Supporting Workplace Learning Partnerships: using web-based collaborative and personal learning spaces to provide rich learning experiences for adult guidance practitioners

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This paper discusses how an education-industry partnership is developing an on-line module to promote workplace learning for guidance practitioners on how to use Labour Market Information effectively with their clients. The module comprises units that make use of a resource database and is enriched by use of social book-marking. It also links to experiential activities; facilitates interactivity through use of a space for shared resources linked to a blog; and provides support for navigating the module. But the key development that brings coherence to the activities as a whole is the use of a Personalised Learning Space (PLS). The PLS allows for co-ordination of learner choices, is the driver of self-directed learning and encourages critical reflection. Overall, the provision of web-based collaborative and personal learning spaces offers the prospect of providing rich learning experiences for learners in a dispersed community of practice.

Keywords: workplace learning; partnerships; personalised learning; adult guidance; computer-supported collaborative learning

The 'workplace learning partnerships' (WLP) Leonardo project sought to develop models of partnership-based co-operation between training providers and organisations providing goods and services. One UK exemplar of collaboration is between the Warwick Institute for Employment Research (IER), sector skill councils (with a remit to promote education, training and development in their sectors) and guidance employers with a responsibility for delivering guidance for both adults and young people that should include the provision of labour market information (LMI) that is timely and relevant. The result of the collaboration, which also extends to guidance practitioners themselves, is the production of an on-line module for professional development of guidance practitioners in the use of LMI in adult guidance.

Context

Recognition of the Importance of Adult Guidance for Workforce Development

Changes in the labour market (like globalisation and the development of information technology) have challenged the relevance of the established, narrow view of career transition as a one-off event at an early stage of an individual's development, replacing it with a broader understanding of how transitions into education, training and employment are more complex, more prolonged and often span lifetimes (Young and Collin 2000). This highlights the need for individuals to be properly supported in making these many and complex changes. A recent review by the Organisation for Economic Co-operation and Development (OECD 2004) emphasises the potential role for career guidance services in advancing lifelong learning goals and helping with the implementation of active labour market policies to support these transitions (p. 3). As a result of this, and other, policy developments, there is great interest in the way information, advice and guidance (IAG) can be used to support workforce development. For example, in England, a recently published White Paper (HM Government 2005) seeks to develop a strategy for ensuring that employers have the right skills to support the success of their businesses and help individuals gain the skills they need to be employable and personally fulfilled. One core strand of this skills strategy is: ‘to support individuals in achieving their ambitions, through better information and guidance, to identify the best options for them in terms of jobs, skills and training’ (p. 9) and guidance is seen as central: ‘achievement of our skills goals depends on far more adults having access to information and guidance to know what training opportunities are available and how to get them. Many people are dissatisfied with their current job, would like a change and see that better skills and qualifications could help them get on. However, making sense of the complex array of qualifications and training schemes, understanding which would provide the best preparation for a new job, and knowing what support is available and how to get it can all seem daunting. This means that many cannot make any progress because they cannot decide what route to take. This forms a major barrier to economic and social mobility.’ (p. 20).

In response to this higher profile given to career guidance services, the Sector Skills Councils (SSCs) (represented in this instance by ‘Skillset’) have taken up the challenge to raise the profile of guidance with employers. Twenty five SSCs have been established recently and together they cover approximately 85 per cent of the UK workforce. Each SSC is an employer-led, independent organisation that covers a specific sector across the UK. The four key goals are to: reduce skills gaps and shortages; improve productivity, business and public service performance; increase opportunities to boost the skills and productivity of everyone in the sector's workforce; and to improve learning supply through promoting apprenticeships, higher education and National Occupational Standards (SSDA 2006).

The role of the National Guidance Research Forum in supporting Guidance Practitioners' Professional Development

The second significant contextual factor has been the recent development of the National Guidance Research Forum (NGRF), a web-based initiative (http://www.guidance-research.org), designed to support the professional development of guidance practitioners. This development means there is a ready-made web-based platform from which to operate the on-line module. The NGRF is managed by IER and represents an imaginative way of linking processes of knowledge acquisition, development, transformation and creation with approaches to tackling the core problems of guidance practice. A key feature of the website development was that it was a ‘workplace learning partnership’ in action. It involved the construction of a shared knowledge base from the contextualised problems that policy makers, managers, practitioners, researchers and trainers face. It involved expert groups focusing on particular topics and providing a mediated commentary on key documents and research findings on-line. This has enriched the process and acted to validate the outcomes. The website initially had two main sections: on ‘effective guidance’ and LMI Future Trends’.

