# **Computer-supported collaborative learning for careers staff working in European Public Employment Services**

Alan Brown, Jenny Bimrose

## Institute for Employment Research, University of Warwick

alan.brown@warwick.ac.uk

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### **Computer-supported collaborative learning for careers staff working in European Public Employment Services**

Alan Brown and Jenny Bimrose, IER, University of Warwick: alan.brown@warwick.ac.uk

#### Abstract:

This paper draws upon work from a four year (2014 - 2018) research project, EmployID, in order to provide an overarching view of how to use on-line collaborative learning to facilitate learning, development and professional identify transformation of careers practitioners, working mainly in European Public Employment Services (PES).

The methodology comprised participatory design, so that learning support (both online and face-to-face) could be developed that met the particular needs of the practitioners. IT applications were developed to support practitioners with on-line reflection, peer coaching and the use of labour market information (LMI) in their practice.

The initial application partners were three European PES. In one PES (DWP in the UK) two blended learning programmes were developed to support identity transformation for employment advisers and work coaches, while subsequently a Massive Open On-line Course (MOOC) was developed to support the continuing professional development of careers practitioners more generally across Europe and internationally.

A detailed evaluation of the blended learning programmes was undertaken based mainly on Kirkpatrick (1998). This showed that the blended learning programmes were highly successful and how practitioners had incorporated changes in their everyday practice six months after completion of the programmes. Additionally, both sets of staff now perceived their work identities in a more expansive way: making greater use of on-line collaborative learning, LMI, peer coaching and reflection.

The project's management of change strategy was successful and employer engagement staff and work coaches took forward the development and adaptation of an LMI on-line tool demonstrated in the learning programmes. The LMI on-line tool which was trialled within the blended learning programmes was subsequently trialled with a further 150 work coaches and then in 2017 the tool was rolled out nationally to 16,000 staff. The approach adopted with the initial PES was picked up by the European PES network and incorporated within their peer learning programme.

The International MOOC was successful in facilitating a dialogue about the implications of the changing world of work for the professional identities of careers and employment practitioners in Europe. It attracted over four hundred learners who were mainly careers practitioners, eighty of whom were very active participants. The MOOC has attracted interest in being adapted for use in Latin America, the Caribbean and India.

The significance of this study is that computer-supported collaborative learning can be expanded from enhancing continuing professional development to supporting professional identity transformation of careers practitioners engaging with a changing world of work.

#### 1. INTRODUCTION

In response to a changing labour market, the European Public Employment Service (PES) 2020 Strategy (PES Network, 2015) outlined some necessary changes to the role and function of careers and employment counsellors working in these services. Career and employment counsellors needed to operate differently, in roles and capacities that required them to adopt new professional identities that involved new skills, competences and understandings. This article focuses on progress in supporting the professional identity transformation of careers and employment counsellors, which was a key objective of a four year (EmployID) research project, funded by the European Union (EmployID, 2017).

Helping employees to be able to shape change was a key goal of the project, with a focus on professional learning and development in order to facilitate the transformation of the professional identity of employees, both individually and collectively (Brown & Bimrose, 2015). Identities at work are the meanings attached to an individual by the self and others and are displayed in attitudes, behaviour and the stories we tell about ourselves to others and ourselves. The meanings and stories may be based on social identities, associated with work, or personal identities, based on personal characteristics, attitudes and behaviour an individual displays or which others attribute to him or her (Ibarra & Barbulescu 2010, p. 137).

The focus of the project was upon learning as a driver of identity development at work and a consideration of how identities at work develop and change over time. Brown (1997) developed a dynamic model of occupational identity formation (see figure 1), where the process of acquiring an occupational identity takes place within particular communities where socialisation, interaction and learning are key elements, with individuals taking on aspects of existing identities and roles, while actively reshaping other aspects in a dynamic way. The formation, maintenance and change of occupational identities are always influenced by the nature of the relationships around which they are constructed. Over time these interactions may lead to modifications and reshaping of these same structures, the communities of practice and the individual's work identity (Brown 1997).

