The Use of On-line Collaborative Learning to Facilitate Learning, Development and Professional Identify Transformation of Careers and Employment Practitioners

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Abstract:

This paper draws upon work from a European 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 and employment practitioners. The methodology comprised participatory design, so that learning support could be developed that met the particular needs of the practitioners. IT applications were developed to support practitioners with on-line reflection, coaching and the use of labour market information (LMI) in their practice. In the UK Public Employment Service (DWP) two blended learning programmes were developed to support identity transformation for employer advisers and work coaches, while subsequently a MOOC was developed to support the continuing professional development of careers and employment practitioners more generally. Employer engagement and coaching staff took forward the development and adaptation of an LMI on-line tool demonstrated in the learning programmes. The learning and development staff used the ideas and skills developed in the blended learning programmes to feed into DWP's on-line learning support. 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.

1 INTRODUCTION

In response to a changing labour market, the European Public Employment Service (PES) Network produced a strategy for PES for 2020 (EU PES Network 2017). The strategy, first published in 2011, outlined some necessary changes to the roles of careers and employment practitioners, who are required increasingly to enable transitions from and within work not just help clients into work. They are also expected to shift from the traditional role of job matching to a relationship with clients that consists of facilitating, coaching and conducting (EU PES Network 2017, p. 4). Supporting the professional identity transformation of careers and employment practitioners is a key objective of a four year (2014 – 2018) research project, EmployID, funded by the European Commission as part of the FP7 ICT work programme. General progress on the first three years of research was reported to the Commission in the EmployID progress report (EmployID, 2017). This paper, however, draws upon work in Year 4 (from February 2017) and consolidates earlier work in providing an overarching view of how to use on-line collaborative learning to facilitate learning, development professional identify transformation. The success in facilitating identity transformation for careers and employment practitioners is what makes this of interest to a wider community as it extends the reach and depth of computer supported education. The focus of professional learning and development was 'deep learning', and a shift away from just training skills, towards facilitating the transformation of the professional identity of practitioners, individually and collectively.

2 OBJECTIVES

Supporting the professional identity transformation of careers and employment practitioners in order to enable them to meet the challenges of their evolving roles was the key aim of the EmployID project. The support was focused mainly in the context of PES but in the latter stages of the project was extended to a wider range of careers professionals across Europe and internationally, with the intention to investigate technology-enhanced learning approaches could facilitate identity transformation for careers and employment practitioners more generally. The TEL approaches included the use of blended learning programmes for PES in the first three years of the project (EmployID, 2017). In Year 4 a Massive Open Online Course (MOOC) aimed at careers and employment practitioners more generally was developed which also incorporated the use of online labour market information tools as well as support for reflection and peer coaching.

3 METHODOLOGY

The methodology comprised participatory design, so that learning support (both online and face-to-face) could be developed that met the particular needs and requirements of careers and employment practitioners. As part of the training support, IT applications were developed to support practitioners with on-line reflection, peer coaching and the use of labour market information (LMI) in their practice. In the UK PES (DWP) the first blended learning programme was developed to support identity transformation for employer advisers, principal duties were to offer support to employers, while the second programme focused upon supporting identity transformation of work coaches, who worked mainly with job seekers or employed claimants (EmployID, 2017). A MOOC was also developed to support the continuing professional development of careers and employment practitioners more generally across Europe and internationally.

The participatory design which included over thirty meetings with staff from a wide variety of roles and hierarchical levels produced a focus upon five themes. Design and implementation groups comprising practitioners, specialist staff (with expertise in LMI and coaching support), learning and development staff and members of the research team then co-constructed blended learning materials for delivery within DWP. These materials also formed the basis of the MOOC and informed the design of the LMI on-line tool.