The website extends the use of ICT to support the knowledge development of the dispersed community of guidance practice (Brown *et al.*, 2002). The work of the six expert work groups meant it was possible to advance understanding through processes of knowledge combination, where existing knowledge was combined with new insights to create new forms of contextualised knowledge. New participants could then make use of online support from a community of interest that focused on the interweaving of guidance research and practice. Brown *et al*. (2002) stressed the importance of having time and space for face to face interactions to facilitate socialisation, active reflection, combination of new and existing knowledge, and the internalisation of different types of knowledge (Nonaka & Konno, 1998). By working together, participants used the collective and individual knowledge of group members, co-constructing plans of action to extend that knowledge (Scardamalia and Bereiter, 1994). The commitment of the project team to collaboration throughout the development process is central to how the site is now being operated – supporting the 'community of interest' in an interactive way, whereby the processes of reflection, consolidation and community development are supported by presenting resources in ways that are meaningful for the community.

The Development of the Partnership

In 2005, IER worked with the SSCs to map the involvement and interest of employer representatives in career guidance activities. LMI emerged as central to the strategy of many SSCs in ensuring that guidance practitioners were equipped to give accurate information, based on access to high quality, industry based information to support them in their guidance work. Additionally, a training need for guidance practitioners in their use and manipulation of LMI was identified. However, SSCs were not funded for this work, so they lobbied the Department for Education and Skills (DFES) for funding to resource the provision of LMI to the guidance community and to provide a level of training support, using the NGRF website, by developing an on-line module to support guidance practitioners in their use of LMI with clients. Skillset commissioned IER not only to provide the up-to-date labour market information but also to design and develop the module, working together with a software development company (theknownet). Guidance practitioners from different parts of the guidance sector will be involved in evaluation of the module during development. The use of both formative and summative evaluation will ensure a close work-learning partnership in this development that is supported by a steering group, also drawn from employer representatives. The WLP project saw this as an exemplar of good practice in developing a workplace learning partnership.

Careers guidance practitioners find themselves at the interface between the job market and their clients. In an increasingly complex world, it is perhaps unsurprising that one aspect of seeing a careers adviser that clients particularly value is 'the access to expert knowledge and networks' (Bimrose *et al*. 2004: v). So whilst linking people to the labour market is not the only goal of career guidance, it is hard to imagine any credible attempt to provide a guidance service that does not have an in-depth understanding of LMI integral to its delivery. Despite the central importance of LMI to career guidance, not all practitioners feel confident in this aspect of their work. This may partly be due to the recent policy re-focus on working with disadvantaged clients (young people 'not in employment, education or training' and adults qualified below level two) with the result that work with employers has become low priority. Whilst practitioners are acutely aware that clients look to them for expertise about the labour market, they often feel ill-equipped to help clients interpret the significance of LMI to their particular circumstances. The LMI module comes from the desire to develop an on-line tool that will support practitioners gain skills and confidence in this area.

The Development Process

The LMI module is being developed in response to a practical and identified need for a higher level of competence for practitioners in working with LMI. The aim for the module is 'to develop the ability to access, understand and manipulate LMI as part of effective career guidance'. On completion of this module, the intention is that users will be able to access and use LMI effectively and efficiently; critically evaluate different sources of LMI; and explain the impact of labour market changes in their work with clients. The module development team includes a former career guidance practitioner, a former trainer with extensive experience of training careers advisers and experts in technology. Practitioner feedback influenced the development of the module content. Consequently, likely useful content for the module has been identified which anticipates learning outcomes that would resonate with practitioners. Although the topics covered could change as a result of the formative evaluation process, topics currently under development include:

- *The nature of LMI and its role in Career Guidance* – covering the purpose of LMI; providing a rationale for the module; and acting as a vehicle for users to share their ideas and harness the interactive potential of the module to participate in discussion.
- *The changing Labour Market – key issues for guidance* – differentiating between labour market *information* and *intelligence*; understanding the complexity and rapidity of change within the labour market, whilst differentiating between myths and realities; drawing attention to the relationship between the complexities of the labour market and the associated implications and challenges for guidance practice.
- *Locating Sources of LMI* – helping users navigate the major resource for LMI on the NGRF website future trends section, together with introducing users to social book-marking technology as a means of sharing web-based LMI resources with other practitioners.
- *Choosing between sources of LMI* – helping users consider how to identify new and additional potential resources of robust LMI appropriate for their particular context; exploring the skills needed to evaluate LMI sources appropriately so practitioners can make sense of the otherwise overwhelming amount of web-based LMI in the public domain.
- *Learning from practice* – using case studies based on representative client scenarios to encourage practitioners to identify when it is appropriate to introduce LMI into a guidance process, and to consider what LMI might be most applicable in different situations.
- *Frameworks for practice* – commonly identified frameworks to inform the use of LMI and the relative merits of different.
- *Implementing good practice* – encouraging practitioners to conduct their own visits to opportunity providers; giving guidelines on how to work effectively with employers, how to make an initial approach, how to conduct an effective interview and how to record and disseminate the findings of any employer visit.

Although identifying broad areas of content was relatively straightforward, developing detailed content was more problematic for two main reasons. First, the module is intended to cater for a breadth of practitioners, with differing backgrounds, qualifications, levels of experience, professional contexts and needs. Secondly, a key value of the development team is to ensure that the resource is 'learner-led'– it must instead anticipate practitioners' learning needs and be sufficiently flexible to accommodate shifting requirements. Together, these two design principles suggest the importance of harnessing the online and interactive potential of the Internet. Key challenges were:

How to provide content that caters for different levels of experience and expertise? It was important that the module should cover basic materials and strategies on using LMI for practitioners with little experience in this area, while offering more advanced content for more experienced practitioners, so the module will be divided into key themes, each containing a number of separate units. Each theme, and each unit within the theme, will be self-contained, and the units could even be described as separate 'learning objects'. The module will be designed in such a way that users can approach the units or themes in any sequence. There will be a suggested route through the module for those who prefer a linear approach, but in essence it will be a fluid presentation that allows complete flexibility. Units will be grouped together under common themes, but users can choose whether to do all or indeed any of the units within any particular theme.

At this very early design stage it is helpful to visualise the module in terms of either a jigsaw puzzle or a mind map. Each piece of the puzzle/mind map corresponds to a separate theme. If the user clicks on the appropriate piece they will then get to a second level where the theme is further divided into smaller pieces (units) each of which can be accessed individually. The top level visual display will identify the key themes for the module and also link to over-arching materials such as a glossary of terms or links to resources on LMI. This should avoid frustration amongst repeat users of the site who want immediate access to either resources; a shared discussion thread on using LMI in general; or (and more of this later) when logged in, their own personalised learning space. It is hoped the result will be a flexible format that allows users to fast track to those parts they expect to be most relevant. However, each unit will cross reference to other parts of the module to encourage maximum use of the resource. At this first iteration new content will focus on covering entry level materials. However, the more expert practitioner will be catered for too. Because this online module is able to draw on the established NGRF website, there is a wealth of raw material on LMI on which to draw. The skill of the module developers will be called upon to facilitate the use of these materials by learners on the module.

How to facilitate interaction with content that caters for a diverse user group? A common problem for tutors, teachers and facilitators is an expectation that they will somehow provide all solutions and answers! However, a good facilitator does not need to provide all the materials, but should be able to stimulate participants to draw on their own experience, and, crucially, critically reflect on their own knowledge and perspectives in a way that allows the learners to make their own discoveries. This suggests that rather than being content driven, the module should, rather, be driven by interactivity. The content does need to be sufficient to provide underpinning entry level knowledge on the identified topics on LMI. However, more important is ensuring any content provided has significant added value generated by investing careful thought into how users should interact with it.

It is not the content that is the vehicle for learning; it is the interaction with both content and potentially other users of the site that will lead to learning outcomes. To achieve this requires careful consideration of how to harness the technology effectively. So rather than producing numerous annotated case studies on how to use LMI within a guidance process, it would be far more meaningful to produce one or two carefully crafted case studies with some associated questions on which the practitioner is encouraged to comment and reflect through drawing on their own experience. This allows learners to engage with the materials in relation to their particular context. The interactive technology would allow users to input their thoughts and reactions on screen and for these thoughts to be saved in their own personal space, together with a link to the original case study for future reference. This is interactive, but it is possible to take the interaction to a further social level. Taking the same example, it would be highly desirable to use this same social technology to capture an individual user's reflections in a shared area of the website so that anyone engaging with the module will also be generating additional content that can be accessed by future users.