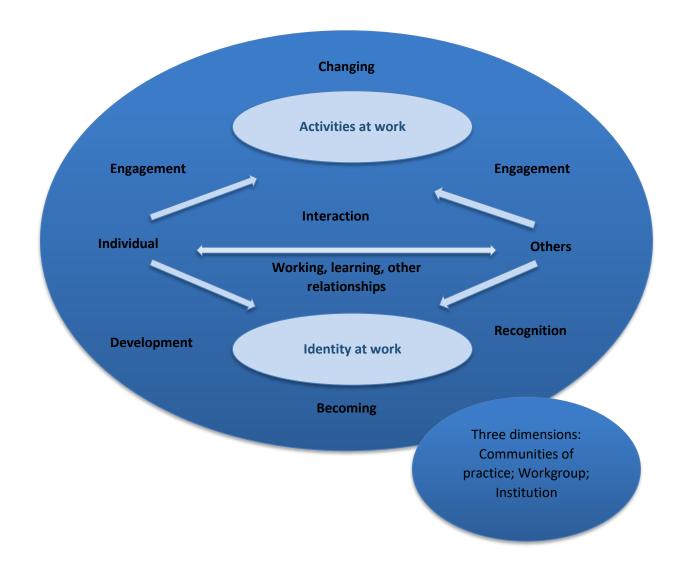
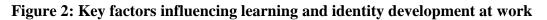
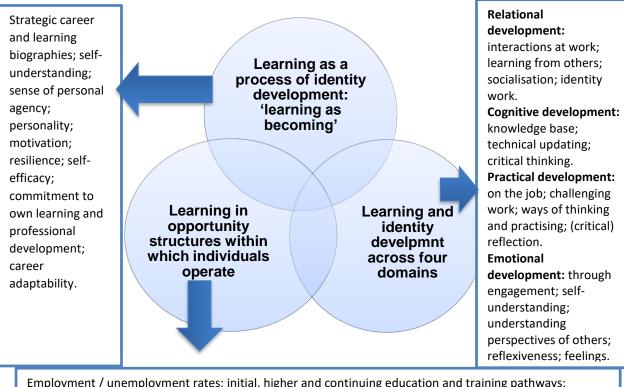


Figure 1: Dynamic model of occupational identity formation (Brown, 1997)

Further developments in thinking about identity development are represented below (Brown and Bimrose, 2015; 2018). Learning at work can be effectively supported if it is understood that such learning can be represented in three ways: as a process of identity development; a process of development in four inter-related domains; and taking place in the context of particular opportunity structures (see Figure 2).





Employment / unemployment rates; initial, higher and continuing education and training pathways; occupational structure; skill formation regimes; occupational pathways; work organisation; affordances for learning and interaction at work; support structures (e.g. family, personal networks, public employment services); career guidance.

Figure 2 draws attention to three representations of key factors influencing learning and identity development at work. The first representation views learning as a process of identity development: 'learning as becoming' is outlined in the strategic career and learning biographies of individuals. Key influences in this representation of learning include: the personal characteristics underpinning learning and development: learning through self-understanding; a commitment to own learning and professional development; and career adaptability (Brown & Bimrose 2015).

The second way learning and identity development can be represented is as occurring across four domains: relational development; cognitive development; practical development; emotional development. Learning may involve development in one or more domains and development in each domain can be achieved in a number of different ways, but development can be represented thematically, although the extent of development under particular themes can vary greatly between individual cases (Brown & Bimrose 2018).

The third way that learning and identity development at work can be represented acknowledges that learning takes place in the context of the opportunity structures within which individuals operate. These structures may also play a key role in access to work which is rich in learning and development opportunities (Brown & Bimrose 2018).

Overall then, learning at work can be effectively supported if it is understood that such learning can be represented as a process of identity development; a process of development in four inter-related domains; and taking place in the context of particular opportunity structures (Brown & Bimrose 2018). The above models constituted the theoretical framework for the EmployID project and the findings reported below.

#### 2. OBJECTIVES

Supporting the professional identity transformation of careers and employment counsellors in order to enable them to meet the challenges of their evolving roles was the key aim of the project. The support was focused mainly in the context of PES but in the latter stages was extended to a wider range of careers professionals across Europe and internationally, with the intention to investigate how technology enhanced learning (TEL) approaches could facilitate identity transformation for careers and employment counsellors. The TEL approaches included the use of blended learning programmes for PES, a Massive Open Online Course (MOOC) for careers and employment counsellors more generally, complemented by the use of on-line labour market information tools as well as on-line support for reflection and peer coaching.