The first theme was 'cultural change within PES'. The focus on the cultural changes taking place within PES starting with a look at the 2020 vision and the technological changes that are supporting this vision. The implications of these changes for coaching and

support roles were also addressed. The second theme focused upon the 'challenges of going digital', examining how digital technology is impacting the coaching role. It will give you a glimpse into the digital future of the Work Coach role as we move towards making our 2020 vision a reality. The third theme related directly to 'the coaching role', giving coaches the opportunity to reflect upon their role as a coach, the expertise demonstrated in the role and how to support clients to take greater personal responsibility for their work search and in-work personal development. The fourth theme was 'Labour Market Information (LMI) and Sectoral Knowledge', involving a series of activities to help participants understand how new forms of representing LMI and Sectoral Knowledge, including an LMI app, could be used in practice. The fifth theme was 'reflection' and on all themes there were opportunities for participants to take part in activities and discussions related to their practice.

The approach to data analysis of the qualitative comments generated in the blended learning programmes entailed coding based on a scheme developed by Murphy (2004) and extended by Rodrigue et al. (2012) for online asynchronous discussions. After four coders tested the original scheme on a restricted set of comments, it was slightly adapted to fit the research goals and put a stronger focus on facilitation, social presence and workplace application. 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 initially 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 work coaches and counsellors, managers, employer advisers and learning and development staff. The learning needs analysis identified for the practitioners included support for the management of cultural change; the challenges of going digital; coaching support; the use of reflection and LMI to support

practice. Subsequently, close collaboration identified specific requirements that reflect the operational contexts of different PES organisations located in different social and economic contexts. The project team involved senior managers as well as practitioners, to ensure sustainable development (EmployID, 2017).

4.1 Blended Learning Programmes

The DWP is the biggest public service delivery department in the UK, responsible for welfare, employment and pension policy, employing approximately 20,000 guidance practitioners and about 1,500 employer engagement staff, specialising in work with employers. The first blended learning programme for DWP was co-constructed by EmployID project staff (with domain expertise and experience of delivery of successful blended learning programmes to support the continuing professional development of careers practitioners) and members of DWP's learning and development team and their national and regional employer support teams.

The programme was delivered to 15 employer advisers in a single DWP region. The programme was intended to support the 'turn' towards regarding employers much more centrally as clients in recognition of the need for DWP to support the effective functioning of local and regional labour markets. The content focused upon helping employer advisers to improve their understanding of Local Labour Market (LMI) and Sectoral Knowledge. The content was delivered via the FutureLearn platform and supported through a mix of face-to-face meetings, audio-conferences and individual and group activities, including use of an on-line LMI tool. The on-line content was scheduled to take involved to take 22.5 hours over 6 weeks from February – March 2015. In practice, the employer advisers spent much longer engaged in programme activities which led to very rich on-line discussions and the development of a range of procedures and activities to enrich their additional responsibilities as employer advisers.

A detailed evaluation report based mainly on Kirkpatrick's level 1-3 evaluation questionnaires (Kirkpatrick, 1998) was produced (EmployID, 2017), which showed that the programme had been highly successful and qualitative evidence highlighted how staff involved in the programme now perceived their work identities in a more expansive way. Learning and development staff were enthused with the possibilities of making greater use of on-line collaborative learning, while employer engagement

staff at local, regional and national levels now embraced the possibility of using open and linked LMI data in a much more dynamic way which transformed how they viewed their role and how they related to others both within and outside the organisation. The open and linked data drew upon the data from the Labour Force Survey; the Annual Survey of Hours and Earnings; the Employer Skills Survey; Working Futures; and also included vacancy data from Universal JobMatch, coupled with data on skills, interests and abilities from the US O*NET database. The data available was organised around the Standard Occupational Classification and the quality, comprehensiveness and timeliness of the data enabled the employer advisers to present a much fuller picture of local and regional labour markets to employers as well as conveying a more professional image based upon their expertise to employers and work coaches more generally.

Following the success of the first blended learning programme early in 2015 within DWP, it was decided to run a second programme, but this time without the face-to-face component. The participants were work coaches from two different DWP regions who volunteered to take part in the programme following local area briefings and an audio conference with the course team. The online learning programme was similar to a MOOC, as it was delivered on the FutureLearn platform, although the programme was neither massive nor open. The programme was again co-constructed, although this time DWP's learning and development team took a more central role in line with their developing expertise from the first programme. The course team also included EmployID project team members, area managers and work coaches. The programme was delivered at the end of 2015 and start of 2016. 74 work coaches initially enrolled but in the event only 62 actively participated.

