European university to become globally competitive and recognisable. Since the beginning of the MOOCs' development, the US has been the leading and largest MOOC market, with their biggest and most prestigious universities as the top MOOC producers in the world ([59]). Nevertheless, Spain has risen to second position among MOOC-producing countries, only just behind the US (Jiménez-Morales et al., 2017). The Latin American market and also the creation of the Spanish platform MiríadaX ([60]) have contributed to that expansion, but Jiménez-Morales et al. (2017) argue that the engagement of certain Spanish universities has also been an important reason for this boom. UPF has been leader among those universities from the very beginning. We would argue that UPF succeeded in standing out among European universities thanks to factors such as its specialisation, its well-designed and multidimensional support offered to academics, and its unique institutional culture that encourages academics' engagement in innovative teaching practices.

The development of Open Educational Resources (OER) has proved to be an efficient way for a relatively small European university to become globally competitive and recognisable.

Strategy for addressing obstacles to PD

Firstly, UPF's success in producing high-quality MOOCs and making them attractive and effective, and thus innovative, derives from their unique set of internal resources and know-how. UPF has a strong Department of Communication covering fields such as journalism, media and advertising (Interview, Jiménez-Morales, 2018). Expertise in these fields means that **UPF already possesses a very strong technical and technological base, equipment, skilled personnel, and relevant expertise** that are necessary to tackle production-related challenges. The fact that there is a unit at UPF dedicated specifically to digital production and creation of audio-visual materials, La Factoria+, is also an outstanding advantage. All of this technical and technological capacity and resources have not been built specifically for the purpose of MOOC production but already existed within the university, and have been used to create high-quality MOOCs. Such an approach has allowed UPF to overcome an important obstacle to effective PD programme implementation, namely a lack of resources and know-how. Indeed, it is often argued that HEIs might lack the expertise (e.g. digital skills) and capacity (e.g. technology) necessary to implement effective PD programmes, while external expertise is often regarded expensive and thus unjustified (Dysart & Weckerle, 2015).

Secondly, comprehensive and multidimensional support for MOOC production brings significant value for course tutors. After all, an academic does not learn that much if his/her class lecture is just recorded and uploaded on the internet. On the other hand, when the course communication is well designed and both visually and content-wise tailored to the online participant, MOOC production is much more complex and demanding but also much more instructive. Both course tutors we interviewed pointed out that academics learn a lot throughout the development of MOOCs, not only in terms of teaching methodologies but also in terms of communication and digital skills, as well as engagement and interaction with students (Interviews, Jiménez-Morales, 2018; Saladié, 2018). There are a number of issues that lecturers have to face while producing a MOOC, including:

- They have to be very **explicit**. In the case of face-to-face courses, students can ask, and a tutor can explain again, or clarify, whereas making a message clear via

([59]) See: Class Central MOOC Database. Available at: https://www.class-central.com/universities [accessed on 6 September 2018]
([60]) See: https://miriadax.net/home [accessed on 5 September 2018].

a video is much harder since one cannot interact with the audience (Interview, Saladié, 2018).

- They have to be very **concise** and summarise the information in very short clips. Because of the mode of delivery, the content is closely scrutinised by the students. Therefore, the quality of lecturing must be very high, and the format should be as attractive as possible (Interview, Jiménez-Morales, 2018).
- They have to **put themselves in the position of a student** in order to critically assess their content and communication during the design process, which helps them to better understand the student's perspective (Interview, Saladié, 2018).
- They have to **consider the different cultural backgrounds of potential participants** – they might come from all over the world - and adjust their message accordingly (Interviews, Guirao, 2018; Saladié, 2018). As a tutor of a MOOC on the history of the EU put it, "How do you explain the EU to a 75-year-old guy in South Africa and a teenager in Latvia for both of them to understand the whole thing?"

All of this helps academics discover new approaches to teaching, re-evaluate their old methods, and better understand the learning process. The amount of learning and self-development is one reason why academics decide to get involved in this practice. Additionally, some simply enjoy experimenting, developing their teaching and discovering what works best for their students; in general they find it a very enriching experience (Interviews, Guirao, 2018; Saladié, 2018). Indeed, production of an online course arguably brings the satisfaction of creating something new, and pride if the MOOC is successful and disseminates around the world (Interviews, Guirao, 2018; Saladié, 2018). Additionally, ***playing*** **with the MOOC content and form can simply be more *exciting* than most of PD practices such as workshops, consultations, etc.** Indeed, among the reasons given for participation in MOOC production, one of the tutors indicated that primarily it was "fun" and "a challenge" (Interview, Guirao, 2018).

Designing aMOOC helps academics discover new approaches to teaching, re-evaluate their old methods, and better understand the learning process.

Additionally, engaging in a MOOC might also have some less expected benefits. For instance MOOC authors tend to see a rise in recognition and popularity both within and outside the university, which consequently increases their number of citations in research (Interview, Jiménez-Morales, 2018). All those perceived benefits result in a relatively high demand for participation from UPF staff. In fact, in the past, CLIK used to implement all proposals they received, while currently they choose projects through competitive, externally-evaluated calls (Interview, Jiménez-Morales, 2018). This seems to prove that the high expected benefits might successfully overcome some well-known obstacles for academics' participation in PD. Their lack of time is one of the most important obstacles mentioned in the literature (see, for example, Postareff & Nevgi, 2015). However, **although there are probably no or few PD programmes that are more time-consuming than MOOC production, academics are still eager to participate as long as they expect to profit from it**.

Finally, teaching innovation including **MOOC production comes under the umbrella of UPF's institutional culture and strategy**. UPF in general encourages innovation and experimentation, especially in the area of teaching and learning. It was recognised, for example, in the European University Association's institutional report that highlighted its "high degree of attention to teaching quality" (EUA, 2008). What is also interesting is that in UPF's Institutional Presentation, "quality teaching" is placed before "excellence in

research" ([61]). This is in line with an argument repeated across the literature about the importance of support from the top administration for academics' PD and the development of innovative teaching. For instance, Jensen and Iannone (2018) argue that HEIs are co-responsible for creating the overall work environment that enables and encourages their employees to learn and improve. In the same vein, Jacob, Xiong and Ye (2015) underline the significance of support from the highest university structures in order to legitimise PD activities.

UPF initiatives such as MOOC production have recently been framed in a broader university strategy – EDvolution (cat. *EDvolució*). EDvolution is a comprehensive educational model that aims to adapt to "the needs of tomorrow's professionals, companies and social agents" through UPF's own teaching model designed "with the flexibility and versatility of UPF's students in mind" ([62]). The project is legitimised by the involvement of the Vice-Rector's Office for Innovation Projects, and supported by the pedagogical expertise of CLIK as well as advice from a team of external consultants. The university's focus on MOOCs relates very much to the UPF's idea of reshaping teaching methodologies and addressing changing the education environment (Interview, Jiménez-Morales, 2018). Therefore, on the one hand, institutional strategy and culture directs academics' attention to teaching and, especially, innovative teaching. On the other hand, MOOCs, being the outputs of such an approach, can make the University more recognisable and popular in the HE sector and further reinforce its perception as an innovation leader.

Challenges and prospects

There are two main challenges to the practice: time and money. Firstly, **producing a MOOC is an extremely time-consuming and long-term commitment**. The preparation time for a MOOC is calculated according to the complexity of the subject matter, but generally it takes between three and eight months of non-exclusive dedication by a lecturer ([63]). To ease academics' workloads, UPF gives 'discounts' on their teaching hours. Instead of having face-to-face courses, they commit to the design of a MOOC (Interviews, Jiménez-Morales, 2018; Guirao, 2018). Nonetheless, some academics might be hesitant about sacrificing that much of their time and resources. Secondly, MOOC production is very costly (around EUR 25,000 per MOOC on average). There certainly are cheaper ways to design and implement MOOCs (e.g. video-recording of in-class lectures). However, to do it the *right* way, i.e. design a course that will be attractive to participants and will maximise their learning experience, large amounts of money, time and resources are necessary.

It takes between 3 and 8 months of non-exclusive dedication by a lecturer to produce a MOOC.

This limits CLIK's capacity in terms of the numbers of MOOCs it can support. The relatively high demand means, in fact, that CLIK receives more or less seven proposals annually, out of which they are able to realise about three (Interview, Jiménez-Morales, 2018). Some of them involve academic teams of, typically, up to four tutors, but many are led by individuals. Therefore, **the outreach of the practice is very limited considering the total number of teaching staff at the university** (almost 600). Additionally, it can be expected that those who decide to engage in MOOCs are already more dedicated to their teaching than many others, and hence the quality of their teaching is already above average. In fact, one interviewee acknowledged the amount of development the MOOC brought him but also highlighted that he had been regarded as a top teacher even before taking the MOOC (Interview, Guirao, 2018). Simultaneously,

([61]) See: UPF. (2018). *Quality, innovation, internationalisation.* Available at: https://www.upf.edu/documents/4328939/4352139/Presentacix_UPF_ENGx.pdf/82b63cf7-52a6-aceb-bfa0-cca32363d06e [accessed on 27 August 2018].
([62]) See: https://www.upf.edu/web/edvolucio/project, and https://www.upf.edu/documents/4328939/4352139/Presentacix_UPF_ENGx.pdf/82b63cf7-52a6-aceb-bfa0-cca32363d06e [accessed on 27 August 2018].
([63]) See https://www.upf.edu/en/web/clik/mooc-and-multimedia [accessed on 8 September 2018].

many academics prefer to focus on research since it is the main driver of their career progression and professional development (Interview, Jiménez-Morales, 2018). Additionally, less confident teachers might be overwhelmed by the pedagogical and technical challenge. Sometimes they are simply scared to take the challenge (Interview, Guirao, 2018). There might be also some indirect impact of the practice, such as MOOC authors sharing experiences among their colleagues, or lecturers accessing the online courses and translating some methodologies into their in-class teaching.

Another result of MOOC production consuming so much of a university's resources is **the current goal of MOOC management to make MOOC production financially sustainable** (Interview, Jiménez-Morales, 2018). An issue recently brought up frequently by universities worldwide is how to make online courses economically profitable while not "killing" the idea of their "openness". After all, the beauty of MOOCs is that they are massive and free – they make education widely accessible and reach people that traditional university courses cannot reach (for economic or other reasons) (Interview, Saladié, 2018). Hence, CLIK is working on a solution that would bring some income for the university but would not scare off students and deprive them of the free education.

Conclusions

Overall, the UPF's comprehensive assistance in MOOC production has been possible largely due to the use of internal resources that already existed within the university. UPF has a strong Department of Communication, and therefore equipment, technology and expertise relevant to audio-visual and video production. The 'smart' use of those resources, combined with the visionary approach of CLIK and strong support from the top university administration, has allowed for the creation of a considerable portfolio of innovative MOOCs.

The UPF's support for MOOC production has proved to be a successful way not only to accommodate the needs of 'contemporary' students or to promote the university's values beyond its walls, but also to provide significant development opportunities for the academics. The amount of learning and benefits they get from the production of MOOCs is significant and multi-dimensional (e.g. improvement of communication and digital skills, discovering new teaching methodologies, or an increased number of citations in research). However, every single MOOC is a big, costly, and time-consuming undertaking, and thus, although the benefits from it are significant, coverage of the practice is still quite limited.

UPF has a crucial advantage in possessing a strong technical and knowledge base, and **it could be very difficult to implement such a practice in most other universities**. Nevertheless, inter-university collaboration might help resolve this issue and also potentially lead to a more optimal use of resources as well as encourage learning from one another on organisational and institutional levels. What is also crucial for the implementation of such initiatives is that they are embedded in the university's broader vision. It is more likely to achieve expected outcomes of the practice and gain desired attention from academics with tangible (resources) and intangible (appreciation of innovative teaching) support from the university's top administration.

Information summary: CLIK

Table 7. CLIK information summary

Background	
Short general description of the practice (W)	The UPF's support for MOOC production involves mainly pedagogical advice, technological assistance, and general management of the initiative. Academics can submit proposals for their MOOCs, which are then evaluated and selected projects are realised.

Context of the practice	The practice involves a multidisciplinary team from different university units (the UPF MOOC team). It is led and coordinated by the Centre for Learning, Innovation, and Knowledge (CLIK). CLIK is the unit responsible for teaching-related PD at UPF.
Why was this practice initiated?	— To adapt to "the new kind of students" — To address the rapidly changing HE sector
What obstacles to academics' participation in professional development are addressed?	— Lack of motivation — Lack of resources and capacity
Main target of PD	Instructional development
Content area	— Digital competences — Innovative pedagogies
Processes	
Type of practice	— Mentoring — Technical and technological support
Nature of PD	Non-formal
Delivery	— The practice – onsite in HEI — The results – online
Type of course material used	— Audio-visual materials — Recordings
Provider	Formal education institution
Funding	About EUR 25,000 per MOOC. Type of funding: — Internal university's resources — Internal grants (PlaCLIK) — Some external research grants
Main challenges faced during the implementation of the practice	Internal: high costs, big workloads, and time constraints
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	— Grants for innovative teaching — Pedagogical support of CLIK — 'Discounts' in teaching hours for MOOC authors — A university's strategy focused on high-quality teaching
How are the results and the impact of the practice measured?	— Outreach of the MOOCs — Feedback from participants
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	— Communication skills — Digital skills — Valuable new experience
What is the impact of PD on academics' career paths?	Indirect – through personal development as well as increased number of citations

What is the impact of PD on the quality of teaching?	Significant impact in terms of learning new teaching methodologies, and understanding the student perspective
What is the impact of PD on students' learning?	— UPF students can complement their formal education, and catch up with courses — A broader audience has access to UPF's education offer for free

3.6 Provision of online materials for teaching development – the Teaching and Learning Centre (TLC)

London School of Economics and Political Science (LSE, UK)

Abstract: The Teaching and Learning Centre is a centralised unit at the London School of Economics and Political Science (LSE) responsible for the implementation of LSE's Education Strategy and the provision of PD for its academic staff. As one of their activities, TLC provides online learning materials that aim to disseminate information on innovative teaching methods and enhance their use across the university. The innovativeness of this practices lies in its complementarity with other TLC initiatives, especially individual consultations during which TLC academic advisors explain how resources can be adjusted to a specific teaching context. Additionally, the distinctive function of TLC as a link between a unified university strategy and relatively independent departments is a good example of how PD can be organised in big, decentralised HEIs.

Interviewees:

- Dr Jenni Carr, Academic Developer at TLC
- Anonymous interviewee

Introduction

The London School of Economics and Political Science (LSE) offers a broad range of PD opportunities through its Teaching and Learning Centre (TLC). TLC is a single centralised unit at LSE that aims to deliver the goals of LSE's Education Strategy across its large and decentralised structure. One of TLC's initiatives includes the provision of online resource materials for developing teaching practices. The materials are shared on the TLC website ([64]) and are accessible for academics who wish to get acquainted with information on good practices in didactics and/or recent innovative teaching methods implemented across LSE.

This case study focuses firstly on TLC's initiative in providing academics with online learning materials, its innovative aspects, and its effectiveness. The practice is analysed in relation to other related TLC initiatives as well as to LSE education policies. The case study then takes a closer look at how an education unit functions in a large and decentralised institution (i.e. an institution whose faculties have a significant degree of autonomy), and how a coherent education strategy can be implemented across such independent faculties.

Context

TLC is a single central entity within LSE that is responsible for the teaching-related PD of academic staff. TLC provides support for academics in the following five main areas ([65]):

- **Departmental support** consisted of dedicated advisors assigned for each academic department offering expertise and assistance in teaching-related issues including individual consultations.
- **Atlas programme**, a series of events and workshops that are organised throughout the academic year.
- **Postgraduate Certificate in Higher Education** (PGCertHE), leading to a formal teaching qualification certified by the UK Higher Education Academy (HEA). It is intended primarily to those relatively new to university teaching (e.g. PhD students). The PGCertHE is a requirement for newly appointed education career

([64]) See: https://info.lse.ac.uk/staff/divisions/Teaching-and-Learning-Centre/TLC-resource-materials/Resource-materials [accessed on 16 August 2018].

([65]) See: https://info.lse.ac.uk/staff/divisions/Teaching-and-Learning-Centre [accessed on 17 August 2018].

track (ECT) staff with less than three years of teaching experience ([66]). Additionally, lecturers who are experienced academics but relatively new to UK higher education are encouraged to join the programme.

- **Provision of online resource materials** for developing teaching practices (described below).
- **Teaching and Learning funding** – three funds to support teaching and learning development activities for: 1) individual academics, 2) LSE departments, and 3) heads of departments.

In their current form, online resource materials are grouped into the following six main categories ([67]):

- **Guidance resources** are short documents drafted by TLC academic developers and are designed to provide lecturers with quick, easy-to-reference advice across a range of topics (e.g. "Active learning in quantitative disciplines" or "Using class participation to develop student engagement").
- **Case studies** present outstanding teaching and learning enhancement measures incorporated by some LSE academics to provide examples of innovative didactics.
- **TLC audio-visual resources** are comprised of three short films featuring several teachers who discuss different ways of encouraging active learning in classes: creating a conducive environment, the use of effective questioning techniques, and the need for course leaders to lead by example and play an active role in facilitating weekly class teacher meetings.
- **LSE Assessment Toolkit** offers insights into a number of assessment methods, enabling lecturers to make informed decisions about the best way to assess students' learning, and select the right mix of methods for a particular course or programme.
- **Resources on feedback** provide guidance on how to give feedback to students on different assignments: exams, oral presentations, essays, etc.
- **Handbooks** gather useful information, guidance, contacts, and some best practices for Graduate Teaching Assistants (GTAs), Academic Advisers, and PhD Supervisors, and are revised annually ([68]).

Implementation

The reasons for the implementation of the selected practice derive from a trend in the UK's HE system, as well as within LSE, to focus more on teaching and learning, rather than exclusively on research. It is often argued that especially the introduction of the Teaching Excellence Framework (TEF) has provided a push for both HEIs and individual academics to pursue educational training (Interview, Anonymous interviewee, 2018). To address this issue, TLC has recently expanded staff-wise, and currently has 10 people on a team (Interview, Carr, 2018). TLC has also been restructured and incorporated some of the other university's bodies such as the Learning Technology and Innovation (LTI, a division of 12 people providing support and collaboration for staff in the use of technologies to enhance and innovate teaching) and some aspects of the role previously carried out by the Educational Strategy Unit (ESU). This increased capacity has allowed TLC to work on a number of initiatives including the design and provision of resource materials (Interview, Carr, 2018). Other stakeholders

([66]) For more information, see: https://info.lse.ac.uk/staff/divisions/Human-Resources/Assets/Documents/RRP/Education-Staff-CDR-Guidance-2017-18.pdf [accessed on 16 August 2018].

([67]) See: https://info.lse.ac.uk/staff/divisions/Teaching-and-Learning-Centre/TLC-resource-materials/Resource-materials [accessed on 16 August 2018].

([68]) The handbooks are available for download at: https://info.lse.ac.uk/staff/divisions/Teaching-and-Learning-Centre/TLC-resource-materials/Developing-your-teaching-practice [accessed on 20 August 2018].

within the university involved in academics' PD include the library, LSE Life (a centre for the academic, personal and professional development of students), and the PhD Academy (e.g. collaboration to produce the Handbook for PhD Supervisors).

The idea behind the provision of online resource materials is to gather best practices and innovative ideas in teaching in one place, make them easily accessible for academics, and disseminate them across LSE. The main area of focus of this particular initiative is obviously teaching skills and innovative pedagogies. However, academics can also develop their communication and creativity skills and learn how to encourage students to engage more in the classroom (Interview, Carr, 2018).