#### 3. METHODOLOGY

The methodology comprised participatory design, so that learning support (both online and face-to-face) was developed that met the particular needs and requirements of careers and employment counsellors. As part of the learning support, IT applications were developed to support counsellors with on-line reflection, peer coaching and the use of labour market information (LMI) in their practice. In the UK PES (Department of Work and Pensions) the first blended learning programme was developed to support identity transformation for employment advisers, while the second programme focused upon supporting identity transformation of work coaches. A MOOC was also developed to support the continuing professional development of careers and employment counsellors across Europe.

The approach to data analysis of the qualitative comments generated in the blended learning programmes and the MOOC entailed coding based on a scheme developed by Murphy (2004) and Rodrigue et al. (2012) to analyse online asynchronous discussions. After four coders tested the original scheme on a restricted set of comments, each topic/week was coded by two independent coders. The units of analysis were chosen thematically (Rourke, Anderson, Garrison, & Archer, 2001). The exact beginning and ending of each idea within the comments was marked and assigned a code using the MAXQDA software tool. Coders went through two rounds of coding. Any disagreements were resolved through discussion.

#### 4. **RESULTS**

The focus of the project had been upon the exploration of the nature and extent of the professional identity formation of different staff groups within the PES partners. An initial phase of familiarisation involved the systematic analysis of the learning needs required to support the successful professional identity transformation of PES counsellors, managers, employment advisers and learning and development staff. Subsequently, two blended learning programmes were developed for DWP staff. The project team involved senior managers as well as practitioners, to ensure sustainable development. The project also developed a MOOC on The Changing World of Work which attracted 400 mainly careers practitioners from across Europe.

The second blended learning programme for DWP, which is reported here, was delivered to 68 work coaches and yielded rich qualitative and quantitative data on facilitation activities in the programme. Trials of an LMI tool were incorporated in the programme, prior to wider trials with 150 work coaches and then a national roll-out to 16,000 staff.

#### 4.1 UK Blended Learning Programme 2

DWP is responsible for UK welfare and pension policy, employing approximately 20,000 guidance practitioners and about 1,500 employer engagement staff specialising in work with employers. Following the success of the first blended learning programme early in 2015 with DWP employer engagement staff, it was decided that the second programme would be aimed at work coaches. Overall, the evaluation results of the second blended learning programme were very positive, with critical feedback mainly relating to some IT infrastructure problems when accessing course material. The collaborative learning experience and the content of the programme were perceived as very useful. A detailed evaluation report based mainly on Kirkpatrick's (1998) level 1-3 evaluation questionnaires was produced (EmployID, 2017).

The second blended learning programme was aimed at supporting DWP Work Coaches in managing challenges in their working life as well as providing them with relevant material linked to the digital agenda and use of labour market information together with insights into coaching processes. The material covered during the six course weeks included: cultural changes within DWP, impact of going digital, enhanced coaching (two weeks), labour market information (LMI) for Work Coaches, and reflection on experience and learning.

74 employees, of whom 68 actively participated, enrolled for the programme, which was run on the FutureLearn platform. The evaluation team provided insights into the learning patterns of the online learners, conducted semi-structured interviews with line managers and learning and development staff responsible for design and delivery of the programme. The interviews were conducted 4-6 months after the course finished in order to gain some insights into long-term learning outcomes, the applicability of the learning and transfer of knowledge within the organization.

#### 4.2 Effects on Identity Development

The second blended learning programme evaluation highlighted evidence of individual development, such as increased digital capabilities, deeper understanding of coaching processes and how to use LMI in practice, and transformed attitudes to learning which amounted to a changed culture supportive of resourceful learners. Learners had actively engaged in experience exchange and collaborative discussion during the course, and this carried over to their subsequent work activities, as there was a statistically significant rise of collaborative reflection activities – compared before and after the course - on the level of "asking colleagues for support", "actively reading colleagues' and clients' comments" and "supporting colleagues in finding solutions via the new skill of strong questioning" (EmployID, 2017).

The social learning activities around the changing world of work also significantly changed the learners' experience of collaborative learning. Participants agreed to a much stronger extent that the discussions with colleagues helped them to solve problems, reflect about their own learning, understand their role in the organisation and how to reach organisational and individual goals. All these improvements are important indications of resourceful learners. As learning in communities is an important aspect of professional identity transformation (Brown & Bimrose, 2018), it is clear that the programme supported professional development processes on several levels.