At this stage it is unclear how the final version might look. However, one possible feature might be a case study, a question, then a text box that encourages the user to input their own response and then gives the practitioner an option about whether they keep this private (in which case it would be moved to their own space on the web) or to publish it in a shared blog. The incentive for publishing would be not only that this might help others in the future, but also this would enable others to view and to comment on their thoughts, thus they would potentially gain access to greater feedback and peer support. Obviously, some thought needs to be given to how such invitations are worded to avoid stage fright for the participants! The example given is a very simple one – there are plenty of opportunities for blogging throughout the site, but it does indicate how the web-based nature of the learning allows for interaction with materials, for reflection on personal responses and potentially to have online asynchronous discussions with any other site user. These communal discussion areas (probably blogs) could even become powerful resources and sources of knowledge creation in their own right. It would provide a forum for consideration of common themes and draw on the expertise from a community of practice far wider than simply the development team.

Accommodating varied approaches to learning and time constraints? A further challenge is the recognition that different users may have different preferences about how to engage with materials, perhaps through time constraints or favoured learning approaches. It is incumbent on the module developers to make it as user-friendly as possible. At this stage, the primary idea is to come up with different formats of the same material to take account of user preferences. For example, some LMI terminology seems obscure to some users. Hence, a glossary would be useful, with a range of options: one could be a straightforward alphabetical list of terms, bland but functional, great for ease of access. However, an alternative option could be a light-hearted quiz that uses the interactive potential of the website to record responses and import results into a personalised learning space; the act of engaging materials in this way may help the terms stay in the memory of some participants. Finally, there will be the option to print out the quiz (without answers) as a resource for practitioners to use in group work with their clients.

Thus the same basic content, in this case a glossary of terms, can be used in three distinct ways to take account of quite different practitioner needs or expectations. The same section may also include an option to make suggestions about any LMI terms that have been omitted, or come up with new definitions. This is consistent with building up the resource options within the site to extend knowledge and it also ensures ongoing user feedback on the usefulness of the materials to date. The opportunity to add to the glossary could be through a simple character limited box that automatically imports into a 'practitioner additions' page of the section, or it might be a link to a separate blog on LMI terminology, user feedback will no doubt indicate a preferred approach.

A more elaborate example involves creating a flow chart on how to manage employer visits effectively. Visiting employers, or more accurately 'opportunity providers', can be a useful way to elicit LMI, but some practitioners find the prospect daunting. This section of the module will explore tactics on how to conduct a visit and include a pro-forma on how to self-evaluate a visit to an employer. This would be in a variety of formats. One detailed version could be printed and used as a basis for discussion with a colleague to see if it echoes how visits are currently conducted. If it seems useful, then a simplified version could be printed and used as a vehicle for a colleague to peer-evaluate how effectively a practitioner conducts an employer visit. Other variants of the same materials would offer the user an opportunity to comment on the different suggested criteria for an effective visit and or generate their own pro-forma on how to carry out effective employer work. One of the criteria included in the pro-forma is a section on 'effective challenging', e.g. how to tackle an employer who seems to hold a discriminatory perspective with regard to recruitment.

The module will allow the facility for users to post their concerns and /or how they deal with them. If they feel stumped, they can pose a question and other users can respond. The module development team will try to populate this blog in advance with some 'Frequently Asked Questions' to encourage new contributions once the module is launched (scheduled for April, 2007). Again, what is being offered is a variety of ways of engaging with the material which allows for flexibility in approach, but also ties in with individual learners' experiences and the depth of their previous experience. Thus more experienced practitioners may ask more demanding questions, and hopefully be well placed to respond to each other as well as the less confident practitioners also undertaking the module.

How to create a free-standing module which users can manage without tutor input? There is no easy answer to the issue of lack of tutor support. Limited resources dictate that this module needs to be free standing. However, it is hoped that the evaluation process will ensure it is sufficiently user-friendly, useful and relevant so that practitioners are motivated to explore the units available without requiring external input. It may be that the most effective way to use the materials will emerge as having a peer cohort, possibly even within the same organisation, working through the materials at the same time. This would ensure – or at least make it much more likely – that communal discussion features would be active, and that would provide some peer support for users. In truth, only feedback post launch will answer this question. In addition to the formal evaluation process, each page could have an instant evaluation option along the lines of 'did you find this page useful?' as an indicator of whether any particular item was off target or highly popular.