The idea is to gather best practices and innovative ideas in teaching in one place, make them easily accessible for academics, and disseminate them across LSE.

The TLC website that offers online resources was started about five years ago, and has been developed since. Many elements are being updated and some materials are being made more convenient and "prettier" so that they are more attractive to academics (Interview, Carr, 2018). **The current big goal for TLC is to develop a repository of open education resources**. It would provide a platform with resources and practices that already exist and are used by lecturers across LSE, but are not shared across the institution as they should be. TLC aims to publish and share open education resources so that academics can draw from them – either use them as they are or modify them for their own purposes and share back to the repository. The first part of the repository – the assessment toolkit - was launched in summer 2017 ([69]) and further elements should follow soon (Interview, Carr, 2018).

Results

The nature of the practice (provision of learning materials) makes its results very difficult to assess. So far the impact has been measured through surveys and focus groups on the usefulness of the resources ([70]). The outputs are then used to further develop TLC's offer of PD activities, and to enhance their usability. TLC as a whole is also reviewed by LSE just like any other department so as to assess whether it is providing good value. The unit was also praised by an interviewee as a skilled, knowledgeable and dedicated team, providing well-organised activities (Interview, Anonymous interviewee, 2018).

The expected direct impact of the initiative is on academics' skills and competences, since they learn about innovative pedagogies and ways to incorporate active learning in their classroom. Additionally, academics' use of learning materials should have an impact on their quality of teaching, but this impact is difficult to confirm since it is only one of many factors influencing academics' teaching habits. Nevertheless, it can be expected that, for example, the availability of the assessment toolkit will encourage some academics to use more innovative and/or diversified evaluation methods. However, a bigger impact on teaching quality is usually linked to the PGCertHE programme thanks to which academics get a formal teaching qualification and then disseminate these practices across LSE (Interviews, Carr, 2018; Anonymous interviewee, 2018). There is no evidence on the impact of the practice on academics' careers. In a research-intense university such as LSE, their career progress is mostly evaluated based on research outcomes (Interview, Anonymous interviewee; Carr, 2018). Even though academics do need to show how they are engaging in teaching and learning as a part of their professional review, that does not have parity with research outcomes (Interview, Carr, 2018). Finally, it is expected that the practice will have an impact on students' performance, and more importantly on their engagement, thanks to a push from traditional lecturing to more active learning. However, TLC does not measure the impact of their initiatives on

([69]) See: https://info.lse.ac.uk/staff/divisions/Teaching-and-Learning-Centre/Assessment-Toolkit/LSE-Assessment-Toolkit [accessed on 16 August 2018].

([70]) The results of those measures are not available for third parties.

students. Student satisfaction is assessed at LSE level or national level through evaluations such as National Student Survey or Teaching Excellence Framework. It is quite possible, though, to link the results of such evaluations to the PD opportunities offered by TLC.

Analysis of the practice

Innovation in this PD practice

The provision of educational resources as a stand-alone strategy is not considered an effective or innovative tool for fostering innovative teaching development. In fact, Cordingley et al. (2015) argue that didactic models in which academics are simply told what to do or are given materials without the opportunity to develop their skills do not have any significant impact on teaching practices or student learning. The superiority of active learning over passive learning has been acknowledged across the literature (see, for example, Stewart 2014). In the case of TLC, the organisers actually admitted that resources alone are quite limited and mostly presented in an unattractive form (Interview, Carr, 2018). Neither do they consider it an innovative practice, arguing that the idea draws on solutions that have been in place for quite a long time (i.e. open education resources).

However, in this case, **the innovativeness comes not from the materials in themselves but from the way they are used**. The provision of online resource materials is very much linked with the two other TLC schemes – departmental support and funding – and this is argued to be the main source of its effectiveness and innovativeness. The guidance as well as funding allows motivated academics to work on improving their teaching and developing new practices. The results of their work are that some extraordinary teaching and learning enhancement measures are then shared in the form of TLC resource materials, such as case studies. Additionally, the materials work especially well with the individual advice offered by TLC staff. As explained by a TLC representative, TLC experts provide expertise on how resources can be adjusted and how the practices proposed can be used in a specific teaching context (Interview, Carr, 2018). The ready-to-use resources also make individual consultation more efficient – TLC advisors used to send materials via email when asked for additional support or information on certain issues – now they can refer to online resources (Interview, Carr, 2018). Overall, wraparound guidance is the element that ensures a more effective use of resources, while funding provides more and more cases to draw on and inspire other academics across LSE.

Wraparound guidance ensures a more effective use of resources, while funding provides more and more cases to draw on and inspire other academics across LSE.

Strategy for addressing obstacles to PD

The availability of educational materials primarily addresses the obstacle of academics' lack of time. In fact, it is probably the most effective PD mode in tackling this obstacle since they are available for academics at all times from any place, and thus do not collide with their busy schedules. As highlighted during the interview, lack of time is among the greatest obstacles for lecturers to engage in developing their teaching skills (Interview, Carr, 2018). This arguably derives from an imbalance between research and education in the HE system. Despite the recent attention shift and acknowledgment of the importance of teaching, LSE has historically been, and still is, a research-intensive institution. Hence, scientific outputs are much more appreciated than teaching performance, what is reflected in, among other things, promotion and remuneration schemes. From the PD provider's perspective, it is thus challenging to get a group of academics in a room for teaching-related training (Interview, Carr, 2018). **By making resources accessible for academics at all times and from any place, this practice is a straightforward answer to the obstacle of a lack of time** for teaching-related activities, and especially for 'extra' activities such as PD.

Additionally, the employment of professional educational advisors within TLC overcomes the common obstacle of a lack of expertise and know-how about effective teaching and learning practices within the university. Advisors use their expertise to design the online materials and to guide academics through individual consultations. Their provision of resources copes with the problem of academics' lack of awareness about innovative teaching methods. The methods are clearly presented and easily accessible for every academic within and even outside LSE as the materials are published on the TLC website and are available for everyone with no restrictions.

Another important obstacle, quite specific to LSE, is difficulty in promoting the practices across the institution (Interview, Carr, 2018). As a response to changing the HE environment, LSE has developed a unified 'LSE Education Strategy 2015-2020' which emphasises parity of research and education as the university's functions: "LSE expects the quality of its educational experience for students to be of an equivalent standard to its research performance (…)" ([71]). Accordingly, TLC is a relatively single and centralised body. This centralisation creates a significant capacity and economies of scale, and helps to identify diverse professional development needs according to the various functions of faculty members, rather than their disciplinary backgrounds. Thus, it allows for a high differentiation of professional development opportunities. At the same time, the Strategy highlights the high independence of LSE's departments: "LSE departments lead in the provision of excellent disciplinary and interdisciplinary education" ([72]). Hence, the departments have very different approaches towards innovative teaching and teaching-related PD.

Having one centralised educational unit allows for a high differentiation of professional development opportunities.

How to ensure the swift implementation of a broad policy in such diverse contexts? Jacob, Xiong and Ye (2015) argue that **effective PD centres require top-level administrative support** to legitimise their standing, to provide broad institutional and financial assistance, and to ensure that the centre is able to outreach to all colleges or departments across the university. In the case of LSE, all three conditions seem to be met:

1. Legitimisation comes from the highest university structures through the authority of the Pro-Director Education as well as the strategy itself.
2. Institutional and financial support comes from LSE and is incorporated into its strategy: "The School will provide resources, as well as a culture and infrastructure of aspiration and support in terms of the development, enhancement and administration of education" ([73]).
3. Finally, outreach across LSE is ensured through TLC, which works mostly at a departmental level, where the largest impact can be achieved (Interview, Carr, 2018), and contributes to the implementation of the strategy 'on the ground'.

Challenges and prospects

An important remaining challenge is the one of academics' motivation to develop their teaching. As highlighted in an interview, the greatest issue in the implementation of the practice was to promote its use among the staff (Interview, Carr, 2018). **Because research outputs are disproportionately more valued in terms of reputation and career progress, developing teaching skills does not receive sufficient attention**. Even with the recent shift in the UK's HE sector, there is still great pressure on academics to publish high-quality research in top journals, and hence they tend to focus much less

([71]) See: *LSE Education Strategy 2015-2020,* p. 3. Available at: http://www.lse.ac.uk/About-LSE/Image-assets/PDF/Education-Strategy.pdf [accessed on 17 August 2018].

([72]) See: *LSE Education Strategy 2015-2020,* p. 7.

([73]) See: *LSE Education Strategy 2015-2020,* p. 7.

on developing their teaching (Interview, Anonymous interviewee, 2018). Therefore, we argue that the university could place more attention on adjusting promotion and remuneration schemes so that they would encourage educational PD. So far, even though according to the LSE Education Strategy teaching contribution is assessed in concert with research productivity at the annual performance review and promotion, in reality teaching engagement has a far lower stance compared to research outputs (Interview, Carr, 2018). A better balance between research and teaching would improve take-up and increase the impact of PD initiatives in general and online resource materials in particular since they often require more self-motivation.

Another aspect that could, in the near future, make the use of online resources both more productive and attractive for the academics is the idea of creating a shared repository for innovative teaching methods (i.e. a platform that would gather resources and practices used by lecturers across LSE in an attractive and more interactive manner). This idea, which is still being developed by TLC, would not only smooth out the process of making innovative teaching ideas broadly accessible but it might also create a kind of community of practice at LSE. Academics tend to share their teaching experiences among each other in more informal contexts (e.g. a chat with colleagues) (Interview, Anonymous interviewee, 2018), but often lack the opportunity to widen the scope of such a practice. A more structured approach could allow for more effective good practice dissemination, encourage its use, and even positively influence the culture of the institution (Darling-Hammond, Hyler & Gardner 2017). Therefore, the repository can be expected not only to facilitate teaching innovation, but also to mitigate the domination of research in academics' agendas.

Academics tend to share their teaching experiences among each other in more informal contexts, but often lack an opportunity to widen the scope of such a practice.

Conclusions

TLC is a unit at LSE legitimised to support the implementation of the university's Education Strategy across its very independent departments. **Having a centralised centre for teaching and learning development, rather than leaving this responsibility to each individual department, allows for greater economies of scale and therefore a very wide PD offer**. It also helps to identify diverse professional development needs according to the various functions of faculty members, rather than their disciplinary backgrounds. Additionally, it can be argued that TLC is an effective 'intermediary' between the university's top administrative level and single faculties and individuals.

The provision of online resource materials by TLC is a very effective measure in addressing the issue of academics' lack of time. Even though as a stand-alone strategy it is argued to be rather traditional and inefficient, when combined with departmental support offered by TLC and LSE's increased funding it can provide an innovative and valuable supplement to a broader PD strategy. The current development of a shared repository of good teaching practices is a very promising initiative that incorporates the aspect of collaboration, proven to be effective for academics' PD. Nonetheless, **an institutional solution regarding remuneration and promotion schemes based on teaching performance should be in place to ensure motivation among the staff to develop their teaching skills**. It is difficult to imagine that teaching will become a priority for academics as long as the systemic disparity between research and education functions in HE exists.

Information summary: TLC

Table 8. TLC information summary

Background	
Short general description of the practice (W)	Resource materials are shared on the TLC website and are accessible for academics who wish to get acquainted with information on good practices in didactics or recent innovative teaching methods implemented across LSE.
Context of the practice	LSE has a very centralised PD model and a single body responsible for it –Teaching and Learning Centre (TLC). They provide support in five main areas: — Departmental support – dedicated advisors for each academic department. — Atlas programme – a series of events and workshops organised throughout the academic year. — Postgraduate Certificate in Higher Education (PGCertHE) – a programme leading to formal qualification certified by the UK HEA. — Provision of online resource materials on developing teaching practices. — Teaching and Learning funding.
Why was this practice initiated?	To gather best practices and innovative ideas in teaching in one place, make them easily accessible for academics, and disseminate them across LSE.
What obstacles to academics' participation in professional development are addressed?	— Lack of awareness of innovative teaching methods — Lack of expertise — Lack of time
Main target of PD	To collect good practices in teaching by educational experts, and make them easily accessible for lecturers.
Content area	— Innovative pedagogies — Giving and receiving feedback
Processes	
Type of practice	Materials for personal research
Nature of PD	Non-formal
Delivery	Mostly digital, some materials available also in hard copies (e.g. handbooks).
Type of course material used	Training and reference manuals (i.e. books describing training content and/or training methods): — Printed — Digital
Provider	Formal educational institution
Funding	Fully funded internally
Main challenges faced during the implementation of the practice	Promotion across departments.

Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	A broad range of PD opportunities offered by TLC. Improvement of education quality and thus teaching-related PD is expressed in LSE's Education Strategy. Relevant funding follows its implementation allowing for restructuring and enlarging TLC.
How are the results and the impact of the practice measured?	The impact has been measured by surveys and focus groups on the usefulness of the resources. The outputs are then used in the development of the TLC offerings. TLC as a whole is also reviewed by LSE so as to assess whether it is providing good value.
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	The direct impact of the initiative is on academics' skills and competences since they learn about innovative pedagogies and ways to incorporate active learning in their classroom.
What is the impact of PD on academics' career paths?	In a research-intense university such as LSE, their career progress is evaluated based on research outcomes. Even though academics do need to show how they are engaging in T&L as part of their professional review, it definitely does not have parity with research outcomes.
What is the impact of PD on the quality of teaching?	There should be an impact on quality of teaching but it is difficult to confirm from looking only at the provision of resources.
What is the impact of PD on students' learning?	TLC does not measure the impact on students – this is only done at LSE level or national level through evaluations such as the National Student Survey or the Teaching Excellence Framework.

3.7 Technology Enhanced Learning in Health Education – iTEL Hub

King's College London (UK)

Abstract: The iTEL Hub provides services for developing digital resources for online and blended learning use. It supports PD of academics who specialise in health education. The iTEL Hub is an internal initiative of King's College London catering to: the Faculty of Dentistry, Oral & Craniofacial Sciences and the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care. The main providers of PD activities are the faculties, but the iTEL Hub supports the system by providing different development support required for the PD. Innovative practices of the iTEL Hub include a personalised approach and a focus on the individual needs of the staff, collaboration and co-design of course materials with students, and the provision and development of digital solutions relevant to the two faculties. This case study analyses the factors contributing to the hub's success, and shows how the development of PD can be encouraged in the healthcare sciences.

Interviewees:

- Dr Jonathan P. San Diego, Director of the iTEL Hub
- Professor Mark Woolford, Associate Dean for Education at the Dental Institute

Introduction

PD development at King's College London (King's) is supported by different groups of staff helping academics produce resources. The iTEL Hub is one of these service teams. The iTEL Hub provides expertise and support in pedagogy, curriculum design and learning design for staff members wishing to embed technologies for teaching, learning and assessment in their courses at the Faculty of Dentistry, Oral & Craniofacial Sciences (FoDOCS; formerly Dental Institute) and the Florence Nightingale Faculty of Nursing, Midwifery & Palliative Care (FNFNMPC) at King's. It is an example of supporting innovative PD practices in health education. The hub aims to meet the King's Technology Enhanced Learning (TEL) Strategy in the aforementioned departments by contributing to courses, workshops and seminars offered to the academic staff; offering individual help for academics wishing to embed technologies in their courses; and providing technical support for the available resources. All activities that are organised or supported by the iTEL Hub are focused on specific aspects: the use of digital tools for teaching materials and an innovative approach to curriculum design. According to the director of the iTEL Hub the initiative is in response to the needs of the FoDOCS and FNFNMPC staff.

A digital approach to traditional fields in healthcare together with the collaboration and co-design of the course materials with students are the most innovative aspects of the initiative. The success of the project is reflected in its expansion and publication of academics' TEL-related work. This case study focuses on iTEL Hub activities at the FoDOCS and investigates the factors that contribute to its success and make it stand out as a practice.

Context

King's, with about 26,000 students and 3,730 academic faculty staff, ranks 31st in the 2018 Quacquarelli Symonds Global World Ranking ([74]). As one of the leading HEIs, King's offers a wide variety of PD programmes for its academics. It ensures that digital technologies are incorporated into education by pursuing the King's TEL Strategy ([75]),

[74] See: https://www.topuniversities.com/universities/kings-college-london#wurs [accessed on 4 September 2018].

[75] See: https://www.kcl.ac.uk/study/learningteaching/ctel/Documents/TEL-Strategy-Temple.pdf [accessed on 21 September 2018].

which outlines a benchmark for online education activities, TEL training and TEL research output. The iTEL Hub was established in 2012 in order to ensure that all courses offered by the FoDOCS and the FNFNMPC meet the TEL benchmark and that they use appropriate learning technologies to enhance the face-to-face and the distance-teaching and learning experience ([76]).

The iTEL Hub began with a team of four staff members looking over the FoDOCS and expanded to include eight staff members looking after two faculties – the FoDOCS and the FNFNMPC (Interview, San Diego, 2018). The nature of the professionals working in dentistry, nursing and midwifery, and palliative care lies in the fact that a large number of the academic staff work only part-time at the HEI as they also work in clinics and hospitals. Some of the FoDOCS and FNFNMPC employees also work at the King's College Hospital NHS Foundation Trust (the university's hospital) and therefore have limited time to develop innovative teaching resources. Also, a large number of academics working at the FoDOCS and the FNFNMPC do not have formal educational qualifications. This makes it challenging to use technology-enhanced pedagogies (Interview, San Diego, 2018). Additionally, academics find it difficult to move away from traditional teaching practices and lack information on the use of digital technologies in teaching.

Implementation

The iTEL Hub aims to encourage and support Technology Enhanced Learning through the implementation of different activities. First of all, the Hub offers training and workshops that help the academics by teaching them how available digital technologies might be adapted to their needs. The faculties, together with the support of the iTEL Hub, currently offer different training sessions, such as ([77]): using the virtual learning environment (King's E-learning and Teaching Service (KEATS)); production of interactive multimedia resources (podcasts, digital films, vodcasts, animations, 3D graphics, etc.); and Rapid Slide cast/Screencast Production. In addition to arranging face-to-face workshops and seminars, online courses and materials are available in order to accommodate the academics' time constraints. The KEATS virtual learning environment training covers the basic operations of the tools available in the virtual learning environment (incl. file upload, update of information on the course, setting up discussion forums, creating and managing groups, creating multiple choice tests, receiving assignments online and plagiarism check). Participants in this training are also familiarised with how the tools are used in context within the curriculum platform. The production of interactive multimedia resources training is on the basics of digital recording and production (storyboarding, filming, scripting, dubbing, etc.). In the Rapid Slide cast/Screencast Production course, academics can learn how to produce a screencast (i.e. a video screen capture with audio narration) or a slide cast (i.e., an audio podcast that is combined with a slideshow) and identify ways in which they can be used for teaching the topics teachers want students to learn.

Most of the workshops last from one hour up to a whole day (depending on the requirement). The more extensive courses are usually offered online. All of the courses offered by the iTEL Hub are free of charge and the participants do not receive any financial support or compensation from the university (Interview, Woolford, 2018). The PD credit training courses offered by the iTEL Hub are both formal and non-formal. The FoDOCS' and FNFNMPC's staff can make use of the services through an online platform ([78]), where all of the courses are advertised and can be booked.

[76] See: https://www.kcl.ac.uk/dentistry/innovation/itelhub/index.aspx [accessed on 4 September 2018]

[77] See: https://www.kcl.ac.uk/dentistry/innovation/itelhub/seminars.aspx [accessed on 5 September 2018]

[78] The courses in an online platform are available through internal webpages that can only be accessed with a King's ID

Furthermore, many of the iTEL Hub services are offered on an individual basis. Interested academics can turn to the iTEL Hub's staff and discuss their needs. The iTEL Hub provides expertise and support in pedagogy, curriculum design and learning design for staff members wishing to embed technologies for teaching, learning, and assessment in their courses. For instance, the staff of the iTEL Hub offer support in the design, development, implementation and evaluation of the Virtual Learning Environment (currently). Moreover, the iTEL Hub provides consultations and other services for developing digital resources for online and blended learning use. The iTEL Hub also provides help related to the design and development of teaching and learning materials. This help includes enhancing curricular design and designing learning activities, as well as contributing to the development of high-quality e-learning materials.