Effects of the intervention could be observed on the level of individual development, collaborative learning and client/customer satisfaction. Looking at the level of internal processes rich feedback was collected on how to roll out an online social learning format in DWP. The positive learning effects triggered by the social learning approach implemented in DWP have also been recognised at higher management level and the project has clearly influenced the approach towards how learning will be implemented in DWP in future (EmployID, 2017).

The blended learning programmes taken together provided strong evidence of professional identity transformation for three groups in DWP: Work Coaches, Employer Engagement staff, and learning and development staff.

#### 4.3 International MOOC on The Changing World of Work

Once the work with DWP on identity transformation through development and delivery of blended learning programmes was completed, it was decided to adapt what was learned through these processes by offering a generic MOOC which was open to everyone with an interest in the consequences for identity development of guidance, coaching and counselling staff of the changing world of work. This MOOC was delivered in March – June 2017 and attracted over 400 career and employment practitioners from across Europe and internationally.

The five week international MOOC on the Changing World of Work started in March 2017. Similar to previous programmes a core didactical element was active learner engagement via discussions and reflection activities. Whilst each participant worked through the lessons as an individual learner, the underlying ethos of the course was one of active learning in a professional context. The content of each week was based around the following topics: Introduction to the changing world of work; Coaching: Going Digital; Labour Market Information (LMI) and Sectoral Knowledge; Reflection and Evaluation. The course was very successful with high learner participation.

The participants went through the course at their individual pace and were able to access over the time period from March – June 2017. Active learner engagement via discussions and reflection activities were triggered by the 8 core tutors. In total 402 participants from approximately 20 countries originally signed up for the course out of which 86, mostly professionals in career guidance or employment services as they reveal in their comments throughout the course, actively engaged in the course and achieved course completion. In the three months' runtime of the course, participants wrote 1073 posts in total. On average, each post contained more than 81 words, which shows the high engagement of participants and the richness of their contributions. Compared to the very large drop-out rates reported for MOOCs of about 90% (Gütl, Hernandez Rizzardini & Chang, 2014) the retention rate for this MOOC was surprisingly high. A high involvement of participants was also reflected by 92% of their initial comments having received at least one reply.

#### 4.4 Effects on identity development

In the international MOOC careers practitioners stressed the importance of learning from others in identity development. Colleagues are one of the most important sources for learning from others:

I reflect on my courses considering how I feel myself and what feedback the participants give. When I do courses together with a colleague, we reflect together, too, but I also discuss with them when I'm considering changes or when I face challenges. We used to reflect together more systematically before, that's something we should get back to. I have a lot of new colleagues and sometimes I reflect on how to build more and/or better co-operation with them... (Lesson6, row 4)

The MOOC helped build a community of interest for those wishing to exchange ideas and learn from colleagues and helped practitioners cope with feelings of isolation. Reflection was seen as another avenue which could support identity development:

The notion of 'community reflection' interested me as I feel that keeping a reflective journal is only the start of a process of reflective practice and that by writing ideas and experiences down and analysing them, you naturally want to talk through these reflections with others to get their ideas. I can see how a formal meeting would be beneficial, but knowing the time constraints within the workplace, I find that chatting with colleagues, family and friends informally is equally rewarding in gaining ideas for improving practice and or build on learning. As a case in point, last year I signed up to join a community of practice group, which focused on supporting young people with disabilities and due to different work commitments we couldn't even manage an initial meeting (virtual or otherwise). (Lesson6, row 236).

Participants also suggested linking to existing communities of interest:

I can highly recommend connecting with experienced careers practitioners like ..... (people like ..... are also great contacts to have) on LinkedIn either directly or on some of the Career Development Institute's Communities of Interest, as much of the best CPD advice I have had this year has been from speaking to practitioners directly. Please feel free to connect with me on LinkedIn, as I am always interested in sharing best practice with other careers practitioners! (Lesson2, row 1040)

This importance of learning from others was also supported by the need to belong to a community, and the recognition of the MOOC community as an important social element in their professional identity development:

"For myself, I find 'practitioner groups' (such as this, but I have equivalents in my own organization) are very useful. The comments about working in isolation are so true, I am in a very small team and often am the only one who deals in certain aspects, so support through practitioner groups and contacts made through these are invaluable. We can share similarly issues and more especially, solutions/problem solve jointly. I also realised that my role has changed within these groups over time, moving from being a 'user' to being confident enough in my knowledge base to be a 'contributor'." (Lesson2, row 1230)