The 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: 1) cultural changes within DWP, 2) impact of going digital, 3) enhanced coaching (two weeks), 4) labour market information (LMI) for Work Coaches, 5) reflection on experience and learning. The role of work coaches was being transformed by the need to support clients in work not just get job seekers into work. This meant that both coaching skills and the use of LMI were becoming more central to how they performed their role.

The second blended learning programme yielded rich qualitative and quantitative data on facilitation activities in the online course. Further trials of the LMI on-line tool were incorporated in the programme. Another detailed evaluation report was produced (EmployID, 2017). The analysis of over 1000 comments, shared in the blended learning programme, mirrored the pyramidic shape of Murphy's (2004) on-line collaboration model with lower level engagements forming a broad base. That is, the largest share (almost a third) of statements expressed social presence. Collaborative processes requiring high levels of involvement in critical reflection and the co-construction of new mental models were less frequent than individual expressions of opinions, both with and without reference to others. Apart from advanced collaboration, the analysis investigated whether learners intended to apply the newly gained knowledge in their working practice or reported back about its actual application. This process represented 5% of all comments, demonstrating the intention to incorporate what had been learned into their everyday working processes (EmployID, 2017).

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.

Once again, the evaluation results were very positive, with critical feedback mainly relating to some IT infrastructure problems when accessing course material. The collaborative learning experience and the programme content were perceived as very useful. Qualitative evidence highlighted how the learning and development staff had been able to apply their growing expertise in online programme delivery including making use of online collaborative learning in the second programme. Subsequently, they made plans to include these approaches in the full range of their internal staff development programmes. The practical constraints of their work meant that the programme did not by itself lead to identity transformation for the work coaches. What it did, however, was to support the identity transformation which was already underway with the redesign of key work activities and processes. The programme was successful in helping work coaches realise the 'turn' towards coaching and greater use of LMI in their everyday practice. In particular, as with the employer advisers, they welcomed the possibility of using open and linked LMI data in a much more dynamic way which could help transform how they viewed their role and how they related to clients.

4.2 Effects of Identity Development

blended learning programme evaluations 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 collaborative 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 resourceful learners. As learning in communities is an important aspect of professional transformation, we can see that the programmes supported professional development processes on several levels (EmployID, 2017).

Effects of the blended learning programmes could be observed on the level of individual development, client/customer collaborative learning and satisfaction. Looking at the level of internal processes rich feedback was collected on how to utilise collaborative learning within on-line learning provision within DWP. The positive learning effects triggered by the collaborative 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 according to information obtained by core staff members. 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, the EmployID project team 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 careers practitioners from across Europe and internationally.

The five week international MOOC on the Changing World of Work started in March 2017. Similar to previous MOOCs 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; and Reflection and Evaluation. The course was very successful with high learner participation and more detailed analysis will be presented at the conference itself. Below we give a flavour of the quality of the contributions and the richness of the discussions.

The first contribution illustrates how a participant establishes social presence, links to the opinions of others, outlines their own contribution and relates this to how it relates to current and possibly future coaching practice:

Coach 1: Hi everyone, I'm and have recently returned to to set up as a self-employed Careers Coach following working as a Careers Adviser at I agree with others that the world of work is changing rapidly, and particularly here an important aspect is supporting and educating people with regards to these changes and how to remain resilient and employable. The main job sectors have changed over the past 10 years and this is combined with limited job opportunities in terms of sectors and roles available. As such, a key challenge is raising awareness of the labour market and helping individuals to identify and market their employability skills accordingly.

The next two contributions highlight a concern expressed by a number of participants that their community of practice was fracturing and how they felt an increasing sense of isolation. A participant expresses her concerns and a facilitator makes links with the contributions of others:

Coach 2: I share the feeling of growing distance totally. Most of my colleagues are situated all over Finland 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 face-to-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.

Facilitator 1: I wonder whether that relative isolation means that staff feel a much stronger sense of occupational community than organisational commitment. Other contributors were wondering whether such isolation also accounts for growing attachments to networks from when people were students and did feel they had a clear sense of identity.