The iTEL Hub supports academics in teaching with simulators, including a dental chair with a mannequin head and dental haptic (virtual touch) workstations in the course.

The iTEL Hub supports academics in teaching with simulators, including a dental chair with a mannequin head and dental haptic (virtual touch) workstations in the course.

Finally, in order to enhance traditional teaching approaches, the hub also supports teaching with advanced digital technologies (e.g., simulation, haptic devices) by offering technical support. The iTEL Hub explores emerging technologies and also supports academics by helping them apply available technologies and devices in their courses. The hub staff are also present when the devices are used in classes, so they are able to help with any issues that arise. For instance, in FoDOCS, students are taught using a dental chair simulator with a mannequin head and haptic dental workstations in the curriculum. This realistic mannequin head enables students to practise dental techniques in conditions closely resembling real life, and haptic technologies enable students to learn practical dental procedures in virtual reality through the sense of touch and force ([79]).

The iTEL Hub is funded by FoDOCS and FNFNMPC (Interview, San Diego, 2018). The development of haptic devices at the iTEL Hub has been funded by UK research council grants (Interview, Woolford, 2018). In order to ensure the effectiveness of the initiative, the iTEL Hub directly collaborates not only with academics but also with students. The iTEL Hub offers paid internships to students who support the department in curriculum design, video processing and other course-related work. Undergraduate and graduate dentistry students help the academics in incorporating digital technologies into the curriculum, thus enhancing the initiative and becoming a part of the innovation processes (Interview, Woolford, 2018).

The activities of the iTEL Hub are focused on a specific academic aspect: the improvement of the digital experience for the staff and students of two specific faculties by providing pedagogic and technological expertise in learning technologies. Meanwhile, the university and faculties are responsible for the more general and universal PD of academics. For instance, King's offers mandatory and voluntary PD courses to all of its staff, academic study and research leave, networking events, conferences, and worldwide partnerships ([80]). Furthermore, academics working in healthcare fields are encouraged to learn not only by the rules of their HEIs but also through more general requirements. The professional communities require health practitioners to undertake PD activities. The General Dental Council ([81]) (GDC) – a UK statutory regulator, which registers qualified dental professionals, requires at least 100 hours of PD per a five-year cycle from its licensed dentists ([82]).

[79] See: https://www.kcl.ac.uk/study/learningteaching/ctel/Projects/Research/Haptic-Technologies.aspx [accessed on 19 September 2018]

[80] See: https://www.kcl.ac.uk/hr/staffbenefits/develop.aspx [accessed 19 September 2018]

[81] See: https://www.gdc-uk.org/ [accessed on 19 September 2018]

[82] See: GDC's, Enhanced CPD guidance (2018). Available at: https://www.gdc-uk.org/api/files/ECPD-guidance-for-professionals.pdf [accessed on 10 September 2018].

Results

The direct impact of the iTEL Hub's support on academics' digital competences and the quality of teaching is difficult to assess. Nevertheless, many factors make it possible to state that iTEL Hub activities might have led to stronger competences on the part of academics. The initiative might also be expected to have a positive impact on teaching quality and students' learning, as well as academics' education career paths. First of all, it seems that the iTEL Hub contributes towards the strengthened digital competences of academics. The investment provided supports academics as digital educators, able to cope with the varying and challenging demands of digital technologies. Furthermore, there appears to be recognition that the iTEL Hub's support has changed the staff's attitude towards digital technologies. Starting from the 'What can learning technologies do for us?' attitude, they switched to one of 'What can we do together for technologies?' Nevertheless, it cannot be claimed that the knowledge acquired always translates into improved teaching quality. The mechanism is more complicated and success depends on the willingness and enthusiasm of the individual academic. Individual reflection on one's teaching and learning practices is crucial in creating a change in instructional methods. Implementation of the acquired knowledge depends on individual approaches to teaching and an academic's decision to use the material, and is essential in improving teaching quality (Interview, Woolford, 2018).

Even though it can be expected that some academics will be unwilling to initiate changes in instructional methods even after they become familiar with modern teaching technologies, this only sometimes becomes reality. The interviewed representatives of the HEI claim that implementation of the innovative teaching methods and digital tools provided by the iTEL Hub have often resulted in improved teaching materials that are "more learnable, feasible, and better correspond to the learning standards" (Interview, San Diego, 2018). The more active use of digital technologies is appreciated by both staff and students. For instance, internal survey results show that students feel that they are being taught better, and also learn more when their access to teaching materials is improved (Interview, Woolford, 2018). Moreover, based on the National Student Survey ([83]), 76% of the surveyed undergraduate dentistry students at King's agree that the IT resources and facilities provided have supported their learning well, and 91% say that they have been able to access course-specific resources such as equipment, facilities and software when needed ([84]). The implemented technologies, illustrated by the availability of course materials on KEATS and the use of interactive polls during class, have helped students to feel that they were taught well (Interview, Woolford, 2018).

Knowledge of and experience with digital technologies makes academics more competitive in the labour market, thus giving them opportunities for further career development.

Participation in PD activities provided by the faculties and the support of the iTEL Hub might also contribute to academics' education career paths. Research shows that the PD impact on career progression can be considered in two ways. Firstly, enhanced teaching skills increase an academic's chances of being promoted and can result in reward opportunities from the university ([85]).

[83] See: https://www.thestudentsurvey.com/index.php [accessed on 19 September 2018]

[84] See: https://unistats.ac.uk/subjects/satisfaction/10003645FT-UBDS5NSDN/ReturnTo/Search [accessed on 19 September 2018]

[85] Wall, J. (2013). A Framework for Academic Professional Development in Higher Education.
Kneale, P., Winter, J., Turner, R., Spowart, L., Hughes, J., McKenna, C., and Muneer, R. (2016). Evaluating Teaching Development in Higher Education. Towards Impact Assessment: Literature Review. York: Higher Education Academy.

Secondly, declaring PD efforts demonstrates a commitment to the profession, enriches one's CV and makes academics aware of the importance of adapting to a dynamically changing professional environment ([86]). In the case of healthcare educators, their participation in the iTEL Hub's PD credited training contributes to professional development. Through cooperation on course design with students, academics are becoming better educators and advancing their careers. Knowledge of and experience with digital technologies makes them more competitive in the labour market, thus giving them opportunities for further career development. As experienced and acknowledged lecturers, they can apply for more senior positions and promotions.

Knowledge of and experience with digital technologies makes academics more competitive in the labour market, thus giving them opportunities for further career development.

The iTEL Hub activities seem to contribute to the spread of knowledge about digital teaching technologies not only inside but also outside of King's. They also possibly enhance the recognition of King's among academics working in different HEIs. As the result of taking part in the Hub's activities, academics are able to own the rights to some of the designs of the technologies developed at the iTEL Hub. Research about these technologies is being publicised and utilised, not only at King's but also externally. The hub encourages and helps with the publication of academics' relevant work regarding the evaluation of technologies for teaching. For example, papers by the hub's academics on the use of virtual haptic simulators in clinical skills acquisition have been published (Ria et al., 2018; Hariri-Rad et al., 2017). Finally, the iTEL Hub contributes to the financial success of the university. Since the resources developed at the iTEL Hub may be utilised outside of King's, other universities can express interest in licensing agreements and thus bring business to King's.

Analysis of the practice

Innovation in this PD practice

The uniqueness and innovativeness of the iTEL Hub lies in the fact that it provides tailored help to targeted university faculties. It focuses on the issues and needs of the staff and students at the FoDOCS and the FNFNMPC. More specifically, it has a digital approach to traditional fields in healthcare. Moreover, the design of the credited PD training organised by the iTEL Hub is quite innovative (e.g., online courses are available, active learning techniques are incorporated).

Limiting the initiative's focus and support to two faculties allows the iTEL Hub to learn about the specific teaching and learning requirements in the context of healthcare education.

Limiting the Hub's focus to two faculties allows for a focus on the specific needs of the academic staff at the FoDOCS and FNFNMPC. A narrow focus also allows the iTEL Hub to learn about the specific teaching and learning requirements in the context of healthcare education.

Additionally, it allows for a more **personalised approach** and better accommodates academics' traditional pedagogical attitudes, which is crucial to bringing about an improved outcome (Postareff & Nevgi, 2015). Moreover, such an approach allows for internal collaboration. The "communities of practice" can foster knowledge and good practices in faculties (Stewart, 2014; Dysart & Weckerle 2015), thus spreading the positive impact of PD within the department. The organisers also emphasise the support for collaboration between staff and students in co-designing courses, which helps in **designing course materials that fit the students' needs**.

[86] Wall, J. (2013). A Framework for Academic Professional Development in Higher Education.

The **provision of digital solutions relevant to healthcare education**, such as supporting the use of virtual and augmented reality (VR and AR), is another feature of the iTEL Hub that illustrates its success in the efficient and innovative provision of PD. The use of haptic dental workstations, for example, familiarises the academics with recent digital inventions and improvements in dentistry and enables extremely precise pre-clinical education. Through its mission to enhance the understanding of learning and teaching processes, the iTEL Hub collaborates with the staff and exposes them to new technological developments in their field. The familiarity with VR and AR allows the academics to enhance their teaching and to incorporate their new experiences into TEL research.

In order to encourage academics to participate in the iTEL Hub's activities and to increase its effectiveness, the initiative innovates the format of PD credited training and introduces new techniques into previously applied traditional methods. For example, the 'sit-and-listen' lectures now **incorporate active learning**, so that academics can learn about digital technologies and at the same time master their use in practice. Such an approach increases the likelihood of implementing the digital technologies in classes. Academics can improve their knowledge about digital technologies not only in more traditional face to face lectures, but also in online courses. The online courses offered by the Hub are of a sustained duration, which allows the participants to gain in-depth knowledge, experiment and implement the practices during the continuous process.

Strategy for addressing obstacles to PD

There are several possible reasons why some academics do not spend a lot of time on their PD and stick to established teaching traditions. The activities of the iTEL Hub and King's effectively address three main obstacles for PD and the implementation of innovative teaching practices that are especially relevant in health education: the very limited time available to the academics, not being aware of what is possible to use in their teaching practices (lack of knowledge), and resistance to change (lack of encouragement from the outside).

First of all, the most important obstacle for the healthcare faculties' staff that decreases the chances for the implementation of modern teaching technologies and new materials into their courses is **limited time**. Most teachers in the faculty are part-timers; therefore they have limited time to develop innovative teaching resources. The iTEL Hub addresses this obstacle by 'saving' the time of academics willing to embed technologies for teaching, learning and assessment in their courses. Instead of spending a lot of time trying to understand particular technologies and apply them to their specific needs, academics can contact the staff of the iTEL Hub and ask for help. The support of professionals makes the process of implementing new technologies less time-consuming for busy academics. Furthermore, the especially busy schedules of academics in the healthcare faculties increase the risk that they will not have enough time for their PD (e.g. they often would not be able to participate in long-term training). The iTEL Hub reacts to this by trying to make their credited training and other activities compatible with busy schedules. For instance, based on their personal needs, academics can choose to participate in training and workshops of different durations. Moreover, the schedule of available online courses is more flexible compared to traditional training. The literature shows that providing a blended learning strategy to academics can significantly increase the take-up of PD courses (Jacob, Xiong & Ye, 2015).

Secondly, academics might not be willing to embed new teaching technologies or strengthen their digital competences simply because they **might not know about the existence of particular technologies that would be useful in the courses that they teach**. The iTEL Hub tries to ensure that academics in the FoDOCS and the FNFNMPC are aware of what is possible to use in their teaching practices. The iTEL Hub provides comprehensive theoretical and practical information on digital technologies suitable for faculty needs, and constantly looks for new developments in the field. While participating in the iTEL Hub activities, academics become informed about the existence

of new technologies, their potential benefits to their teaching quality, as well as learn how exactly these technologies might be used and utilised in the courses that they teach.

Thirdly, academics might be unwilling to invest their time into PD or the implementation of new practices and technologies because of a lack of extrinsic motivation. It means that **the probability of academics' active participation in PD activities and the application of new materials and resources increases when academics are encouraged by their faculties, universities, or professional communities**. Support given to the iTEL Hub by the faculties has provided extrinsic motivation to academics to participate in the iTEL Hub's activities. Because of this support, academics in the faculties see that TEL as well as the digital education of academics is interpreted as essential and appreciated by the faculties. This works as encouragement for academics to learn and utilise modern resources in the courses that they teach. Furthermore, the university enables its staff to learn and improve through a dedicated policy and wide offer of PD activities for all staff. The iTEL Hub is the place at King's where FoDOCS and FNFNMPC staff can gain experience and digital education. King's is not only motivated to provide better quality education and incentivise staff to develop their skills through TEL training, it also has the know-how and the qualified experts necessary to implement successful PD programmes. Finally, the professional communities that unite health practitioners enforce rules and requirements for their members' PD. Such requirements generally focus on professional knowledge and keeping up to date with developments and advancements in the field, which can contribute to the teaching training needs of professionals. In the case of FoDOCS and FNFNMPC staff, these requirements can encourage the academics to participate in the iTEL Hub's activities as they are recognised by the faculty and can be used for PD hours' credit for the GDC and NMC.

Challenges and prospects

The financial sustainability of the practice is ensured directly by the university, and university funding is justified indirectly by the benefits brought about through the work of the iTEL Hub. The funding from King's finances the department itself, including staff and interns' salaries, and the infrastructure. The **developed resources offer opportunities for international projects with other institutions**, thus earning money for the initiative. Investing in the PD of academics enhances the profession, which is visible in the student surveys, and **increases the prestige of the university**, thereby attracting more students and justifies the tuition fees and income. The focus on publishing TEL-related research improves a university's rankings and attracts distinguished academics to join cutting-edge departments. Finally, a university known for being the best in technical innovation in dental education attracts companies and investors from the industry that are willing to contribute money to the further development of the technologies.

The focus on publishing TEL-related research improves a university's rankings and attracts distinguished academics to join cutting-edge departments.

The individual approach and time-flexibility offered to academics require quite significant expenditure on staff. Moreover, **academics often underestimate the amount of time they need to devote to the courses** and are unable to complete them. Additionally, technologies unfold and expand very quickly. The hub's staff constantly need to renew their knowledge and adapt offered teaching materials in order to make sure that they are not outdated and that all of the latest technologies are enhanced.

This initiative can be replicated in other HEIs. It may be applicable to multi-faculty HEIs, which can create department-specific bodies that support and develop the resources and training required for PD, as well as smaller, specialised institutions (e.g. Business Schools), which can offer PD related to their field. As the iTEL Hub has a limited focus, it requires specific knowledge in order to provide relevant support and digital technologies. The user-friendly course format will be appreciated by all time-constrained academics and the use of digital technologies can improve the quality of teaching in any course. One

of the success factors of the iTEL Hub's activities is the fact that this initiative is an indispensable part of the general strategy of the university. More particularly, the iTEL Hub was created to meet the King's internal and TEL strategy in the FoDOCS and the FNFNMPC faculties. The development of digital technologies can be costly and would often require external funding. Moreover, implementing digital technologies such as a Virtual Learning Environment often needs to be coordinated at the HEI in order to ensure compatibility and regulatory compliance.

Conclusions

The internal incentive of King's College London – the iTEL Hub - offers support and development of the resources and training required for PD, including courses and help with developing teaching resources. It has been considered a worthwhile initiative in changing the perspective of academics on digital technologies and in equipping them with Technology Enhanced Learning skills.

Following the spirit of King's College London, other higher education institutions can encourage their staff to constantly excel not only as researchers but also as educators, by providing Continuous Professional Development opportunities. The iTEL Hub provides comprehensive theoretical and practical information on digital technologies suitable for the departments and constantly looks for new developments in the field, thus informing academics about technological advances and how they can be applied in teaching. In order to alleviate the time-burden of academics, the administration of faculties, together with the support of the iTEL Hub, offer online courses and individual consultations characterised by considerable time-flexibility. Furthermore, the support and encouragement of the healthcare council as well as the overarching attitude of the institution promotes the institutional culture of Continuous Professional Development.

Information summary: iTEL Hub

Table 9. iTEL Hub information summary

Background	
Short general description of the practice (W)	This initiative was created as part of the internal and TEL strategy in the FoDOCS and the FNFNMPC departments at King's. The iTEL Hub offers PD credited training, workshops and seminars to the academic staff. Organised activities focus on the implementation of digital tools into teaching materials and an innovative approach to curriculum design.
Context of the practice	The institution has an internal TEL strategy in place. There is also a Centre for Technology Enhanced Learning (CTEL), which is leading the implementation and delivery of the King's TEL Strategy and offers PD activities and training to the staff. CTEL has launched several projects pertaining to the implementation of TEL. Thematically they cover the evaluation of lectures, video streaming, KEATS, and classroom space development.
Why was this practice initiated?	The demand for distance and the blended learning delivery of courses, academics' limited time and experience in developing learning materials of the staff was the reason for initiating the iTEL Hub.
What obstacles to academics' participation in professional development are addressed?	— Limited time availability in developing digital teaching resources — Lack of innovative resources

Main target of PD	— Faculty development — Instructional design and digital resources development
Content area	— Issues linked with ICT and needs for digital learning — Digital competences — Innovative pedagogies
Processes	
Type of practice	Implementation of TEL strategy by means of: — Online courses — Qualification programmes — Consultancy services — Help in curriculum design — Providing e-assessment technologies — Providing digital solutions in dental education — Identifying new technologies with possible application for dental education — Workshops: o Virtual learning environment KEATS training (basic operations on the KEATS platform) o Use of the virtual learning environment (King's E-learning and Teaching Service (KEATS)) o Academic Poster Design, Educational Podcast Production of interactive multimedia resources (podcasts, digital films, vodcasts, animations, 3D graphics, etc.) o Rapid Slidecast/Screencast Production
Nature of PD	Formal and Non-formal
Delivery	Blended
Type of course material used	— Digital didactic materials — Software
Provider	Formal education institution
Funding	Type of funding: — The iTEL Hub is financed by the university through two faculties (FoDOCS and FNFNMPC) and has an additional budget for developing course materials
Main challenges faced during the implementation of the practice	Internal (staff-related): lack of time
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	Polices and institutional culture promote PD, with initiatives including: — Future Research Leaders Programme (developing individual leadership skills) — King's Academy (supporting all staff in enhancing the teaching and learning environment) — The Centre for Research Staff Development (professional development support for research staff). — The Centre for Doctoral Studies (training for new PhD supervisors and refresher courses for experienced academics) — Teaching Excellence Awards (student led award for the best

	academic staff in different categories)
How are the results and the impact of the practice measured?	Based on the results of a National Student Survey
What is the impact of a particular PD on the learning of academics? Have participants improved their knowledge and competences significantly?	It is difficult to assess it as it depends on the individual approach. However, the organisers pointed out the following: — A change in attitude towards digital technologies — The academics own some of the design requirements — Research and publications on TEL and using VR in dental education
What is the impact of PD on academics' career paths?	— Publications on TEL and using VR in dental education directly influence their careers — They contribute to the prestige of the faculty, which in turn reflects on them — Digital literacy allows the academics to cope with the demands of digital technologies. This makes them more competitive in their field and as employees, thus giving them opportunities for career development.
What is the impact of PD on the quality of teaching?	Teaching materials have been improved and are "more learnable, feasible, and correspond to learning standards". Implementation of digital technologies such as KEATS has improved access to these materials. In the surveys, the students seemed to appreciate the initiative.
What is the impact of PD on students' learning?	Students and staff appreciate the new technologies and how they improve access. Student interns are employed to help academics with creating teaching materials and incorporating digital technologies into their courses. This facilitates collaboration between the academic staff and students and provides education that fits students' needs.