It is so positive to be able to discuss issues with colleagues in a safe environment and great for building trust within the work environment. (Lesson3, row 867)

That careers practitioners were feeling their identities were in flux was contrasted by one practitioner with a former identity:

I feel I had a clearer professional identity to others as an Occupational Therapist, as a careers adviser - the professional status is more vague, in my current role I am called a Personal Adviser which always needs an extra explanation. This external perception of my professional identity does not concern me, I am very aware that it is the skills and experience I have that will be vital element that enables me to remain employable in the longer term, not a job title. (Lesson2, row 1840)

The feeling of isolation is present for a number of participants, for various reasons. While for some isolation is perceived due to their remote geographical location, another participant feels even isolated in their own organization, as the example below shows. Technology can be a benefit when it comes to overcoming isolation, since it offers the possibility to connect to others in the virtual world. I also work in more isolation than I have done in the past (I'm 100 miles+ away from the rest of my team) - and for me I have had to think about ways that I build in relational learning through building virtual teams or connections with people.... Thank goodness that we are now able to access so many resources (like this MOOC!) for free and via technology. (Lesson2, row 1462)

"In terms of learning with others, within my organisation I can sometime feel like an 'island' so have explored links with other schools and local networks to support my learning. It is always good to have a 'buddy' who you can share ideas / seek advice from; learning in isolation can be very daunting ..... I do miss the face to face support of a mentor as a support." (Lesson2, row 1064)

I feel your pain about being an Island & I would welcome the opportunity to connect with you. Like yourself I am in the same boat - I'm self-employed so I'm a whole lot of Island all alone!!! So if I can help you as a peer to peer support connect with me. (Lesson2, row 1051)

Feelings of isolation could also be linked to fewer face-to-face meetings:

"I share the feeling of growing distance totally. Most of my colleagues are situated all over [country] in different cities and we communicate using Skype. It's easy to reach people around the country but on the other hand, we almost never see faceto-face because Skype is cheaper. The same goes for my students. Even the colleagues in the same city work from home for a few days every week so often it's pretty lonely at the office." (Lesson2, row 516)

I am quite surprised that we are still talking about what the future labour market will need and how these new trends will affect future jobs but I feel like the most important - people themselves - are left out. How they will be affected by constant insecurity in their lives? Many people are enthusiastic about new technologies and many can learn how to use them and yes, they save time and can be very useful... but I believe many people can be frustrated by these technologies and I don't mean because they can't use them. I mean I have studied psychology because I liked to interact with people - and not by phone or skype or by e-mail - but with real people with their handshakes, movements, tone of voice... I often hear that from many career counsellors - they appreciate the help of modern technologies, but still feel the most significant work (at least as they perceive it) is done face to face." (Lesson3, row 562)

Several practitioners saw themselves as being isolated on their own 'islands' and that they were keen to seek and to rely on other networks or communities for their professional growth. The discussion of geographical distance continued as some of the lone workers are working remotely and four learners conveyed how technology has contributed to effective communication and how it has become a part of their day-to-day routines. Faced with the

geographical challenge (working in isolation/working remotely) some learners highlighted the importance of finding an opportunity to learn through relational learning, for instance, building virtual teams and connecting with other practitioners. One practitioner mentioned that that informal sharing mechanism could help to gain new ideas for improving practice and to build learning, while another expressly mentioned how it helped her/him to maintain his/her identity in the current job as a careers professional. Several practitioners outlined how colleagues can learn from each other in the same field as other colleagues would deal in the same situation differently, including problem solving.

As well as conversations directly related to their changing roles, practitioners also had conversations about the structures and context within which they worked. Eight practitioners stated that their organisations were undergoing organizational changes on structural level that have affected their work. The large-scale structural changes included administration and management restructuring, establishing new departments and privatization of PES and social security services in one country. Other practitioners stated that the PES services in their countries will be decentralized and their services will be outsourced through private companies. One of the triggers of identity transformation in organizations is technological change. The high speed of technological change has influenced the way practitioners work in their daily routines and how business and services are conducted. The practitioners welcomed the opportunity to talk through the consequences of some of these changes. Some PES providers are developing their digital services and online client support, with four practitioners outlining how they were copping with the change, while one practitioner opined that the online approach is not as effective as the face to face counselling because information can be interpreted differently and navigating through the websites can be confusing and frustrating.