Another exchange involving three coaches and two facilitators highlights the pervasiveness of feelings that it was unclear how best to respond to changes in the world of work and in their own practice:

Coach 3: Hi, I am from Croatia. I work in Public Employment Service. In my opinion PES must become more flexible, open and market-oriented. That requires a mental shift equally among PES managers and workers. Some changes have begun with establishing department for employers, so we can dedicate more on employers' needs. But changes are very slow and we need more education for people on the field working with employers. Moreover, we don't have a consensus on a national level about education system, labour market, demography, quotas for imports manpower, etc., so the changes govern us instead of the other way around.

Facilitator 1: Hi yes the policy context can structure the directions in which the work of PES goes. It is noteworthy that some PES are engaging more with employers at the same time as other PES are reducing their contact.

Facilitator 2: We were in Zagreb just last week,, talking with some PES practitioners and like all PES organisations, it does seem that you are heavily constrained by policy and resource availability. European policy requirements on PES organisations are great - perhaps particularly in the current climate of economic volatility. But establishing a department for employers is quite a breakthrough. Lack of

consensus on fundamentally key policy issues is another common thread to PES' experiences. Priorities typically shift as governments change. So professionals being agile/adaptable to rapid change seems to emerge as crucial, from what you're saying.

Coach 4: Hello from Croatia! After this first lesson, all I am thinking about is how fast can we respond to the changes occurring in our labour market. I just realized that we are at the point where we have to react and anticipate (to be reactive and proactive) at the same time in order to solve current problems and prevent possible future ones. And what I am happy and enthusiastic about is that we are doing so right now and I am a part of that! What I am facing in my everyday work are people (unemployed, employed, employers, colleagues....) not willing to take responsibility for themselves, but shifting it to others. This is problem I am focused on when interacting, trying to give some ideas for a crucial mind-set change in a way what can you do about it instead of what should be done by others. Looking forward to coaching & peer coaching!

Facilitator 1: Hi - I really like the idea of needing to be reactive and proactive at the same time. Mind-set is also crucial as you say and the ability to switch perspective between what can I do now to make myself effective in current education, training and employment settings and also consider what skills, values, attitudes and behaviours will serve me well in future.

The final exemplary contribution sets out a paradoxical situation in practice, outlines their response to it and subsequently shares the approach adopted with other coaches who expressed interest: Hello, greetings from Slovakia. I work for our PES and I am responsible for guidance and counselling services. In Slovakia we are facing a paradox: a high rate of long term unemployment and a severe lack of workforce. Our most difficult target group - long term unemployed, often from marginalized rural areas often have a very low level of basic skills and can be confronted with difficult economic and social situation. In fact, in many cases finding a job is their smallest problem. In these cases the pathway towards and employment is very long. We developed an experimental ""employability factors"" framework, that covers identity, motivations, self-knowledge, social and networking skills etc. We try to use this framework to help these people develop skills, attitudes and behaviours that can help them move on their path towards employment, but also in their life. Tough job! But the focus with this target group should be on long-term investment in improving their human capital, because they are so far from the labour market...

The above exchanges were drawn from the discussions linked to the topic of the 'changing world of work' and illustrate the quality of the contributions from the participants. The volume of such contributions was also impressive as participants embraced the idea of creating a community of learners focused upon not just understanding but also discussing possible responses in their practice to a changing world of work.

5 CONCLUDING DISCUSSION

Online asynchronous discussions (OADs) are a major part of CSCL (Cheng et al., 2014) which can foster feeling embedded in a community of learners (Mäkitalo, Häkkinen, Leinonen, & Järvelä, 2002). The on-line collaborative activities of EmployID achieved this and also promoted critical thinking (Koops, Van der Vleuten, De Leng, Houterman, & Snoeckx, 2014).

However, just offering the opportunity to share experiences around specific topics does not automatically result in participation, interaction, and the critical reflection required for more substantive learning (Murphy, 2004; Milligan & Littlejohn, 2014). Facilitation, social presence and critical inquiry are all needed for the mediation and active support of knowledge construction processes (Garrison, 2007). The on-line collaborative activities of EmployID paid attention to these processes which were successfully applied in workplace settings.