3.8 University Collaboration as PD Driver in Estonia – ENUCE and 'Teaching and Learning' conference

The Estonian Network for University Continuing Education (ENUCE) and the University of Tartu (Estonia)

Abstract: ENUCE and the Teaching for Learning Conference showcase nationwide university collaborations in the design of PD provision. ENUCE is an informal and voluntary network that unites the continuing education specialists of six Estonian public universities. The University of Tartu's Teaching for Learning Conference, which invites local and foreign PD experts to present their research and good practices as well as network activities are good examples of the impact on the provision of PD. The Conference organised by the University of Tartu includes participants from the majority of Estonian universities. The two PD practices in focus use collaboration as a tool to overcome obstacles to the provision of PD. These practices help to inform university leaders, educational developers (support staff) and academics about state-of-the-art teaching resources and techniques, build expertise in the provision of PD, and create national support for the promotion of PD. This case study investigates the importance of nationwide university collaborations in the design of PD provision, and identifies the success strategies and innovative characteristics of the implemented PD practices.

Interviewees:

- Aet Kiisla, Lecturer at Narva College of the University of Tartu, Participant in the Teaching for Learning Conference
- Marek Sammul, Head of the Centre for Professional Development of the University of Tartu
- Ülle Kesli, Senior Specialist for Continuing Education at the Lifelong Learning Centre of the University of Tartu

Introduction

The case of Estonia is an example of how continuous collaboration can gradually create an array of opportunities for the PD of academics and for addressing the obstacles to their development. The case study presents one of the oldest networks of Estonian HEIs and the University of Tartu (UT) with a variety of PD activities. The Estonian Network for University Continuing Education (ENUCE) emerged as a non-formal unregulated initiative. On an organisational level, ENUCE creates a platform for university staff to organise PD activities, discuss obstacles, and share experiences and knowledge. This enhanced awareness can gradually create a consensus on the need for PD for academics and lead to smaller scale initiatives. Another example of collaboration is the UT's series of HE conferences that have been a tradition since 2011. It is a place for researchers and educators from all over the world to share their studies and approaches to innovative teaching. These innovative PD activities show how **domestic and international cooperation can aid the development and implementation of PD**.

The aim of the case study is to investigate the importance of nationwide university collaborations in the design of PD provision. Moreover, the international conference on innovative teaching practices (Teaching for Learning) as a form of PD is evaluated. The case study begins by describing ENUCE and the Teaching for Learning conference separately. This is followed by an analytical part identifying success strategies and innovative characteristics with examples from both practices.

Context

ENUCE was established in 2001 as an **informal and voluntary union** of continuing education specialists of Estonian universities ([87]). It is a member of the European University Continuing Education Network (EUCEN) – a multidisciplinary European association for University Lifelong Learning ([88]). The network currently links six public universities in Estonia: the Estonian Academy of Arts, the Estonian Academy of Music and Theatre, the Estonian University of Life Sciences, Tallinn University, the Tallinn University of Technology, and the University of Tartu ([89]).

In general, ENUCE was created to provide **a meeting ground for educational developers** responsible for the University Continuing Education (UCE) ([90]) provision at different Estonian universities and to facilitate the exchange of experiences and good practices among them (Interview, Marek Sammul, 2018). In other words, the network provides an activity targeting mainly administrative staff responsible for the provision of educational programmes and services to professionals not enrolled in the traditional on-campus study. Specifically, its aims are the following:

ENUCE was created to provide a meeting ground for educational developers responsible for the University Continuing Education provision at six different Estonian universities.

- **To promote the role of continuing education in Estonian universities** through cooperation between university managers and educational developers (support staff) as well as by joint conferences and seminars
- **To enhance support staff development** through joint projects in open studies and distance learning, in adult and continuing education, and through the exchange of ideas and staff (mobility projects),
- **To facilitate joint activities focused on developing quality assurance systems** in university continuing education,
- **To create links between UCE and society** ([91]).

Implementation

Activities within the ENUCE network include **irregular informal meetings and an e-mail list for sharing information and holding discussions**. As the network is rather informal, the topic of each meeting is set by the organising partner and most often revolves around the organisation of UCE, new teaching methods, differences in field-specific teaching, the role of leadership in ensuring quality teaching and learning, and the participation of teachers in PD as well as the technical organisation of PD, topics such as financing or various regulations related to the organising of UCE. The participants discuss problems that have occurred and occasionally, the meeting involves a lecture or seminar or discussion on an important topic for the organisation of UCE activities. Some of the meetings include Ministry of Education representatives who talk about topics relevant to the parties (Interview, Kesli, 2018).

ENUCE does not have a dedicated budget. The informal and collaborative nature of the network results in very low costs for its operations. In fact, the only recurring cost is that of organising the meetings, which is covered by the host university and is said to be insignificant (Interview, Kesli, 2018).

Results

([87]) See: http://eatk.edu.ee/home-0?lang=en [accessed on 17.09.2018]
([88]) For more information, see: http://www.eucen.eu/aims-and-objectives/ [accessed on 19.09.2018]
([89]) See: https://www.ut.ee/en/studies/continuing-education/enuce [accessed on 11.09.2018]
([90]) University Continuing Education refers to various activities through which universities provide educational programmes and services to those not enrolled in traditional on-campus study.
([91]) See: https://www.ut.ee/en/studies/continuing-education/enuce [accessed on 11.09.2018]

Engagement in ENUCE helps the universities overcome some important obstacles to educational developers' work for supporting PD of specialists and academics. The relatively low frequency of meetings, supplemented by online communication, makes it easier for university staff to allocate time for the practice in their busy schedules. Additionally, the **geographic proximity of the universities helps cut costs and the time required to get together**, which is usually an obstacle in cases of inter-university collaboration. Furthermore, the exchange of ideas and good practices tackles the problem of HEIs' lack of knowledge and expertise when it comes to implementing successful training schemes. Finally, it is argued that the features of informality and collaboration have a positive impact on educational developers' willingness to adopt more innovative approaches to PD at their HEIs. It is believed that academics might be likely to accept and embrace ideas coming from their colleagues rather than from external experts at sit-and-listen courses where they are placed in the position of a novice and learner (Postareff & Nevgi, 2015).

As the network is considered informal and its main purpose is to provide a platform for discussion rather than facilitate specific changes at the universities, the impact has not been actively measured. However, the interviewees did indicate some results. The initiative has been considered successful in exchanging knowledge and experiences and providing peer support to educational developers at different universities. Moreover, **the ideas arising from ENUCE's discussions were offered to the Ministry of Education**. Since the meetings are targeted at PD organisers at universities, there is no direct influence on academic staff; however, there is a strong indirect impact through improved PD quality and opportunities.

Description of the UT's 'Teaching for Learning' conference

Context

The University of Tartu (UT), the oldest and the largest university in Estonia, ranks in the top 2% of the world's universities according to the 2017 Quacquarelli Symonds Global World Ranking. With over 10,200 students and 1,400 academic faculty staff, it is in the top 1% of the world's most cited universities and research institutions in several fields ([92]). Alongside its pronounced success in research, the university attaches great importance to the quality of teaching, especially in terms of UCE. In fact, in its 'Strategic Plan', UT describes itself as a "university of lifelong learning" and a "provider of research-based teaching of high-quality corresponding to the needs of society" ([93]).

The university also offers PD opportunities to its staff through the UT's Centre for Professional Development. Academics can benefit from **training sessions, Summer Academy events, individual and group counselling, mentoring, peer-review discussion groups, a grant system** for the study of teaching practices (Scholarship of Teaching and Learning (SOTL)), advice on the development of e-courses as well as the technical support of e-learning environments, etc ([94]). There are agreed **good practice of learning ([95]) and good practice of teaching ([96])** in place, compiled as a bottom-up practice and used as guidelines in professional reviews. Another incentive provided by UT in order to encourage participation in PD is the granting of a Lecturer of the Year Award

([92]) See: https://www.topuniversities.com/universities/university-tartu [accessed on 11.09.2018]

([93]) Strategic Plan of The University of Tartu for 2015-20. Available at: https://www.ut.ee/sites/default/files/www_ut/ulikoolist/tartu_ulikooli_arengukava_aastateks_20152020_a2020_eng_0.pdf [accessed on 09.10.2018]

([94]) Other opportunities include competence-specific courses (e.g. communication or collaboration skills), courses in digital content creation and the use of digital technologies in teaching. The Institute of Education at the UT also focuses on development projects tackling web-based learning environments and learning analytics in e-assessment and developing digital literacy in teacher education curricula. For more information on CPD activities see: https://www.ht.ut.ee/en/institute-2 [accessed on 11.09.2018].

[95] See p. 14 of the Welcome Guide for International staff, 2018 https://www.ut.ee/sites/default/files/www_ut/ulikoolist/welcome_guide_2018.pdf [accessed on 22.11.2018]

[96] See: https://www.ut.ee/sites/default/files/www_ut/ulikoolist/good_practice_of_teaching.pdf [accessed on 22.11.2018]

for an outstanding teaching performance. The award is based on students' feedback and includes a financial reward for the winner. Other nominations include Programme Director of the Year, awarded for the effective development of degree programmes and prizes issued by institutes and student organisations ([97]).

Implementation

The Teaching for Learning conference is part of a series of yearly HE conferences organised by UT (Interview, Sammul, 2018). It is dedicated to the development of teaching and learning, with a focus on **new teaching tools, differences in field-specific teaching, and the role of leadership in ensuring quality teaching and learning**. The format and ideology of the conference is peer-to-peer exchange: university teachers from all disciplines, often without specific educational training, present their experiences of improving teaching for their colleagues to learn about and discuss. Teachers, graduate students, trainers of teachers, educational developers, HE administrators and HE academic staff from Estonia and abroad are invited to attend. The conference also works as a platform for presenting results of higher education research and sharing good practices with colleagues. Therefore the practice aims to improve educational development on two levels: faculty development through seminars and workshops on teaching methods and personal professional development; and organisational development through talks on evaluation, curriculum development, leadership and cooperation between different stakeholders in academia.

The conference works as a platform for presenting the results of higher education research and sharing good practices with colleagues.

The series of HE conferences in Estonia started in 2011 with one entitled 'Is Teaching an Art or a Science?' Currently the University of Tartu organises an HE conference each year. Mostly these are local events, conducted in Estonian, but sometimes they are international. The last international conference was organised in January 2018 at the University of Tartu and lasted for three days. It attracted over 300 participants, the majority of whom came from Estonia, representing 14 local universities ([98]). International participants represented universities from 13 countries ([99]). Delegates from the Estonian Ministry of Education and Research attended the conference along with representatives of informal education institutes and members of the Quality Agency for Higher Education ([100]). During the three days participants could choose the seminars and workshops (on different topics ([101])) they wished to attend. The seminars were led by experts and qualified academics who work on PD and research various fields of education. Participants who had registered their abstracts beforehand could present their research results on related subjects during the conference. Summaries of the research studies were presented in an abstract book ([102]). Some examples include studies on the aspects of

([97]) UT also nominates candidates for the national competition 'Estonia learns and thanks' (Est. Eestimaa õpib ja tänab), which is an award for exceptional achievements and contribution to education in Estonia (Interview, Sammul, 2018).

([98]) Baltic Defence College, Estonian Academy of Arts, Estonian Academy of Security Sciences, Estonian Business School, Estonian Entrepreneurship University of Applied Sciences, Estonian National Defence College, Estonian University of Life Sciences, Lääne-Viru College, Tallinn University, Tallinn University of Technology, Tartu Art College, Tartu Health Care College, TTK University of Applied Sciences, and University of Tartu

([99]) Belgium, Czech Republic, Denmark, Finland, Georgia, Ireland, Latvia, Poland, Portugal, Sweden, Switzerland, United Kingdom, and the United States

([100]) Conference Programme and Abstract Book, 2018, available at: https://sisu.ut.ee/universityteaching2018/avaleht [accessed on 12.09.2018]

([101]) The topics included trends in higher education, learning environment, educational innovation, field-specific differences in learning and teaching, course and curriculum design, student engagement, cooperation in teaching and learning, self-directed learning, multicultural classroom, approaches to teaching of academic staff, problem-based learning and e-learning.

([102]) Conference Programme and Abstract Book, 2018, available at: https://sisu.ut.ee/universityteaching2018/avaleht [accessed on 12.09.2018]. Some examples include studies on the aspects of learning most important for students and a consideration of what lecturers can do to cultivate a culture of learning and teaching; simulation games, their implementation and use in education; and the use of creative design methods in curriculum development.

learning most important for students and a consideration of what lecturers can do to cultivate a culture of learning and teaching, simulation games, their implementation and use in education, and the use of creative design methods in curriculum development.

There was no conference fee and the University of Tartu and the EU ASTRA programme project Per Aspera ([103]) covered all costs.

Results

It is somewhat difficult to measure the long-term impact of education conferences. However, its significance can be seen in **the large number of attendees** and the variety of institutions they represent. The conference serves as a means to promote new teaching methods, to promote the research of teaching (SOTL) and to get academics interested in PD. The fact that academics can choose which seminars to attend increases the probability of them improving their knowledge and competences in the areas most necessary and relevant to them individually. Even though attending the conference is unlikely to impact their career paths directly, improving digital skills might potentially allow them to cope with digitalisation trends in HE sectors, and make them more competitive as employees. However, improved knowledge about good teaching practices and an acquaintance with various teaching methods or curriculum design should in all likelihood result in improved teaching quality and student satisfaction. Through attending such conferences, academics show a commitment to the profession and enrich their CVs. It is undoubtedly difficult to identify an impact on the quality of teaching or students' learning, as it can be influenced by other factors. It also depends on individual academics' approaches and their ability to reflect on learning. Finally, the conference encourages collaboration and knowledge-sharing and provides networking opportunities that might be used in other contexts. Since the topics of the conference cover an array of issues related to facilitating innovative and effective teaching, it is expected that participants will translate the knowledge and skills into their teaching, consequently improving its quality. In this line, students are supposed to benefit in terms of their learning experience thanks to improved teaching methods. The long-term impact of the conference is also shown in that there are over 200 participants each year, despite the fact that most of the conferences in the series are held in Estonian and are not international. A continuation of the conferences and a sustained high participation rate show that there is a need for such PD activities and that the quality of the conference so far is satisfactory to participants.

Analysis of practices

Innovation in PD practices

This case shows how nationwide collaboration can foster the provision of quality PD practices at Estonian universities. **The analysed initiatives efficiently deal with case-specific problems and have been widely used in Estonia.** ENUCE and the conference address the provision of PD through the joint efforts of the universities.

ENUCE and the Teaching for Learning conference show characteristics of effectiveness for a relatively small-scale HE system. The two Estonian initiatives are characterised, even if unintentionally, by effective features of PD for educational developers and academics. ENUCE is a bottom-up initiative. Rather than having an official curriculum, it deals with issues arising in educational developers' and PD organisers' every-day work. The fact that the collaboration happens at an organisational level, uniting educational developers, shows the uniqueness of the scope of ENUCE. The Teaching for Learning conference is an example of the effectiveness of cooperation in improving the provision of PD. The conference encourages academics to participate in PD and sets an example by **building national PD know-how**. Both

The initiatives are considered novel in Estonia as they efficiently deal with case-specific problems.

([103]) See: https://www.h2020-peraspera.eu/ [accessed on 11.10.2018]

initiatives – ENUCE and the Teaching for Learning conference – provide a platform for the participants where they can deal with the issues by using each other's experiences and also draw from international experience and expertise.

Strategy for addressing obstacles to PD

ENUCE and the Teaching for Learning conference address several obstacles to PD participation. They tackle the lack of pedagogical and financial resources in some universities and allow stronger universities to support others. Additionally, the initiatives exhibit some factors inherent to successful innovative PD practices.

The Teaching for Learning conference provides a good context for encouraging hesitant academics to attend PD practices.

Literature shows that conferences are one of the most common practices attended by professionals. In a report evaluating the effectiveness of PD in the medical field, professionals indicated that conferences were the most valuable contributors to PD. They also scored highest when it comes to attendance. Moreover, the participants indicated that conferences offered an opportunity to network and talk to their colleagues (Schostak et al., 2010). In this case, organising the Teaching for Learning conference provides a good context for encouraging hesitant academics to attend PD practices. As the conference features local speakers who are often familiar to the participating academics (due to the small size of the country), it can **encourage more academics to participate and to implement the introduced strategies** as they can see that doing so benefits their colleagues. The knowledge obtained in the conference can also be spread informally through communities of practice, which is a promoted method of PD at the University of Tartu. According to one of the interviewees, an important part of participation in PD activities for academics is sharing the training experience with colleagues (Interview, Kiisla, 2018).

Estonian HEIs show significant support for the organisation and improvement of PD activities. In this case, ENUCE is not only promoted but also initiated by the HEIs. Moreover, the Teaching for Learning conference invited the best Estonian experts to one place for three days, thus **creating an inspiring and accessible environment to collaborate**. National speakers were joined by several foreign experts ([104]), so the Estonian academics could benefit not only from the practices and experiences of their peers but also those of external specialists (and vice versa).

Additionally, ENUCE has invited government representatives to its meetings and provided a **platform for influencing political decisions** as well as gaining official support for the importance of PD. The PD providers at the HEIs are able to directly interact with policymakers and vice versa, thus creating and improving official PD structures.

The ENUCE network displays several successful PD programme traits identified in the literature. It has been functioning since 2001, which indicates **repeatability** – a feature highly valued in PD initiatives. The indirect impact of such meetings may be reflected in a rising awareness of the need for PD, improved PD opportunities, and new initiatives in Estonian HEIs such as the Teaching for Learning conference. It is a **bottom-up** practice, where the curriculum depends on the participants**.** The meetings are **necessity-based**: any member can initiate a meeting on a topic that concerns them or discuss an issue they are currently having. Not only does this support collaboration but it is also **designed for the needs of the participants**, which makes them more likely to make use of the network. As the participants may face similar problems as well as deal with the same regulations at the national and institutional level, ENUCE allows for finding solutions collectively. The initiative further supports continuous collaboration by the informality of the network and the fact that members can discuss issues over e-mail (Interview, Kesli, 2018). Thus, ENUCE creates a support network for educational developers to receive already tried and proven solutions to the issues they are facing.

([104]) For example: Peter Felten from Elon University (US), Andy Penaluna and Kathryn Penaluna from University of Wales Trinity Saint David (UK)

Moreover, the **meetings encourage lower-level participation**, so the organisers of PD can freely discuss and initiate their agendas for PD. Such an arrangement allows the participants to address the issues in the provision of PD that they face, inform others, and receive feedback.

Challenges and prospects

The informal structure of ENUCE allows for very low costs for the initiative. Moreover, as the member universities alternate the organisation of the meetings, costs become even more dispersed. This initiative also **requires relatively little dedicated infrastructure and financial resources**. Based on UT's experience, only a room, refreshments and simple digital technologies (e.g. a computer and a projector) are needed. When it comes to the organisation of the Teaching for learning conference, it **requires substantially more financial and human resources and infrastructure**. The organisation of such a conference requires dedicated staff and several venues in which the workshops and lectures take place. It may also require new digital technologies (e.g. an interactive blackboard or field-specific technologies and devices) for presentations and workshops. This can lead to significant financial expenses, although the costs can be partially covered by applying for grants and financial aid.