Two practitioners identified that there is a mismatch in training plans between management's agenda and client needs, and that management made decisions without any input from career advisors. On the other hand, several practitioners indicated that management support (financially and non-financially) has opened more possibilities to professional growth. The discussion also involved the budget cuts and limited resources in the public sector and financial constraints in training for professional growth of career advisors. Such constraints have meant some career advisors have had to rely on free of charge events and online activities.

Due to organizational change, practitioners also highlighted that there can be significant shifts from previous practice and organizational culture and values. The shift in organizational culture has directly impacted career advisors such as in the requirement to take more responsibility to determine their own training needs and how they generally participate as well as take initiative in the organization. Another practitioner stated that PES must become more flexible, open, and market-oriented and that requires a mental shift of PES managers and workers. Practitioners made eleven comments as to how organizational changes had meant they lacked time for professional growth through peer-to-peer support programmes. The reasons behind their lack of time were the high workload, work pressure, being too busy and range of work commitments. Another reason for work pressure was

identified as changes to key performance indicators: according to one learner, measuring PES performance is nowadays more likely to reflect quantity rather than quality. Another comment was that the measure of soft outcomes has largely been ignored in favour of the visible indicators of the success of the services.

Organizational changes, especially structural changes, will likely lead to changes in roles and responsibilities as well as giving rise to new processes in the organization. When changes in roles and responsibilities occur, these would raise the question of one's capability in performing his/her new role. In general, there are gaps (big or small) between the current and the desired skill set whenever new roles and responsibilities appear. The scale of organizational changes mentioned in the MOOC are linked to identity challenges of individuals due to the new roles and responsibilities and new processes that are being implemented. Technologies have also changed work processes and the way people communicate. The MOOC seemed to help practitioners have conversations about both the context in which they worked and their new roles and identities. In this sense the MOOC contributed to key aspects of practitioners' learning, development and identity transformation.

#### 5. CONCLUSIONS

The long-term vision of the project was that users would take ownership of the ideas, processes and tools of the project so that they would continue to use and adapt them after the lifetime of the project. Hence the intention of the work on the first blended learning programme was to work with DWP employer engagement staff and learning and development staff and co-create material and to work together in facilitation of learning and development in the delivery of the programme, such that ideas about employer engagement staff and use of LMI to support staff and clients would be owned by employer engagement staff and used in their work with both employers and work coaches. In this, the management of change strategy was successful and employer engagement staff took forward the development and adaptation of the LMI on-line tool. The learning and development staff used the ideas and skills developed in the first programme to feed into both the second blended learning programme and the use for learning and development of DWP's on-line learning support.

The ideas underpinning the second blended learning platform was to work with DWP work coaches and learning and development staff such that ideas developed in the programme would be owned by the work coaches and used in their work (evaluation shows this was largely achieved). Again the management of change strategy was successful and learning and development staff further developed their skills to feed into development and use of DWP's own on-line provision to support learning and development. For each of the three groups (work coaches; learning and development staff; and employer engagement staff) there was evidence of identity development as their work roles and identities evolved.

The International MOOC was successful in facilitating a dialogue about the implications of the changing world of work for the professional identities of careers and employment counsellors in Europe. Overall, a positive outcome has been achieved, including fundamental change management and demonstrable impact.

Conceptually, the findings were in line with the models of identity transformation outlined, that is, work identities were produced through a mix of personal agency, interaction with others, and existing social norms and discourses, and these factors interacted in a dynamic and iterative way. Identity development through narratives for storytelling and sensemaking was evident, with the career conversations switching between three perspectives: skill development, the structures and contexts within which skills are developed, and careers (narratives) and identities. The central theme for the EmployID project was supported, as ICT tools did create spaces to drive processes of learning, facilitation and reflection in support of identity development and career construction. The spaces provided were animated in order to support rich interactions which helped participants to make sense of and tell stories about their changing world. Indeed, the blended learning programmes and international MOOC had high levels of facilitation coupled with very strong emotional and relational components which generated commitment to the practical and cognitive dimensions of skill development. Overall, the pedagogic approach of linking situated practice, overt teaching, and reframing was powerful, but transformed practice is a demanding goal and the affective elements of facilitation were important in order to generate a commitment to change and identity transformation.

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