Several models of learning and collaboration in OADs have been evaluated (Garrison, Anderson, & Archer, 2000; Murphy, 2004; Salmon, 2013) and the results are not necessarily directly applicable to workplace CSCL (Daneshgar, Van Toorn, & Chan, 2008).

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 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 blended learning programme to feed into both the second 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 again showed this was largely achieved). Again the management of change strategy was successful and learning and development staff further developed their skills in the second blended learning programme 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 LMI on-line tool which was trialled within the blended learning programmes was subsequently evaluated with a further 150 work coaches and then in 2017 the tool was rolled out nationally to 16,000 staff. The use of open and linked LMI data in a more dynamic way had already transformed the way employer advisers viewed their role and promised similar benefits for work coaches in their dealings with clients. 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.

The success of the project has also attracted wider international attention. The EmployID project team are also working with the PES Network of all European PES to extend this approach more widely across Europe. The Inter-American Development Bank has expressed interest in adapting our MOOC for delivery in Spanish as a means of enriching their technical support networks to Employment Services in Latin America and the Caribbean. Million Lights, an established service provider of online learning, wish to adapt the MOOC for delivery to careers practitioners in India. Overall, a positive outcome has been achieved, including supporting PES in the management of change. As well as demonstrable impact in supporting the development careers and employment guidance practice, the project also demonstrated that on-line collaborative learning can be used to facilitate the learning, development and

professional identify transformation of careers and employment practitioners.

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REFERENCES

- Cheng, B., Wang, M., Mørch, A. I., Chen, N. S., Spector, J. M., 2014. Research on e-learning in the workplace 2000–2012: A bibliometric analysis of the literature. Educational Research Review, 11, 56-72.
- EmployID, 2017. The EmployID Approach: Empowering Change in Public Employment Services: Part II.

 Available from: https://employid.eu/sites/default/files/Y3_Book.pdf.
- European PES Network, 2017. EU Network of Public Employment Services Strategy to 2020 and beyond, European PES Network Brussels. Available from: http://ec.europa.eu/social/BlobServlet?docId=9690&langId=en.
- Daneshgar, F., Van Toorn, C., Chan, S. C. E., 2008. Elearning in workplaces. In Salem M.A. & M.T. El-Hadidi (Eds.), *Proceedings of 2008 ITI 6th International Conference on Information and Communications Technology*, pp. 65-70. Danvers, MA: IEEE
- Garrison, D. R., 2007. Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, 11(1), 61-72.
- Kirkpatrick, D. L., 1998. Evaluating training programs: The four levels, Berrett-Koehler..San Francisco.
- Koops, W., Van der Vleuten, C., De Leng, B., Houterman, S., Snoeckx, L., 2014. Computer-supported collaborative learning at the clinical workplace: Students' perceptions and the effect of knowledge construction on learning outcome. *Journal of Contemporary Medical Education*, 2(2), 71-78.
- Mäkitalo, K., Häkkinen, P., Leinonen, P., Järvelä, S., 2002. Mechanisms of common ground in case-based web discussions in teacher education. *The Internet and Higher Education*, 5(3), 247-265.
- Milligan, C., Littlejohn, A., 2014. Supporting professional learning in a massive open online course. *The International Review of Research in Open and Distributed Learning*, 15(5), 197-213.
- Murphy, E., 2004. Recognising and promoting collaboration in an online asynchronous discussion. British Journal of Educational Technology, 35(4), 421-431.
- Rodrigue, A., Hyland, N., Grant, J. M., Craig, A. C., Hudon, M., Nethery, C., 2012. Exploring facilitation

stages and facilitator actions in an online/blended community of practice of elementary teachers: Reflections on practice (ROP). In S. Van Neuland & J. Greenlaw (Eds.), *Social media & teacher learning*, pp. 71-82, UOIT E-Press. Oshawa, ON.

Rourke, L., Anderson, T., Garrison, D. R., Archer, W., 2001. Methodological issues in the content analysis of computer conference transcripts. *International Journal of Artificial Intelligence in Education*, 12, 8-22.