The practices have the potential to be replicated, especially in countries with less developed PD of academics, as they can implement and benefit from practices already established in other counties. However, **creating a nationwide network of HEI PD providers requires a favourable institutional culture** and the recognition that teaching is of equal importance to research. Support for networks like ENUCE is provided by EUCEN, e.g. through international conferences and EU-funded projects ([105]). The implementation of a network uniting PD providers can face some challenges in other countries. For example, in countries where PD is not well known, it may be difficult to identify the people responsible for PD provision. In larger countries it may become expensive if the participants have to travel longer distances, and this may also require a larger time commitment, which would make it difficult for the universities and the potential participants to fit in their budgets and schedules. Implementation of such a network in countries with established PD practices can also be beneficial, as it provides a rather cost-effective way of learning about successful PD practices and the PD policies of other universities in the country.

Creating a nationwide network of HEIs on PD provision requires a favourable institutional culture and the recognition that teaching is of equal importance to research.

The organisation of conferences has been widespread in many countries and includes both domestic and international conferences. However, as this particular form of conference requires a substantial time-commitment, it can be difficult to implement. As it can be a valuable medium for learning about successful PD practices and new developments in the field of PD provision, the form of the conference can be adapted to fit the needs of other countries. For example, it can be less formal, shorter or in order to be more practical, only include workshops.

Emerging themes

The size and location of the country can work for the benefit of improving the PD for academics. Estonia is a small country and may in some respects be regarded as a single region, with its national system of innovation also forming a single regional system of innovation. **The size and location make collaboration and interaction of academics and PD providers within the country easier than in geographically more dispersed countries**. There is an attitude of "everybody knows everybody" in research and innovation, which makes it easier to identify potential partners for new PD projects (Huisman et al., 2007). Representatives confirm this point of view and contend

([105]) See: http://www.eucen.eu/ [accessed on 17.09.2018]

that if someone in the network needs anything, they will call a colleague, ask for a meeting, start a discussion – whatever they find necessary in that particular situation (Interview, Sammul, 2018). The small size of the country may have contributed to the fact that ENUCE was able to attract government representatives to its meetings. Thus, it allowed the PD professionals to directly interact with policymakers (Interview, Kesli, 2018). This provided a platform for influencing political decisions as well as gaining official support for the importance of PD.

The size and the location of the country can work for the benefit of improving the PD for academics.

Conclusions

ENUCE and the Teaching for Learning conference are two innovative practices where active collaboration fosters and improves the provision of PD. First, ENUCE is slowly but steadily building a consensus between educational developers (support staff) and academics on the importance of PD and its improvements. Additionally, it occasionally provides HEIs' representatives with a platform to have a say in policy-related matters. Secondly, by adopting a bottom-up approach and allowing the educational developers to decide on the issues they want to be discussed and solved, the network proves to be relevant and appealing to the participants. Finally, the conference allows the participants to use each other's strengths by learning from one another and from the national speakers during discussions, enhanced on occasion by international experts. While it is not a unified, homogenous or systemised practice, Estonia provides an example of how taking a collaborative approach to issues can lead to an enhanced PD culture.

Information summary: ENUCE

Table 10. ENUCE information summary

Background	
Short general description of the practice (W)	The ENUCE (Estonian Network for University Continuing Education) provides a platform for the organisers of PD at Estonian universities to discuss the obstacles they are facing and to share experiences.
Context of the practice	Estonia is a small country and may in some respects be regarded as a single region. The ENUCE (Estonian Network for University Continuing Education) was established on 30 January 2001 in Tartu as an informal association of educational developers at Estonian universities. The association links educational developers from six public universities: the Estonian Academy of Arts, the Estonian Academy of Music and Theatre, the Estonian University of Life Sciences, Tallinn University, the Tallinn University of Technology and the University of Tartu. It was set up as an initiative of the European University Continuing Education Network (EUCEN), a multidisciplinary European association for University Lifelong Learning. It is a member of the European University Continuing Education Network (EUCEN), which through conferences, projects and networking activities provides a wide range of opportunities for staff and curriculum development, for sharing of good practices and for the development of international contacts for University Lifelong Learning.
Why was this practice initiated?	ENUCE was created to provide a meeting ground for educational developers at different Estonian universities in order to facilitate an exchange of know-how. The main goal is for the organisers of UCE to share experience,

	knowledge, and support each other in their work.
Which obstacles to academics' participation in professional development are addressed?	— Lack of intrinsic motivation — Lack of time — Resistance to change — Poor financial and pedagogical resources
Main target of PD	Advisory and consultative support. . (Indirectly: faculty development and instructional development)
Content area	— Organisation of UCE Innovative teaching — Quality assurance of PD — Innovative pedagogies Digital competences — Skills and competences of educational developers — Issues linked with ICT and e-learning — Special needs
Processes	
Type of practice	Participation in a network of educational developers, working specifically for PD
Nature of PD	Informal
Delivery	Blended
Type of course material used	Not relevant for a network
Provider	Other: participants
Funding	Budget is provided by the HEI organising the event
Main challenges faced during implementation of the practice	Potential at the HEIs: — Internal: resistance to change, the staff did not always see the value of PD — External: different statuses and capabilities of participating universities.
Results	
How have the HEIs been supporting academics' pedagogical development or innovative teaching practices?	— Common principles for RPL in UCE — Erasmus Teaching Staff Mobility
How are the results and the impact of the practice measured?	Results of ENUCE activities are — Common quality criteria for self-evaluation of UCE structure at HEI and self-evaluation tool — New methods for UCE — Common principles for RPL in UCE — Successful platform for knowledge/experience Peer support to academic developers of different universities
What is the impact of a particular PD on learning of academics? Have participants significantly	Academics become more confident educators, who receive support from their colleagues.

improved their knowledge and competences?	
What is the impact of PD on academics' career paths?	There is no direct impact. The potential impact on skills and competences may lead to improved career prospects. Teaching quality is evaluated during professional interviews, hence there is a reason to develop teaching.
What is the impact of PD on the quality of teaching?	There is no direct impact. The potential impact could be that the increased and improved provision of PD results in a better quality of teaching.
What is the impact of PD on students' learning?	There is no direct impact. Assessed at the HEI level, not by the ENUCE. Learning is at the heart of the teaching issues discussed in ENUCE meetings, Hence, there is a reason to presume a positive impact.

Information summary: 'Teaching for Learning' conference

Table 11. 'Teaching for Learning' conference information summary

Background	
Short general description of the practice (W)	The Teaching for Learning conference is organised at the University of Tartu and is dedicated to the development of innovative teaching and learning. The conference welcomes all members of the higher education community, both from Estonia and abroad: teachers as well as graduate students, trainers of teachers, educational developers, HE administrators.
Context of the practice	The UT has an elaborate support system for the PD of its teaching academics.
Why was this practice initiated?	Organised by UT as a part of a series of yearly conferences on higher education.
Which obstacles to academics' participation in professional development are addressed?	— Lack of time — Resistance to change — Prioritisation of teaching vs research
Main target of PD	— Faculty development — Organisational development — Dissemination of knowledge and best practices
Content area	— Novel teaching methods — Field-specific didactics — Learning-centred approach to teaching — Results of research on teaching and learning (incl. results from Scholarship of Teaching and Learning) — Teaching in multilingual and multicultural settings — Work-based learning — Digital competences — Innovative pedagogies — Issues linked with ICT and needs for digital learning — Curriculum design — Supervision of students — Cooperation in learning and teaching
Processes	
Type of practice	Education conferences or seminars

Nature of PD	Non-formal
Delivery	Blended
Type of course material used	— Didactic materials — Training and reference manuals: booklet with summaries and abstracts of the content of seminars and workshops
Provider	Formal education institution
Funding	Fully funded by the University of Tartu
Main challenges faced during the implementation of the practice	None noticed.
Results	
How have the HEIs been supporting academics' pedagogical development or innovative teaching practices?	— Offering PD courses on: teaching, leadership, support for incoming foreign staff, languages. — Conferences on teaching — Funds for PD — Institute of Education – focuses on research and provides original, evidence-based teaching methods — Centre for Professional Development – organises training for teaching staff, provides individual support, facilitates peer-to-peer exchange and communities of practice, analyses results of PD activities etc. — Awards for good teaching — Lecturer of the Year — Programme Director of the Year — Awards for improving the quality of teaching — Awards for good teaching issued by the institutes of UT — Nominations for the award 'Eestimaa õpib ja tänab' (Estonia Studies and Expresses Gratitude) - an award for exceptional achievements and contribution to education in Estonia — Communities of practice — Counselling — Scholarship of teaching and learning — Erasmus Teaching Staff Mobility
How are the results and impact of the practice measured?	The impact can be seen by the attendance of local as well as international participants.
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	Yes, participants improve their knowledge and competences. They raise awareness of issues in the field. Exchange of good practices is inspiring and encourages academics to try new teaching methods. The conference provides a ground to share experiences with colleagues and get feedback.
What is the impact of PD on academics' career paths?	— Declaring PD efforts demonstrates commitment to the profession and enriches CVs. — Digital literacy allows the academics to cope with the demands of digital technologies. This makes them more competitive in their field and as employees — Teaching quality and development of teaching is assessed when academics go through professional review.
What is the impact of PD on the quality of teaching?	The topics of the conference cover an array of issues related to quality of teaching, including curriculum design and student

	engagement. The impact is evaluated when academics' teaching quality is evaluated. Conferences have led to more people applying for the Scholarship of Teaching and Learning, adding e-learning tools to their courses, changing assessment, etc.
What is the impact of PD on students' learning?	The students can benefit from lecturers who are inspired and up to date with good teaching practices. The goal of the conferences is to promote a learning-centred approach to teaching, which is of direct benefit to students.

3.9 Leadership development through active learning – the Empower Online Learning Leadership Academy (EOLLA)

European Association of Distance Teaching Universities (EADTU) and the European Consortium of Innovative Universities (ECIU)

Abstract: The Empower Online Learning Leadership Academy (EOLLA) is an initiative that targets the decision makers responsible for introducing a variety of open, online and flexible learning opportunities at their HEIs. It aims to inform them about the most recent trends and problems they need to address in order to successfully transform the current educational models of their universities. The main innovativeness of EOLLA is its mode of delivery, focused on principles of active learning and, more specifically, on engagement with real-life scenarios that present challenges relevant to current changes in the HE environment. However, the idea of active learning appears simultaneously to be an important reason for academics' reluctance to participate in EOLLA.

Interviewees:

- Professor Mark Brown, Institutional Leader of EOLLA, Director of the National Institute for Digital Learning at Dublin City University
- Mr George Ubachs, Managing Director of EADTU
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Introduction

The Empower Online Learning Leadership Academy (EOLLA) is a yearly workshop event designed around the principles of active learning ([106]). It targets current and especially emerging leaders responsible for a variety of open, online and flexible learning initiatives at their universities. During the EOLLA event, scenarios of real-life challenges currently facing universities are used to raise participants' awareness about most serious problems HEIs are facing. Additionally, a very interactive mode of delivery aims to help them develop leadership, problem solving, and strategic thinking skills as a response to newly emerging models of teaching and learning. So far, two editions of EOLLA have taken place: the first in June 2016 and the second in May 2017. Both were organised in Brussels, Belgium.

EOLLA is a programme with international outreach but is only partially funded by an external body, which is not a common feature compared with other European PD programmes. Instead it aims for financial sustainability by charging registration fees from participants. This case study aims to evaluate, firstly, how EOLLA's specific mode of teaching addresses known obstacles to academics' participation in PD, and how it impacts participants' learning experience. Secondly, it attempts to answer the question of whether such PD schemes are indeed financially sustainable in reality.

Context

The initiative was launched by the European Association of Distance Teaching Universities (EADTU) as part of the Empower programme. The EADTU is Europe's leading network focused on online, open and flexible higher education – it associates 12 Open Distance Learning (ODL) universities in Europe as EADTU members ([107]). However, it also has a

([106]) Active learning is any approach to instruction in which all students are asked to engage in the learning process rather than just passively receiving knowledge from an expert. For more information see, for example: https://www.cambridge-community.org.uk/professional-development/gswal/index.html [accessed on 18 October 2018]

([107]) The members include: Anadolu University, FernUniversität in Hagen, Hellenic Open University, Open University of the Netherlands, The Open University, Open University of Cyprus, Universidad Nacional de Educación a Distancia, Universidade Aberta, Università Telematica Internazionale UNINETTUNO, Universitat

membership of 15 institutions and 14 national associations across 25 nations, which covers over 200 universities altogether ([108]). The Empower project is part of EADTU's commitment to sharing the expertise of ODL universities with traditional face-to-face ones in their transition to harnessing the potential of technologically enhanced teaching and learning (Paniagua & Simpson, 2018). It was launched at the end of 2015, and currently offers the following services ([109]) (Interview, Ubachs, 2018):

- **Online** webinars on topics related to Empower's 12 fields of expertise ([110]). The events are open to join live, but it is also possible to access them afterwards in the Empower archive
- **'Empower on-site'**. Upon request, Empower experts visit universities for a two-day intensive session during which they help them map the needs and create solutions in terms of their transformation to online or blended education
- **Empower Online Learning Leadership Academy** (EOLLA)
- Access to the **Empower's annual 'envisioning report'** on latest trends and developments in the 12 fields of expertise.

The online resources, i.e. the webinars and the report, are available for free for all of those who are interested. 'Empower on-site' and EOLLA are non-profit initiatives, so the participants cover the costs of implementation. Furthermore, the text below focuses on one of above-mentioned services of the Empower project – EOLLA.

A key strategic partner in the first iteration of EOLLA was the European Consortium of Innovative Universities (ECIU). ECIU is a partnership of 13 European universities, started in 1997, and focused on HEIs' roles in innovation, creativity and societal impact. Even though ECIU emphasises that it gathers together research-intense universities, one of the three main focus areas is 'Innovation in Teaching and Learning'. It is highlighted that members strive to develop, firstly, a strong relationship between research and high-quality teaching, and secondly, effective learning-centred and future-focused teaching approaches.

Implementation

EOLLA was designed to fill the leadership gap in HEIs, particularly observable in the area of innovative approaches to teaching and learning.

The main reason for the initiation of the EOLLA initiative was a realisation of the importance of educational leadership in harnessing the benefits that technology has to offer in the HE context (Interview, Brown, 2018). The initiative was designed to fill the leadership gap in HEIs, particularly observable in the area of innovative approaches to teaching and learning. The target audience comprised decision makers responsible for a variety of open, online and flexible learning initiatives at their HEIs (typically from middle-management level) (Interview, Ubachs, 2018). It was emphasised that the principle of the EOLLA is not so much to target existing managers but to build a new generation of leaders and to highlight the importance of creating networks between those emerging leaders (i.e. between people addressing similar problems but in different contexts) (Interview, Brown, 2018).

Oberta de Catalunya, Swiss Distance Learning University (FernUni Schweiz), and The Open University of the University of Jyväskylä.

([108]) See: https://eadtu.eu/about-eadtu/about-eadtu [accessed on 15 October 2018].

([109]) See: https://empower.eadtu.eu/images/EMPOWER_flyer.pdf [accessed on 15 October 2018].

([110]) The fields are as follows: 1. Assessment; 2. Student support; 3. OERs and MOOCs; 4. Quality assurance; 5. Knowledge resources; 6. International education; 7. Institutional support; 8. Policy and strategy development; 9. Curriculum development and Course design; 10. Off-campus, online, open and flexible education; 11. Blended education; and 12. Continuous professional development.

There have been two editions of EOLLA so far. Both took place in Brussels: the first in June 2016 and the second in May 2017. Both events lasted two days, included 11 (2016) and 14 (2017) participants, and were led by four facilitators to ensure intimacy and interactivity with the programme. Each was preceded by an 'Online Primer' during which participants were introduced to each other, given access to a number of online resources and asked to fulfil some initial primer activities. Similarly, after the event in Brussels, participants were invited to an online 'Reflection and Evaluation' debrief. This follow-up served to offer more detailed feedback on the discussed cases, to create a space for participants to reflect on and share key lessons from the event, and to give them access to additional learning resources. On the successful completion of the Reflection and Evaluation stage of the programme, participants received a Completion Certificate and became members of the EOLLA. They also received a voucher offering a discounted registration fee for the annual EADTU conference ([111]). In addition, an institutional version of EOLLA was offered in Greece in 2017 with 24 participants.

The costs of participation in EOLLA were covered primarily from registration fees, which were EUR 495 per person for each of the editions ([112]). Through the fees, the organisers aimed to cover the costs of the venue, the meals provided during the meeting, and remuneration for the facilitators.

Results

As in many similar cases, the EOLLA events are not followed by any robust evaluation – hence there is no certainty about their actual impact. The reasons for this are twofold. Firstly, **it is very difficult to assess the impact of a single event,** through fees and **long-term strategic decisions of the leaders at HEIs,** since there are a number of different factors that influence leaders' behaviour. Secondly, measuring the impact, especially over such a length of time, requires sustained administrative support as well as additional financial and human resources that the EOLLA organisers currently lack. Therefore, the only evaluation was feedback on the events themselves, gathered through so-called "happy sheets". They showed a high degree of satisfaction about all three editions of the academy (4 on a 5-point scale, on average) (Interviews, Brown, 2018; Ubachs, 2018). Some positive externalities of the programme were also observed – for instance, two papers related to the EOLLA context were published by the participants, which shows some continuity in their involvement. Some networking effects were also mentioned by the academy facilitator – he acknowledged that he continues to work with some participants on related matters (Interview, Brown, 2018).

The successful implementation of online and blended learning tools is expected to improve the HEIs' education quality and enhance students' learning experience.

Nonetheless, it has been reported that participants feel strengthened by talking to colleagues who face the same challenges, and that they learn from each other as well as find new ideas to cope with the challenges of a rapidly changing HE environment (Interview, Ubachs, 2018). This is expected to help them in an efficient transformation of their universities in terms of innovative models of teaching and learning. In fact, by the end of the event, all participants are asked to outline how they are going to implement their acquired knowledge in their contexts (Interview, Ubachs, 2018). Additionally, the successful implementation of online and blended learning tools is expected, by definition, to improve the HEIs' education quality and enhance students' learning experiences. Finally, the EOLLA's goal of building a community of leaders was supposed to be realised in the creation of EOLLA alumni's community which would

([111]) Based on 'Empower Online Learning Leadership Academy: Developing Transformative Leaders' – EOLLA description, unpublished. See also Academy flyers, for 2016: https://empower.eadtu.eu/images/EOLLA/EMPOWER_EOLLA_Flyer_Final.pdf, and 2017: https://empower.eadtu.eu/images/EOLLA/EMPOWER_EOLLA_Flyer_Brussels_2017.pdf [accessed on 16 October 2018].

([112]) See the flyers (above).

provide a more sustainable platform for the sharing of ideas. This, however, is still in the planning phase.

Analysis of the practice

Innovation in this PD practice

Innovation can manifest itself in the development of a brand-new practice, but also in adding a new tool or method to existing ones. Even though a training workshop is a rather well-established PD practice, EOLLA introduces some innovative twists to this method. As opposed to traditional 'sit-and-listen' courses, which are widely considered ineffective (see, for example, Haywood et al., 2015), **the academy is designed around principles of active learning** (Interview, Brown, 2018). It aims to develop participants' leadership skills, and to encourage creative problem-solving and strategic thinking in response to new and emerging models of teaching and learning. It includes a mix of methods such as short presentations, open discussions, and small-group work. However, most importantly, it is anchored around seven genuine future scenarios of universities that participants had to engage with and come up with solutions for (Interview, Brown, 2018). For instance, one of the scenarios pictures an "Oldish University" that has been a highly reputable institution for centuries, but it has begun to slip in university rankings and student satisfaction surveys and reported poor use of technology in teaching. The participants were asked to think about strategic imperatives for change, to identify potential opportunities and challenges, consider a number of different options, and evaluate the risks and potential returns on any proposed investment ([113]). In another scenario, that of a "Newish University", participants were presented with the results of a survey of employers who were dissatisfied with the lack of detail and information beyond the final grades on the traditional degree record (transcript) when trying to assess the wider skills of prospective employees. The participants were asked to evaluate the potential results of introducing a digital badging ([114]) initiative at the Newish University so as to better recognise and showcase to employers the wider range of skills and qualities of their graduates ([115]). Such a mode of delivery, including the scenarios, was inspired by the Online Learning Consortium's (OLC) leadership development programme ([116]) (Interview, Brown, 2018).

As opposed to traditional 'sit-and-listen' courses, or even workshop-style events, the academy is designed around the principles of active learning.

Strategy for addressing obstacles to PD

The practice is expected to overcome two obstacles to the promotion of innovative teaching methods and the more effective implementation of PD programmes. Firstly, is was noted that participants were often unaware of the current problems and challenges in relation to innovation in teaching and learning (e.g. related to HEIs' technology adoption in education, or the demand for more student-centred, innovative modes of teaching) (Interview, Brown, 2018). Therefore, the practice overcomes the obstacle of academics' lack of awareness about the importance of PD and pedagogical innovation. It is especially important to raise this awareness among the current and emerging leaders since they are the ones who can make decisions at a strategic level, for instance on including innovative teaching in universities' visions, or on the extent of financial and administrative support for PD schemes. Secondly, the obstacle of insufficient leadership

([113]) Based on the document 'Oldish University' – the description of the case study shared by the interviewees, unpublished.

([114]) A digital badge is an indicator of accomplishment or skill that can be displayed, accessed and verified online.

([115]) Based on the document 'Newish University' – the description of the case study shared by the interviewees, unpublished.

([116]) OLC is a major professional development body from the US, see: https://onlinelearningconsortium.org/about/olc-2/ [accessed on 15 October 2018]

capacities was identified and addressed. During the course the participants are expected to develop as innovation leaders through recognising problems they might face during their universities' transformations as well as possible solutions. It was emphasised in the programme agenda as well as during the interviews that the academy primarily targets the younger generation of emerging policymakers. This is in line with an argument mentioned across the literature that **PD programmes tend to be more effective if they are focused on young professionals who are not yet attached to traditional teaching methods**. For instance, Postareff and Nevgi (2015) draw attention to the so-called "intermediate phase trap", acknowledging that people in their mid-careers have a fear of making commitments to learn new ways of teaching, and tend to avoid change. Haywood et al. (2015) argue that young professionals tend to learn new fields of expertise (e.g. pedagogy or, in this case, modern leadership) along with their disciplinary or institutional content, and match with one another, which builds a good skill set and a broader understanding of the HE environment.

Nevertheless, it is often argued that to bring about significant changes in participants' behaviour, PD programmes need to be sustained over a longer period of time, and to involve repetitive actions (Cordingley et al., 2015; Darling-Hammond, Hyler & Gardner, 2017). The EOLLA's post-event debriefs offer some opportunity to receive feedback and reflect on the content learned during attendance at the academy. However, debriefs take place straight after the event and are quite limited in their scope (participants are expected to commit no more than three hours to it). However, it is acknowledged that **one-off events might be effective in providing orientation or disseminating information**, **especially if they focus on narrowly defined topics** (Cordingley et al., 2015). Therefore, it can be expected that EOLLA serves the purpose of making the participating leaders aware of challenges they might face in their mission to transform their universities' teaching models.

Challenges and prospects

In 2018, EOLLA was offered in the same format and roughly the same time slot, but it failed to attract enough participants to make the event viable. It required at least 12 participants to make the event feasible in financial terms, and only eight people registered (Interview, Brown, 2018). Nevertheless, the organisers are dedicated to further developing the practice and are currently analysing what went wrong and why EOLLA did not get the numbers that it had previously garnered. Some possible explanations include:

- Academics find it difficult to allocate a couple of days to come to Brussels. In fact, there were enough people interested, but it turned out to be impossible to find a time slot that would suit everyone (Interview, Ubachs, 2018). This also implies the need for a broader pool of potential participants.
- There was too little marketing done to attract an audience. In light of the prevalent domination of research over education as functions of universities in most European HE systems (see, for example, Gibbs, 2016), it is sometimes challenging to convince academics to commit their time to engaging in PD. Additionally, academics might be unaware of the problems a certain initiative is addressing in the first place. In response, it is crucial to present the clear value of a PD activity and convince potential participants that this is what they actually need (Interview, Brown, 2018);
- With many EU-funded initiatives available, HEIs and individuals are used to 'getting things for free'. It is great that PD activities are supported by the EU bodies, especially in light of the declining national funding for HE in most European countries (EUA, 2014). Nonetheless, it is sometimes argued that they might be making people and universities reluctant to pay the price a given programme is actually worth (Interview, Brown, 2018). This would mean it is very difficult to develop a programme that would be financially sustainable.

All those arguments might be partly true, but they certainly do not present the whole picture. After all, conferences organised by EADTU (such as the 'Online, Open and Flexible Higher Education Conference' and 'Maastricht Innovation in Higher Education Days') are promoted in a similar way, and require virtually the same amount of money and time from participants. Despite this, they repeatedly attract dozens or hundreds of people, even though their value is, arguably, much lower than two days of full individual attention at EOLLA (Interview, Ubachs, 2018). This relatively high level of interest in conferences such as those mentioned above – as well as in, for example, the 'envisioning report' (the number of downloads has exceeded 2,500) – seems to indicate that academics are open to *being informed.* On the other hand, they might not feel comfortable actively engaging in small interactive sessions. According to EADTU, this can derive from two issues. Firstly, following the argumentation about the academics' attachment to traditional teaching methods (see, for example, Postareff & Nevgi, 2015), they might be reluctant to engage in active learning not only as tutors but also as learners – **conferences are a much more established and 'safer' model of participation**. Secondly, it is possible that people responsible for transforming their universities' teaching model feel they have not made as much progress as they should have, and do not feel comfortable sharing their doubts on the forum (Interview, Ubachs, 2018). This would mean that the biggest innovation of EOLLA – its mode of active learning – is also its biggest drawback in terms of attracting an audience.

To bring about significant changes in participants' behaviour, PD programmes need to be sustained over a longer period of time, and to involve repetitive actions.

It can be imagined that this practice would be implemented in different contexts or modes. EOLLA organisers have considered limiting the initiative to the country level (Interview, Ubachs, 2018). This would possibly allow for more narrowly focused marketing efforts and a better alignment of the content to given HE system conditions. On the other hand, it would not provide such diverse perspectives and gather together competing HEIs. Another idea is to preserve the goal of EOLLA (i.e. to instruct aspiring leaders in the area of transformation to innovative teaching models), but to change the implementation method to one similar to 'Empower on-site'. However, while 'Empower on-site' focuses on universities with some digital strategies already being developed, 'EOLLA on-site' would serve in the role of raising awareness among HEIs that do not yet realise the importance of teaching innovation (Interview, Ubachs, 2018).

Conclusions

Overall, EOLLA comes as an alternative to traditional 'sit-and-listen' courses that are seen as a rather ineffective way to influence academics and trigger real changes in how they teach. **EOLLA's innovative mode of teaching, based on active learning, especially through the use of real-life scenarios,** seems a very relevant way to raise awareness about the genuine problems and challenges universities are facing in relation to the need to embrace more innovative teaching models as a response to the rapidly changing HE environment. The approach of targeting young, emerging leaders, as well as the emphasis on creating a broader empowered community rather than producing 'lone leaders', seems to be very relevant and also aligned with the evidence in the literature.

The question of the financial sustainability of such initiatives is often raised. Some argue that in the European environment, where many opportunities are available for free (which is, all things considered, a great thing), people might be reluctant to pay the actual price for PD activities. However, based on an analysis of EOLLA, this does not seem to be the main constraint. What does constrain people from participating, in reality, is probably their reluctance in the face of unknown learning modes or fear of sharing their problems in an open forum.

Information summary: EOLLA

Table 12. EOLLA information summary

Background	
Short general description of the practice W)	Empower Online Learning Leadership Academy (EOLLA) is a yearly event designed around the principles of active learning. It targets current and emerging leaders responsible for open and flexible education, and focuses on the development of their leadership, problem solving and strategic thinking skills in response to new and emerging models of teaching and learning. So far, two editions of EOLLA have taken place in Brussels: one in June 2016, the second in May 2017.
Context of the practice	EOLLA is a joint initiative by the European Association of Distance Teaching Universities' (EADTU) Empower programme and the European Consortium of Innovative Universities (ECIU). The EADTU is a network focused on online, open and flexible higher education. The Empower project is a part of the EADTU's commitment to sharing the expertise of Open Distance Learning (ODL) universities with traditional face-to-face ones, in their transition to technologically enhanced teaching and learning. The ECIU is a partnership focused on HEIs' roles in innovation, creativity and societal impact.
Why was this practice initiated?	To address the leadership gap in the area of teaching and learning
What obstacles to academics' participation in professional development are addressed?	— Lack of awareness — Lack of efficient leadership in relation to universities' transformation to innovative teaching models
Main target of PD	Leadership in innovation
Content area	— Digital and blended learning — Strategic thinking
Processes	
Type of practice	Education workshops
Nature of PD	Non-formal
Delivery	Onsite out of school
Type of course material used	— Real-life scenarios — Other tools focused on active learning: short presentations, open discussions and small group works.
Provider	International partnerships
Funding	— A registration fee of EUR 495 per participant covers costs of the event (e.g. venue, meals, etc.) — Administrative support from EU-funded EADTU
Main challenges faced during the implementation of the practice	— To make the event financially sustainable — To attract the target audience
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching	The Academy focused on university current and emerging leaders who are expected to gain knowledge and skills that would allow them to promote and incorporate more technology-enhanced teaching methods at their institutions.

practices?	
How are the results and the impact of the practice measured?	Satisfaction with the events was measured through feedback forms. There was no robust evaluation of broader impact because it would pose too many financial, logistical and methodological challenges.
What is the impact of a particular PD on the learning of academics? Have participants significantly improved their knowledge and competences?	The participants are expected to become more aware of the problems and challenges HEIs are currently facing and might face in the future. They also develop their leadership, critical thinking, problem solving, and strategic planning abilities.
What is the impact of PD on academics' career paths?	No proven impact.
What is the impact of PD on the quality of teaching?	The implementation of some innovative digital teaching models, as a result of the academies, is supposed to enhance the educational offer of the HEIs.
What is the impact of PD on students' learning?	Those innovative modes of teaching are, by definition, student-focused, attractive in their format, and easily accessible. They are designed to improve students' learning experiences and thus their learning results.

Annexes

The annexes contain two case studies that are relevant for the professional development of HEI staff members who may not be teaching students directly. These cases focus on a) the professional development of academics in management positions, such as faculty deans, vice-rectors and rectors, and b) the professional development of academic-related staff, including librarians and those working in students' services and technical posts.

Annex A: European-level leadership project: D-Transform

The coordinator: FMSH (Fondation Maison Des Sciences De L'Homme, France)

Abstract: D-TRANSFORM was a EU-funded leadership project implemented by an international public-private partnership. The project is considered innovative in two aspects. Firstly, it involved a very narrow but potentially impactful audience – it primarily targeted senior university leaders (such as rectors and vice-rectors), as well as staff with strategic responsibilities, and focused on the role of digital resources in shaping university strategies. Secondly, it was comprised of multiple activities addressing different obstacles to PD that were implemented during a limited time span. Three main outputs included the provision of research-based guidelines for universities' digital transformation, two leadership schools for high-level university officials, and the creation of a MOOC to raise awareness of project topics, to complement the Leadership Schools and to disseminate the results to broader audiences.

Interviewees:

- Professor Anne Boyer, Representative of the University of Lorraine, Scientific coordinator for D-TRANSFORM
- Mrs Ada Giannatelli, Digital Learning Project Manager at Politecnico di Milano. Responsible for design and implementation of the MOOC at D-TRANSFORM

Introduction

D-TRANSFORM (Transforming Universities for the Digital Age) was an EU-funded project that targeted university leaders and focused on **digital resources as a lever for university transformation.** D- TRANSFORM involved a partnership of four European universities as well as two private organisations and one European educational network (all identified below). It ran for three years between 2014 and 2017 and was comprised of three main activities:

1) Provision of research-based guidelines on digital innovation and strategies for HEIs,
2) Organising two leadership schools involving the training of high-level university officials, and
3) Producing an open online course aimed at raising awareness and complementing the leadership schools.

D-TRANSFORM was a pioneering project in many aspects. It involved a combination of different activities that were implemented during a limited time span. It targeted an audience that was very specific and also quite unusual for PD programmes – university senior management. It also addressed issues at a strategic level of the HEIs, rather than the individual skills and competences of academic staff. The main aim of this case study is to evaluate if and how these atypical features of D-TRANSFORM translated into its effectiveness and impact. The case study also discusses the potential role of the EU as a catalyst for innovation and change across European HE systems and institutions.

Context

D-TRANSFORM, co-funded by the European Union Erasmus+ programme, was a first attempt to set up a 'University Leadership Programme' at the European level ([117]). **The project was primarily targeted at senior university leaders (rectors and vice-rectors)** but also academic staff with strategic responsibilities. It focused on the role of digital resources in shaping university strategies, and therefore it considered Massive Open Online Courses (MOOCs) and Open Educational Resources (OER) as a lever for transforming the HE systems and adapting universities to the new learning ecosystem that has developed in the 21st century and to the needs of both new student populations and the labour market ([118]).

The project ran for three years from 1 September 2014 to 1 September 2017 and involved seven partners from five different countries:

- Budapest University of Technology and Economics, Hungary
- Fundacio per a la Universitat Oberta de Catalunya, Spain
- Politecnico di Milano - METID, Italy
- Université de Lorraine, France

Additionally, the FMSH (fr. *Fondation Maison Des Sciences De L'Homme*, France) coordinated the entire project. It is a private foundation under the sponsorship of the French Ministry of Higher Education and Research, and one of the goals of FMSH is to foster international scientific cooperation in the EU. Another private company involved was Sero Consulting (UK). It is a consultancy organisation that offers research, evaluation, strategy formulation, project management, training/workshops, etc. related to all levels of education. Finally, the European Distance and E-Learning Network (EDEN) – a European association in the field of open, flexible, distance and e-learning – formed a part of the project.

HEIs are facing major transformations that require modern governance arrangements and dynamic leadership.

D-TRANSFORM was initiated in response to an increasingly fast-changing and competitive environment of EU HE systems ([119]). It is argued that nowadays European universities have to tackle key issues related to the massification of HE, career guidance, cost-efficiency, international attractiveness, student mobility, etc. Therefore, HEIs are facing major transformations that require modern governance arrangements and dynamic leadership. In this framework, some European initiatives (e.g. the MODERN platform ([120])), and some European projects (such as the La Manche project ([121])) have been launched to respond to the need to promote leadership and management skills in academic settings. However, these initiatives are generally focused on operational (managerial) aspects. D-TRANSFORM, on the other hand, specifically targets digital innovation in relation to a university's strategies and policies. The first of its kind, D-TRANSFORM proposes training programmes that focus on the impact of OERs and MOOCs (instead of a general focus beyond ICT).

Therefore, **D-TRANSFORM's goal can be defined as raising awareness of the role of digital resources for the transformation and innovation of HEIs**. Digital

([117]) See: http://www.dtransform.eu/ [accessed on 29 August 2018].

([118]) See: *D-TRANSFORM: Transforming Universities for the Digital Age*. Press release. Available at: http://www.dtransform.eu/wp-content/uploads/2015/01/press_release_dtransform_18Mar2015_.pdf [accessed on 29 August 2018].

([119]) See: http://www.dtransform.eu/about-us/why/ [accessed on 29 August 2018].

([120]) See: https://www.eurashe.eu/projects/modern/ [accessed on 31 August 2018].

([121]) See: http://www.lamanche-tempus.eu/ [accessed on 31 August 2018].

practices and technologies have the capacity to support the change of HEIs and their traditional model of knowledge dissemination. Good strategic planning, and effective management and leadership are essential to enable these changes. Hence, D-TRANSFORM aimed to inspire university leaders to find their own pathway to harness the potential of digital resources in higher education ([122]).

Implementation

The project outputs were delivered on three levels. The University of Lorraine led the first output, whose goal was to draw up guidelines with recommendations for university strategies based on the use of e-education. The reports delivered included ([123]):

- Public Digital Policies in Higher Education – A comparative survey between Spain, France, Italy and the United Kingdom
- Business models for opening up education – Sustainability of MOOCs, OER and related online education approaches in higher education in Europe
- Open Educational Resources, a lever for the digital transition of higher education
- Guidelines for the governance of HE institutions
- Guidelines for Leadership Schools – Leadership development for leaders of digital transformation in higher education in Europe.

Based on the above reports (first output), two leadership schools were organised (the second output was led by the Open University of Catalunya). The first leadership school (named 'Preparing Higher Education leaders to become the change makers of the university of tomorrow') took place in November 2016 in Barcelona, and the second (named 'Becoming a visionary higher education leader in the digital age') was held in May 2017 in Nancy ([124]). Both were five-day events addressed to leaders and senior managers of European HEIs and were aimed at raising awareness of digital resources, and especially OER and MOOCs as a strategic factor for university transformation, with a special focus on teaching and learning processes (Interview, Giannatelli, 2018). In order to allow for a high level of intimacy, interaction and networking, the leadership schools were designed for a limited number of delegates (78 and 59 participants in Barcelona and Nancy respectively). The two leadership schools were specifically aimed at:

- Rectors (tier 1)
- Vice-Rectors and other senior managers who directly report to the Rector (tier 2)
- Directors (of operational units) and Deans of Faculties who directly report to a tier 2 person (tier 3)
- Directors of relevant specialist units, such as libraries, student services, e-learning, and distance learning, at large or hierarchical organisations

Finally, Politecnico di Milano led the third output, aimed at implementing an open online course. The MOOC ([125]) that was created focused around the main innovation fronts (topics) identified throughout the first two outputs. For each topic, video interviews with visionaries and practitioners from diverse organisations were integrated with infographics that visually introduced each specific topic and explained its importance to the HEIs using a communication style that was accessible and attractive for the general public. The

([122]) Blended learning combines online digital media with traditional classroom methods.

([123]) All the reports are available at http://www.dtransform.eu/resources/guidelines-and-reports/ [accessed on 31 August 2018].

([124]) See: http://www.dtransform.eu/1st-d-transform-leadership-school-barcelona-2016/, and http://www.dtransform.eu/training/2nd-d-transform-leadership-school/ [accessed on 4 September 2018]

([125]) The 'D-TRANSFORM: University Strategies in the Digital Age' MOOC is available at: https://www.pok.polimi.it [accessed on 31 August 2018].

MOOC was launched in May 2017 and will be available in a self-paced mode at least until 2020 (the MOOC is expected to be active for at least another three years after the completion of the project in 2017) (Interview, Giannatelli, 2018). To meet the diverse needs of academics, MOOC participants are allowed either to follow the whole course, or to cherry-pick content within the topics they are most interested in (Interview, Giannatelli, 2018). MOOC participants can also engage in individual or collaborative activities, sharing their thoughts with the other course participants in the course forum.

The MOOC was launched in May 2017 and will be available in a self-paced mode at least until 2020 (the MOOC is expected to be active for at least another three years after the completion of the project in 2017).

The funding for D-TRANSFORM activities came from the EU Erasmus+ programme in the form of a grant and was equal to EUR 417,356 ([126]). However, the partners also contributed to the project in terms of, for example, extra hours dedicated to the activities, or provided resources. There was no official co-funding. Additionally, the participation in the leadership schools was free of charge for both D-TRANSFORM consortium organisations and EDEN network institutions, and grants (covered by the project's budget) were available to support the participation of attendees staying for the whole duration of the leadership schools. The D-TRANSFORM MOOC is also available free of charge.

Results

Based on interviews, **D-TRANSFORM seemed to have a positive impact on the universities, but it is difficult to assess its strength and scope** (Interviews, Boyer, 2018; Giannatelli, 2018). The project was about inspiring university leaders to find their own pathway to harness the potential of digital resources, rather than directly trigger changes at the university level. Additionally, universities' strategies are developed over the years, so it is difficult to track down the actual impact of the project at this level (Interview, Boyer, 2018). Nevertheless, the outreach was measured. Both leadership schools showed successful participation (78 and 59 participants in Barcelona and Nancy respectively). Internal evaluation used qualitative and quantitative indicators that both showed very positive feedback (Interviews, Boyer, 2018; Giannatelli, 2018). So far, several hundred people have participated in the MOOC, mainly but not only from Europe. The number is not final as the MOOC is still being used (Interview, Giannatelli, 2018). Finally, the networking opportunities provided at the leadership schools resulted in a number of follow-up initiatives and partnerships, such as a cluster ([127]) of universities gathered around the use of learning analytics ([128]) for strategic purposes (learning analytics was one of the main topics of the second leadership school) (Interview, Boyer, 2018). There are some more projects being designed at the moment, for example additional leadership schools and a project with partners from South America to adapt the results of D-TRANSFORM into the South American context. Finally, the project has popularised the concept of 'leadership programmes' for university governance among national rectors' conferences, and European and international university networks (Interview, Giannatelli, 2018).

Universities' strategies are developed over the years, so it is difficult to track down the actual impact of the project at this level.

Analysis of the practice

Innovation in this PD practice

([126]) See: https://ec.europa.eu/programmes/erasmus-plus/projects/eplus-project-details/#project/2014-1-FR01-KA203-002425 [accessed on 31 August 2018]

([127]) See: https://icde.memberclicks.net/learning-analytics-cluster [accessed on 31 August 2018].

([128]) Learning analytics is the use of data, analysis, and predictive modelling to improve teaching and learning.

First of all, D-TRANSFORM targeted a very narrow audience – high-level university officials (i.e. primarily rectors and vice-rectors) and staff with strategic responsibilities, while traditional PD activities tend to aim directly at a broader spectrum of academics. The number of leadership school participants was designed to allow for effective interaction and networking during training activities (for example, there were 78 and 59 at the two leadership schools respectively). Despite the niche audience, the MOOC is scalable to accommodate an – in principle – unlimited number of participants, in order to increase the impact by opening up content to a wider and diverse audience. However, by focusing on universities' senior management staff, the project aimed to encourage deeper, strategic changes at the institutional level. Therefore, **due to participants' influential role as decision makers, the anticipated impact of raising their awareness of the potential of digital resources was expected to be disproportionately large**. It has been indicated in literature on the subject, notably in a report of the French National Digital Council (fr. *Conseil National du Numérique Français*) that "the digital culture of governing bodies is essential for a successful digital transition in education, because these governing bodies will define and drive the transformation strategies of their establishments" ([129]).

It is often argued that **academics are unlikely to engage in activities that are not supported by top management** (Interview, Boyer, 2018). Additionally, Jensen and Iannone (2018) claim that single PD initiatives at a university are unlikely to be effective without an overall work environment that enables and encourages employees to learn and improve. This cannot be achieved without the acknowledgment of the importance of innovation and support for it on a strategic level. Therefore, affecting a narrow group of decision makers can potentially make them rethink and help re-design university policies, and thus have large spill-over effects to the broader community of academics.

University authorities can potentially have large spill-over effects to the broader community of academics through redesigned university policies.

Secondly, **D-TRANSFORM was a multi-level project that managed to combine a number of different activities despite a limited time span**. An allegation often made against short-term programmes is their lack of longevity, meaning that a project might be forgotten shortly after it has finished, and thus not have the expected impact on participants or institutions. However, it is acknowledged that shorter projects can have a positive impact as long as they focus on narrowly defined topics and aim at providing orientation or disseminating information rather than learning skills and changing habits (Cordingley et al. 2015). D-TRANSFORM focused precisely on raising awareness about the importance of digital innovation for HEIs' strategic planning – hence the short time span was justified in this case. Additionally, its longevity is likely to be ensured with the Politecnico di Milano sustaining and developing the MOOC, and through new partnerships and projects that keep the digitalisation challenge 'alive' in the academic community.

Furthermore, a number of partners working simultaneously on different, complementary outputs allowed for a comprehensive coverage of the problem despite the short period of time. Effective coordination between the partners was achieved through a number of factors: in some cases it was the previous experience of working together, holding regular meetings, and the very good complementarity of partners' expertise. For example, Politecnico di Milano having experience in MOOC production took care of the online course design and development and EDEN used its network to promote the project. As a result, a combination of different activities allowed it to address many issues and effectively overcome a number of obstacles typical for PD programmes,

([129]) See: *Guidelines for governance of HE institutions*, p.25. Available at: http://www.dtransform.eu/wp-content/uploads/2016/11/GuideLinesAnne_UK.pdf [accessed on 4 September 2018].

including the lack of awareness, lack of time, and insufficient evidence base (analysed below).

Strategy for addressing obstacles to PD

The leadership schools were the core of the project. **They aimed to update leaders and senior managers in European HEIs with knowledge, skills and attitudes for making effective decisions about the use of digital techniques in learning and teaching as well as in defining university strategies.** This was in direct response to a need to improve the leadership skills of university managers and address their frequently observed lack of "digital literacy" (Interview, Boyer, 2018). Some authors in the relevant literature suggest that academics tend to be unaware of the most recent innovations in the teaching and learning area (see, for example, Kim and Kim, 2018). Therefore, it can be expected that some university managers also might not have a full understanding of the rapidly changing HE environment (Interview, Boyer, 2018). Meanwhile, due to prevailing trends such as the massification of HE, increased student mobility and the digitalisation of education, universities are increasingly exposed to students' changing demands and international competition. Therefore, the primary role of the leadership schools was to raise awareness about the importance of digital innovation in shaping university strategies.

Two especially important advantages of the leadership schools were having highly reputable international experts as speakers with an opportunity to meet face to face, to share experiences, and to network (Interviews, Boyer, 2018; Giannatelli, 2018). The networking aspect of the leadership schools was facilitated through there being a limited number of participants, which created the desired level of intimacy; the highly interactive character of the workshops; and the balance between formal sessions and informal social events. In fact, the effects of networking are among the biggest success factors mentioned by the interviewees (Interviews, Boyer, 2018; Giannatelli, 2018). Networking led not only to broadening horizons and confronting different perspectives and experiences among the participants, but also resulted in consequent partnerships between HEIs, e.g. the consortium on learning analytics was initiated (Interview, Boyer, 2018). Both expert support and academics' collaboration are often mentioned in the literature as success factors of effective PD schemes, precisely because they tend to provide multiple perspectives and challenge established views (Cordingley et al., 2015; Darling-Hammond, Hyler & Gardner, 2017). D-TRANSFORM provided a large diversity of perspectives not only by bringing collaboration to the interuniversity level (rather than just to an interpersonal level within a single HEI) but also by inviting speakers from entirely different backgrounds (e.g. experts from the U.S.).

The open online course had the goal of raising awareness of how digital resources can be a catalyst for change in university strategies. To this end, the MOOC uses a format that is available and attractive to the broader public. It also provided an easily accessible reference for the participants, so they were able to use the materials after the project had finished. Even though the course obviously lacks the advantages of face-to-face interaction and networking, it also to some extent allows for experience-sharing and collaboration through the course forum (Interview, Giannatelli, 2018). More importantly, it addresses another essential obstacle to academics' participation in PD, namely their lack of time. The ability to access the MOOC at any given time eliminates the problem of squeezing a PD course into academics' busy schedules, and thus increases the take-up of the course. In other words, the online course served a purpose similar to that of the leadership schools – the dissemination of knowledge about digital innovation – but used a very different communication method (online course as opposed to live conference and face-to-face networking) and

The MOOC served a purpose similar to that of the leadership schools – the dissemination of knowledge about digital innovation – but used a very different communication method and targeted a much broader audience.

targeted a much broader audience (lower-level management and virtually any academics interested in the subject, in addition to top managers). Therefore, these two elements – the leadership schools and the MOOC – seem to complement each other quite effectively.

Nevertheless, in order to disseminate knowledge, one first needs to have a solid evidence base. The leadership schools and the MOOC design were therefore preceded by **a number of research studies that aimed to resolve the specific issues to be discussed during the leadership schools** (Interview, Boyer, 2018). For example, they provided a synthesis of the current state of play with regard to online education approaches in HE in Europe, digital public policies in selected European states, etc. Building on this evidence, guidelines for the governance of HEIs in relation to digital innovation as a lever for university transformation were developed. This was in response to a scarcity of research that would address challenges faced by decision makers in the HE sector in relation to digitalisation (Interview, Boyer, 2018). In fact, it is argued that the literature often fails to produce coherent findings or provide rigorous evidence that could inform practice (Chalmers and Gardiner, 2015). A lack of evidence is considered to be another serious obstacle for universities in developing their effective digital strategies. As a result, even if decision makers are aware of and responsive to the changing HE environment, they might often lack guidance on how to successfully implement relevant policies. For example, most universities have focused solely on transforming activities and materials from a physical space to the digital sphere, whereas D-TRANSFORM research revealed that digitalisation also requires modifying learning spaces through a 'hybrid' (physical/digital) infrastructure ([130]) (Funamori, 2015).

Challenges and prospects

One of the biggest challenges faced during the implementation of the project was that of attracting the target audience (Interviews, Boyer, 2018; Giannatelli, 2018). Senior university officials are rarely available or willing to attend a five-day event. This issue was addressed by exploring the needs and constraints of the target audience and by providing a relevant research base prior to the leadership schools. As a result, participants were offered concrete and very up-to-date solutions to real problems. In other words, it is assumed that the managing staff decided to participate because they thought the project had significant value (Interview, Boyer, 2018). Moreover, the institutional capacity of EDEN was utilised to promote the leadership schools among the network members (EDEN involves more than 200 institutions across Europe). Partners also contributed to its promotion through attendance and dissemination at local and international conferences. Additionally, the availability of senior university staff was addressed by careful scheduling of the leadership schools (Interview, Giannatelli, 2018). Finally, middle management as well as the heads of relevant university units (e.g. library units, teaching innovation units) were invited to participate to increase the outreach of leadership schools. Another challenge, as mentioned in the interview, was to disseminate the results after the project had finished (Interview, Boyer, 2018). It has been done through the MOOC, and among EDEN members and outcomes have been also presented at some conferences.

Emerging themes

In the case of projects such as D-TRANSFORM, inter-university and international collaboration is highly beneficial. Therefore, the organisation of such projects must come from institutions that are above the management of a single university – i.e. national, or preferably international, environments (Interview, Boyer, 2018). In this context, the EU can effectively work as a catalyst for innovation across universities and national HE systems (Interview, Giannatelli, 2018). EU patronage can also serve as an authority legitimising the project – after all, high-level

The organisation of leadership projects must come from institutions that are above the management of a single university – i.e. national, or preferably international, environments.

HE institutions. Available at: http://www.dtransform.eu/wp-pdf [accessed on 4 September 2018].

university officials are rarely accessible for such commitments and engaging them requires raising the profile of the project.

Additionally, the involvement of organisations other than HEIs – for example private companies and cultural institutions such as GLAMs (Galleries, Libraries, Archives and Museums) – might be considered highly beneficial, as they offer very specialised and complementary knowledge (interview, Giannatelli, 2018). After all, universities and their strategies are the problem in this case, and are therefore unlikely to find solutions on their own. The role of external evaluators would help HEIs identify problems and provide guidelines on how to fix them. D-TRANSFORM builds on external expertise from private actors (Sero Consulting) as well as on an existing European network (EDEN). Obviously the very process of experience-sharing and networking between rectors coming from different universities, and hence different institutional contexts, can be beneficial (Interview, Giannatelli, 2018). Nevertheless, the engagement of partners from outside the HE environment might bring additional expert knowledge, while the EU patronage brings a very desired high status to the project.

Conclusions

To sum up, D-TRANSFORM was a very successful project, as indicated by both interviewees as well as by the feedback from the leadership schools (Interviews, Boyer, 2018; Giannatelli, 2018). The topics it covered – digital resources, and especially MOOCs and OER, as a lever for university transformation – were innovative in themselves, and the guidance that the project provided was relevant for universities operating in a fast-changing environment. The mode of implementation (i.e. a combination of extensive prior research, conferences, and an online course) allowed for comprehensive coverage of the topic despite the limited duration of the project. Even though the target audience was unusually narrow (the project was aimed primarily at university leaders and staff with strategic responsibilities), influencing decision makers is expected to have significant spill-over effects on the broader communities of academics. Although the deeper impact of the project is extremely difficult to grasp, there are some essential indicators of its success. The leadership schools managed to attract senior university officials, which proves the relevance of the topic. The feedback from participants was very positive and enthusiastic, and networking opportunities within D-TRANSFORM fostered subsequent inter-university partnerships and projects on similar subjects. Therefore, the case of D-TRANSFORM also proves **the important potential role of the EU as a catalyst for innovation and change across European HE systems and institutions**.

Information summary: D-TRANSFORM

Table 13. D-TRANSFORM information summary

Background	
Short general description of the practice (W)	D-TRANSFORM is a programme on leadership development that aims to support university leaders (e.g. rectors and vice-rectors, staff with strategic responsibilities) in finding their own pathways to leverage the potential of digital resources in shaping university strategies. The project ran for three years and involved seven partners from five different countries.
Context of the practice	The D-TRANSFORM project, co-funded by the European Erasmus+ programme.
Why was this practice	D-TRANSFORM was initiated in response to an increasingly fast-changing and competitive environment of EU higher

initiated?	education systems
What obstacles to academics' participation in professional development are addressed?	Lack of awareness Lack of evidence and expertise
Main target of PD	Strategic development Leadership in innovation
Content area	Digital learning
Processes	
Type of practice	A combination of a few: Educational research Events Online resources
Nature of PD	Non-formal
Delivery	Blended
Type of course material used	Active learning during the leadership schools' workshops The MOOC
Provider	International partnership
Funding	Erasmus+ programme: EU Grant: EUR 417,356
Main challenges faced during the implementation of the practice	Reaching the target audience: university leaders (e.g. rectors, presidents) and staff with strategic responsibilities, both academic and non-academic
Results	
How has the HEI been supporting academics' pedagogical development or innovative teaching practices?	The project did not address academics directly, but rather focused on university senior management to raise awareness on digital innovation among decision makers and thus create an environment that would serve as a catalyst for pedagogical developments or innovative practices.
How are the results and the impact of the practice measured?	Through feedback from participants in the leadership schools. The expected impact on universities' strategic transitions is extremely difficult to conceptualise and measure.
What is the impact of a particular PD on the learning of academics?	It is expected that participants have improved their 'digital literacy' and have been equipped with knowledge and guidance on how to effectively incorporate digital solutions

Have participants significantly improved their knowledge and competences?	into university strategies.
What is the impact of PD on academics' career paths?	The project did not target academics directly. However, the impact is expected through the modification or implementation of relevant educational policies.
What is the impact of PD on the quality of teaching?	The participants are expected to implement some modern teaching models, especially including OERs and MOOCs, at their HEIs.
What is the impact of PD on students' learning?	Those teaching models are designed to boost students' experience, whereas this impact is indirect and difficult to measure.

Annex B: Centralisation of information on PD opportunities for academic-related HEI staff - IMOTION

Network of Universities from the Capitals of Europe (UNICA)

Abstract: IMOTION was a one-year project, conducted under the European Union Lifelong Learning Programme, which culminated in a unique platform presenting centralised information on the training and mobility opportunities of HEIs' non-academic[131] staff. Its innovativeness lies in the simplicity of the platform, which facilitates finding information about PD opportunities and is essential for the financial sustainability of the project. Furthermore, IMOTION is directly aimed at increasing the international mobility of HEIs' staff in Europe, which can increase the capacities of both the staff and the HEIs through various channels. Finally, it also has the potential to include opportunities for teaching academics.

Interviewees:

- Marta Brelih-Wasowska, Project and Communications Officer at UNICA
- Stefan Jahnke, Participant, Senior Policy Officer at European University Foundation

Introduction

Integration and Promotion of Staff Training Courses at Universities across Europe (IMOTION) was a one-year project, conducted under the Lifelong Learning Programme, which culminated in the IMOTION online platform ([132]). The platform allows higher education institutions (HEIs) to promote their staff training events such as staff weeks, job shadowing, job-related conferences, and workshops for technical and administrative staff. It also provides HEIs' non-academic employees with the opportunity to find PD initiatives more easily and quickly. The project is sustained by the Network of Universities from the Capitals of Europe (UNICA). ([133])

According to the UNICA representative there is virtually no other platform presenting such centralised information on the HEIs' staff training and mobility opportunities. This case study aims to analyse the project in order to identify its strengths, weaknesses and impact. It will also investigate IMOTION's financial sustainability and the potential to expand its functions.

Context

The professional development of the administrative and technical staff in HEIs has been a rather neglected issue. Recent developments in HE such as internationalisation processes have led to the creation of numerous novel services in HEIs (e.g. cross-departmental communication units, an extension of managerial functions) that are the non-academic staff's responsibility. This resulted in broadening the focus of PD activities (Interview, Brelih-Wasowska, 2018). This has been reflected in **the rise of activities to the HR management and professional development of all HE personnel including non-academic staff members**.

One of the most important European-level initiatives aiding the broadening focus of HEIs is the Lifelong Learning Programme (LLP) launched by the European Commission in 2007 and in 2014 replaced by the Erasmus+ programme. It was designed to enable people, at any stage of their lives, to take part in learning experiences ([134]). One of the sub-programmes established was Erasmus for higher education that includes Erasmus staff training activities. Between 1987 and 2013, Erasmus provided opportunities for over

[131] In some HEIs 'non-academic' staff are also referred as 'academic-related staff'
([132]) See: http://www.staffmobility.eu [accessed on 20 September 2018].
([133]) See: http://www.unica-network.eu/ [accessed on 20 September 2018].
([134]) See: http://ec.europa.eu/education/lifelong-learning-programme_en [accessed on 11 September 2018].

300,000 lecturers and staff in HE, with 4,000 institutions and 33 countries participating ([135]).

While student mobility was becoming common, international mobilities of HE non-academic staff was rather new (Interview, Jahnke, 2018). Erasmus created favourable conditions for HEIs' staff mobility. However, there was no centralised source of information on the mobility opportunities available, making it difficult to spread awareness of the importance and possibilities of professional development of non-academic universities' staff. The situation was exaggerated by internationalisation which, among other things, caused organisational changes in HEIs. Due to their scope of activities, international offices' staff were more exposed to information about mobility programmes. Hence, the available opportunities were rarely spread across different university units and eventually almost exclusively taken by the international offices' employees. (Interview, Brelih-Wasowska, 2018). There was therefore an urgent need for a coordinated source of information in order to ensure sufficient and inclusive professional education for technical and administrative staff.

UNICA is a network consisting of 49 universities from 37 capital cities across Europe.

In this context, **IMOTION was initiated by the president of the Network of Universities from the Capitals of Europe (UNICA), Prof. Luciano Saso and established by a consortium led by UNICA** and its partners, namely the European Association of Erasmus Coordinators (EAEC), Sapienza University of Rome, the University of Ghent, the SGroup European Universities' Network, and the Compostela Group of Universities. **UNICA is a network consisting of 49 universities from 37 capital cities across Europe**, with a combined strength of over 160,000 university staff and 1,900,000 students. Its role is to promote academic excellence, integration, and cooperation between member universities throughout Europe. To achieve its aims, UNICA articulates the views of member universities to European institutions and to national, regional and municipal governments. It provides its members with information on European initiatives and programmes and supports them in cooperative projects. IMOTION is one example of UNICA's supportive programmes ([136]).

Implementation

IMOTION was a one-year project co-funded within the European Union's Lifelong Learning Programme (Erasmus Accompanying Measures grant agreement number 2013 – 2888 / 001 – 001), launched in October 2013 ([137]). The idea was to **create an online platform for HEIs to promote the training of their non-academic staff training and for employees to find the appropriate mobility opportunities specific for technical and administrative staff**. The ultimate objective of the project was **to achieve a better promotion of mobility opportunities and to increase the overall quality of Erasmus training for non-academic staff** ([138]). Its main goal was to ensure the swift exchange of non-academic staff between different university units and to activate full awareness of the existence and scope of such opportunities. This consequently created the potential to improve performance among technical and administrative staff, their units and their universities (Interview, Brelih-Wasowska, 2018). IMOTION was therefore an innovative solution for achieving staff inclusiveness and strengthening their skills in light of internationalisation and the modernisation of HE.

The main objectives of IMOTION were defined as follows:

— Achieving better promotion and quality of Erasmus training events for HEIs' non-academic staff

([135]) See: http://ec.europa.eu/education/lifelong-learning-programme_en [accessed on 11 September 2018].
([136]) See: http://www.unica-network.eu/page/unica-glance [accessed on 11 September 2018].
([137]) See: http://staffmobility.eu/page/about-imotion [accessed on 11 September 2018].
([138]) See: http://staffmobility.eu/page/project-description [accessed on 11 September].

- The inclusion of various HEIs' units into the training and mobility programmes (e.g. International Relations Offices, PR and Communication, Finance and Accounting, ICT, HR, etc.)
- Internationalisation of member universities through inviting experts or staff members with specific profiles ([139]).

IMOTION helped establish a coordinated source of information about PD opportunities, which allowed faster searches, easier application procedures, and a more efficient selection of participants. The systemised information of all HEIs' staff-training events potentially contributes to increasing the quality of PD practices, as it allows the sharing of experiences and best practices.

PD organisers from HEIs that have signed the Erasmus Charter for Higher Education ([140]) have the opportunity to create content on the IMOTION platform from their personal accounts. The first step is to create a profile by filling in data and submitting the registration form on the IMOTION website. UNICA then reviews and activates the profile. Following this, the organisers are able to add information about their event, including pictures, videos and any other material to make the invitation more attractive ([141]). This option allows for a faster and better-quality promotion of the event.

Through IMOTION, Erasmus staff mobility offers an opportunity to participate in various forms of training abroad, such as job shadowing (i.e. a staff member from one HEI goes to work at another HEI for a certain period of time), staff weeks (training), job-related conferences and workshops ([142]). Activities are assigned to various content areas, which also allows adapting a search to specific 'target groups': International relations, Academic and students' affairs, Research and development, Human resources, Placements and careers guidance, PR and communication, ICT, Libraries and learning centres, Finance and accounting, Doctoral education, Infrastructure and Facilities, and others ([**143**]); Interview, Brelih-Wasowska, 2018). Thus, most of the offered activities are specific to a job profile. Many of them, however, **include training in personal skills such as cultural, language or leadership training**. Up to a quarter of staff weeks are cultural education and socialisation – participants are invited to excursions, traditional meals, fairs, networking, etc (Interview, Jahnke, 2018). The target of most of the practices offered therefore seems to be related to faculty (role-specific) and organisational (personal skills) development.[144]

The most commonly offered type of PD – staff weeks – has activities that are multi-layered. Firstly, they are **observation visits** to other HEIs, specific units, organisations, businesses, and countries in general. Secondly, they **involve workshops, short courses, excursions and lectures, and thus are delivered onsite in and out of HEIs.** Activities are **provided by the host institution**, usually a specific unit within an HEI. Some of them offer training materials ([145]) Interview, Jahnke, 2018). Generally, the practices are **non-formal**. They may provide certificates but not a qualification, and they have planned curriculums. Nevertheless, some universities offer the possibility of being awarded or recognised at a local or national level. However, these award systems depend on the HEIs' own initiatives (Interview, Brelih-Wasowska, 2018).

The fees for publicised events differ according to the scope of activities organised and the prices in the country in question. **The costs are shared – organisers may cover the facilities, courses, local travel (depending on the university) and so on, while participants are supposed to pay for their international travel, accommodation**

([139]) See: http://staffmobility.eu/page/about-imotion [accessed on 11 September 2018].
([140]) The document is available at: http://ec.europa.eu/dgs/education_culture/repository/education/opportunities/higher-education/doc/he-charter_en.pdf [accessed on 20 September 2018]
([141]) See: http://staffmobility.eu/page/publish-your-staff-week [accessed on 11 September 2018].
([142]) See: http://staffmobility.eu/page/project-description [accessed on 11 September].
([143]) Based on: http://staffmobility.eu/staff-week-search [accessed on 11 September 2018].
([144]) See: http://staffmobility.eu/staff-week-search [accessed on 11 September 2018].
([145]) Based on: http://staffmobility.eu/staff-week-search [accessed on 11 September 2018].

and meals, and sometimes for the programme itself. Participants are encouraged to apply for an Erasmus+ mobility grant within their home institution to cover costs for travel and subsistence ([146]). The organisational costs can be covered by the host university or it can cover these by charging a registration fee ranging from 20 to many hundreds of euros ([147]) Interview, Jahnke, 2018).

Results

Currently, the platform lists over 200 staff mobility weeks. Moreover, in 2017-2018 there were 101,672 unique visitors (an increase of 18% compared to the previous year) and 52.2% were returning visitors.

Almost 5,500 HEIs in Europe have signed the Erasmus Charter and have the possibility of participating in Erasmus staff training. Popularity is aided by the fact that the platform is listed on the Erasmus+ Staff Mobility pages of the European Commission, providing the website with sufficient visibility and legitimacy (Interview, Brelih-Wasowska, 2018). Currently, the platform lists over **200 staff mobility weeks. Moreover, in 2017-2018 there were 101,672 unique visitors (an increase of 18% compared to the previous year)**. The highest number of users were from Germany, Spain and the United Kingdom (UNICA, 2018). So the popularity of the platform is growing and is expected to continue doing so as the website expands and includes new target groups and new types of training opportunities (e.g. activities for teaching academics).

Analysis of the practice

Innovation in this PD practice

IMOTION is an innovative step in the PD of HE staff. Instead of attempting to create new opportunities for staff development it works with projects already on offer, which **allows it to create a user-based interface and avoid the high costs of maintaining a platform (website)**. Firstly, IMOTION does not encourage a volume of information flow but instead **systemises and centralises the information**, which makes the invitations reach a wider audience and eases the process of finding and selecting participants. This accessibility of information is one of the most important innovations of IMOTION (Interview, Jahnke, 2018). Secondly, an important innovative aspect of IMOTION is that **it is directly aimed at increasing the international mobility of HEIs' staff in Europe**. By its existence it directly promotes the international mobility of administrative and technical staff of HEIs in Europe. Through gathering information from all international staff weeks around Europe, the platform works as a centralised information source for all potentially interested people. In this way it simplifies the initial steps of the process of going abroad for PD activities. Finally, **IMOTION has the potential to include HEIs' staff as a whole, including teaching academics**. Teaching academics already participate in certain staff weeks, as the competences addressed are important for both teaching and non-teaching employees (Interview, Jahnke, 2018). However, there are plans to fully include the profile of a teaching academic into a full range of the activities on offer. This would make IMOTION an unprecedented platform, extremely helpful in improving the quality of European HEIs.

Strategy for addressing obstacles to PD

([146]) See: European Commission, Erasmus+, Higher Education (2018). Available at: https://ec.europa.eu/programmes/erasmus-plus/opportunities/individuals/staff-training/higher-education_en [accessed on 17 September 2018].

([147]) Based on: http://staffmobility.eu/staff-week-search [accessed on 11 September 2018].

A lack of time is one of the main obstacles to any kind of HE professionals' participation in PD. Time pressures at work, along with home and family commitments, make participation in courses and training a difficult task for many (Friedman & Phillips, 2001). In particular, when even a search for opportunities requires extensive time and research, many may refuse to even take the first step. The lack of awareness can therefore become an obstacle to participation in PD. This situation is made worse by the fact that professionals are not homogenous. A variety of factors, such as differences in career stages, learning styles and individual ambitions, all affect the likelihood of taking part in PD and appropriate programmes (Friedman & Phillips, 2001). Thus, focusing on a specific area of development in HEIs may not cater to the wide range of non-academic staff.

In this context, one of the main innovations of IMOTION is a simple solution to both the lack-of-time and lack-of-awareness obstacles. IMOTION does not focus on any specific type of opportunities, nor does it attempt to increase the offer of PD projects. Instead, it centralises and systemises already-existing information. Firstly, this **tackles the lack of awareness on the part of HEIs' staff through hosting information on staff weeks and other mobility opportunities from over 200 HEIs across Europe** (Interview, Jahnke, 2018; UNICA, 2018). This solution significantly alleviates the burden of staff looking for appropriate development activities by providing schedules, organisers' contacts, and any other necessary details. It saves time for those who are motivated to participate in professional development opportunities. Additionally, **providing a centralised point for information has the potential to spark the interest of those who had not previously been considering participating in such activities**. Currently, IMOTION is considered to be the first point of contact for staff members searching for development opportunities (Interview, Brelih-Wasowska, 2018). Additionally, the IMOTION platform is **integrated directly on the website of the European Commission**. This was an important step in gaining access to the wider public and providing the website with more legitimacy. Another success factor may have been the fact that the consortium had the strength of 3,000 universities (Interview, Brelih-Wasowska, 2018). Finally, the platform **aims to overcome geographical disparity by involving all universities despite their locations, sizes and resources**, and thereby increases the diversity of participating staff (Interview, Brelih-Wasowska, 2018).

Challenges and prospects

As the HEIs get a chance to advertise themselves, it is up to them how much financial and human resources they would like to spend on that.

IMOTION has not been supported by any external funds since the end of the project and has thus faced a significant financial **sustainability challenge** – the lack of financial resources to further develop and maintain the platform. Despite the human and financial challenges of managing, monitoring and updating the constant flow of large amounts of information, **UNICA succeeded by employing a strategy in which the management of the platform is user-based**. This means that by creating an account, the representative of a university is eligible to propose any PD activities, update the information, upload and withdraw invitations, etc. As the HEIs get a chance to advertise themselves, it is up to them how much financial and human resources they would like to spend on that. The development of one institution's advertisement is easy: it is free of charge, it takes only a few minutes to develop, and it helps HEIs to better promote their events. The factor of cooperation between participating HEIs strengthens IMOTION and allows it to be constantly sustained. This leaves UNICA's representatives responsible only for reviewing and verifying the profiles of universities' representatives (Interview, Brelih-Wasowska, 2018). **An additional challenge is geographic disparity**. While IMOTION is meant to increase the diversity of participating staff and involve all universities despite their locations, sizes and resources, it is still observable that certain locations are

significantly more popular among participants than others (Interview, Brelih-Wasowska, 2018).

While the main focus of IMOTION is non-academic administrative and technical staff, it still provides some blended profiles (targeting staff members performing both academic and non-academic roles in HEIs). Even though not directly targeting teaching academics, they are still often participants in staff mobility weeks (Interview, Jahnke, 2018). Thus, **currently, some of the programmes offered are relevant for teaching academics as well**. For instance, Latvia's University of Economics and Culture offers the 'Digitalisation of Higher Education (for academic staff)' programme, the Wroclaw University of Economics offers 1st International Academic Week, while the University of the Basque Country is organising training on Architecture and Human Rights that will explore the role of architecture in society, the kinds of architecture that can help provide better living conditions for all human beings, the role of the professors at the school of architecture, and so on ([148]).

UNICA has already been planning a set of additional opportunities that could be offered specifically to academics.

Thus, UNICA was responding to the growing interest among academic staff by including blended target group categories, allowing users to announce types of training opportunities relevant not only for non-academic staff, but also for academics ([149]). UNICA has already been planning a set of additional opportunities that could be offered specifically to academics. In March 2018 a consortium coordinated by the Eötvös Loránd University (ELTE) in Budapest and consisting of UNICA, the European University Foundation, the UniLaSalle (France) and the University of Alcala (Spain) **submitted the project 'Teaching with Erasmus+' (TWE+) that was approved in the summer 2018** (Interview, Brelih-Wasowska, 2018). This project focuses on the mobility of academics and will run from 1 November 2018 to 28 February 2021 ([150]).

The Erasmus Impact Study of 2014 (European Commission, 2014) has identified staff mobility as a key priority in the internationalisation strategies of HEIs. The main obstacles to teaching staff and HEIs benefiting from staff mobility schemes are the limited access to mobility opportunities (especially for junior teaching staff) and the lack of recognition and assessment frameworks ([151]). The above-mentioned project will be an **extension of opportunities proposed by IMOTION through the creation of the Erasmus+ Teaching Mobility Platform** (ETMP). The staff mobility platform will also be complemented with new functions for both academic and non-academic staff mobility, such as opportunities for academics and expressed learning outcomes of activities (Interview, Jahnke, 2018). Additionally, **the project aims to: develop a set of criteria to measure the quality of teaching mobility and to provide a framework for the assessment of teaching mobility activities; create an online catalogue of innovative teaching methodologies and tools to support teaching mobility; and devise policy recommendations on teaching mobility to be incorporated in the next EU HE programme post-2020** ([152]). If successfully conducted, the TWE+ can be of very high added value for HE in Europe. It will not only systemise professional development opportunities for academic staff, just as IMOTION did for non-academic staff, but will also provide additional benefits such as a database of methodologies, tools, and policy recommendations with regard to the PD of academics. The platform has a high potential for overcoming such obstacles to academics' participation in PD as the lack of time, lack of awareness, and lack of support at the policy level.

([148]) See: http://staffmobility.eu/staff-week-search [accessed on 11 September 2018].
([149]) See: UNICA (2018). UNICA Activity Report 2017-2018, available at: http://www.unica-network.eu/sites/default/files/activity_report_17-18_v2_0.pdf [accessed on 26 November 2018].
([150]) See: http://www.unica-network.eu/project/twe [accessed on 11 September 2018].
([151]) Ibid.
([152]) Ibid.

Emerging themes

Encouraging international mobility of HEI staff

Through international mobility, HE staff learn not only about differences between curricula but also about different HE systems, cultures, experiences and people. This is likely to enhance their personal and professional development as well as their general awareness and contact network.

Mobility is one of the innovative methods of education strongly encouraged by the European Commission (European Commission, 2017). It is contended that with the help of such methods, HE in Europe is more likely to achieve excellence. This is due to the wide scope of information participants of international mobilities are exposed to. Thus, **through international mobility, HE staff learn not only about differences between curricula but also about different HE systems, cultures, experiences and people, which is likely to enhance their personal and professional development as well as their general awareness and contact network.** Only through interactions with people from various countries attending the events are participants affected on multiple levels – they learn about different cultures and potentially improve their language skills (Interview, Jahnke, 2018). Furthermore, participants are exposed to international knowledge flows along with new ideas and technologies. Mobility provides teaching and administrative staff with international benchmarks and comparisons, which are then likely to have an impact on improvements in a home institution ([153]). Finally, mobility weeks connect European universities and they are more likely to form networks or collaborative projects (Interview, Jahnke, 2018). Thus, overall, international mobility can increase the capacities of both the staff and the HEIs through various channels.

Conclusions

Overall, IMOTION is a unique and innovative initiative potentially offering numerous benefits for HEIs' employees. Its innovativeness lies in three areas – its **simplicity, encouragement of staff mobility, and potential to become a larger-scale programme** encompassing both academic and non-academic HE staff. Its simplified and user-based design not only allows the HEIs to advertise themselves in the way most suitable for them, but also ensures the financial sustainability of the platform. Following the end of the project funding, the platform is only sustainable if it does not require extensive financial or human resources from UNICA. Additionally, offering only international mobility programmes, the platform is a point of information and encouragement for HEIs' staff to participate in such programmes. Finally, if successful, the extended platform would be a unique initiative providing numerous benefits for HE staff across Europe. It would be likely to increase the amount of training for both academic and non-academic staff, and to benefit the work of HEIs across Europe.

Information summary: IMOTION

Table 14. IMOTION information summary

Background	
Short general description of the practice	The IMOTION staffmobility.eu online platform allows HEIs to promote their staff training such as staff weeks, job shadowing, job-related conferences, and workshops at home universities and abroad.

([153]) See: OECD (2010). International mobility in higher education, OECD Innovation Platform brief, available at: http://www.oecd.org/innovation/policyplatform/48137663.pdf [accessed on 11 September 2018].

Context of the practice	The IMOTION project was launched in October 2013 under the Lifelong Learning Programme. IMOTION was established by a consortium led by the Network of Universities from the Capitals of Europe (UNICA) and its partners, namely the European Association of Erasmus Coordinators (EAEC), Sapienza University of Rome, University of Ghent, SGroup European Universities Network, Compostela Group of Universities.
Why was this practice initiated?	The objective was to achieve a better promotion of Erasmus staff-training events, improve their quality, and involve and activate awareness of the existence of such opportunities among technical and administrative staff and other units in the universities.
What obstacles to HEIs' staff participation in professional development are addressed?	Lack of awareness Lack of time
Main target of PD	Other – job-specific and cultural development
Content area	Other - International relations, Academic and student affairs, Research and development, Human resources, Placements and careers guidance, PR and communication, ICT, Libraries and learning centres, Finance and accounting, Doctoral education, Infrastructure and Facilities, and other.
Processes	
Type of practice	Observation visits to business premises, public organisations, non-governmental organisations (NGOs) In-service training courses in business premises, public organisations, NGOs Observation visits to other schools Education conferences or seminars Other – cultural practices (excursions, tastings, etc)
Nature of PD	Non-formal
Delivery	Onsite (work-based) in HEI Onsite (work-based) out of school
Type of course material used	Depends on the project
Provider	Formal education institution
Funding	Type of funding (varies by staff week): Free courses (public costs), paid by: • Erasmus+ programme upon application (travel

	and subsistence costs) • Host university • Sending university Courses where academics have to pay full costs Period of funding (until when funding is available) – 2013-2014 (IMOTION project funded by the EU LLP programme; since 2014 - maintenance of the platform financed by UNICA)
Main challenges faced during implementation of the practice	Internal – lack of resources, lack of information/communication across university units External – geographical disparity of interest
Results	
How are the results and the impact of the practice measured?	Statistics: unique visitors to the webpage, number of participating universities, participating nationalities and countries.
What is the impact of a particular PD on the learning of non-academic staff? Have participants significantly improved their knowledge and competences?	Potential impact: staff become more confident and open. Acquire knowledge of the best practices at other HEIs in Europe.
What is the impact of PD on non-academic staff's career paths?	No direct impact – impact at the institutional level.
What is the impact of PD on the HEI's quality of work?	Potential impact: staff become more confident and open; networking extends the experience, which can lead to joint educational and research projects. Experience sharing provides knowledge on the best practices that can be implemented at the HEI.

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