Facilitating a learner – led experience: the Personalised Learning Space. The identification and presentation of content, together with the use of blogging technology to capture discussions or ideas in a communal space, is linked with the more interesting and innovative part of this development from the perspective of the WLP project, the intention of the module developers to create for each user a Personalised Learning Space (PLS). The attempt to design and realise this represents a key stage in the developmental process, and probably the greatest technological challenge. However, the solution seems to lie within the online, interactive nature of this module, a key feature of which will be the effective use of the PLS to allow users to create their own bespoke learning packages that allows them to engage with the materials they choose in the manner they find most appropriate. Hence the PLS will, if successful, be the pivot around which the learning outcomes for the module turn.

Personalised Learning Space

Reflection and critical engagement. Reflection can be a powerful component of effective learning. The blogs have reflective interactive elements, but it is the PLS that will particularly encourage users to reflect on the module content, their own practice, and the relationship between the two. However, it can be naïve to accept experiential learning as an inevitably powerful component of adult learning, for as Brookfield argues ‘because of the habitual ways we draw meaning from our experiences, these experiences can become evidence for the self-fulfilling prophecies that stand in the way of critical insight. Uncritically affirming people’s histories, stories and experiences risks idealizing and romanticising them. Experiences are neither innocent nor free from the cultural contradictions that inform them’ (Brookfield 1995, pp. 4-5 quoted in Mason 2006:122). That is, reflection does not necessarily equate with expansive learning, it can reinforce negative thoughts and behaviour when it is inward looking and uncritical. A key challenge in developing this PLS will be to signal to users that this is a safe space for them to ‘self-challenge’ and to encourage critical self reflection, as opposed to using it just as a storage area. The PLS may have limitations, but it is also the glue that will pull together what might otherwise be a series of disparate learning activities.

The module was first envisaged as online content from which users could select, presented in a user-friendly and attractive format. However, this might encourage minimal engagement with the materials. Even if quizzes and activities were undertaken, in the absence of having anywhere to store that material, or without any incentive to reflect on and revisit it later, this approach might only engender superficial learning. Further, as it is expected that the majority of users will be in the workplace, and may have to visit the module in short bursts over time. So it would be de-motivating to ‘start from scratch’ at each visit if outcomes of any learning were lost. Hence, users need their own ‘space’ to store results of activities. This would not be an e-portfolio, because this has connotations of being used as an assessment tool (Mason 2004), but it might have some elements in common with some e-portfolio approaches. The solution is to develop a new technological approach that will draw on the principles underlying blogging and eportfolio / pdp approaches, but be driven by the primary user, the practitioner learner. It will be more a flexible framework that the user can exit quite rapidly, but provide sufficient initial minimal structure, so that there is a clear sense of progress towards the intended purpose of the feature.

Learners may identify initial learning outcomes by choosing from a drop down menu that lists learning outcomes arising from the materials offered by the online module, in which case initial activities will be suggested as possible starting points with the expectation the learner can add to these as they gain confidence in both the potential of the online module materials and the use of the technology. Additionally, learners will be encouraged, quite literally, to create their own learning outcomes. If they do so in a particular space, the entering of a new learning outcome will trigger a pro-forma that encourages the user to identify strategies and objectives that will lead to the achievement of her or his goals. Again, the emphasis will be on indicative text, rather than a prescriptive approach, to prompt a response, such as ‘would you like some help in thinking about how you will achieve this objective’. If the respondent indicates ‘yes’ then they would be invited to comment on what they already know, what they need to know, how they might achieve this, who could help and so on.

The LMI module development is work in progress. At this stage, the development team has a vision for what they want which has yet to be realised. It needs to combine features such as a resource database, enriched by use of social book-marking; a space for shared resources linked to a blog; ideas for navigating the module, with a suggested way through for the first time user; together with some encouraging explanation of the value of using the PLS; and support for personal reflection. The module will present opportunities to complete quizzes, answer questions, contribute to discussions and card sort exercises, and so on. All such interactive exercises should have a default option whereby on completion, if a user is logged in, their results will automatically be stored in their PLS. However, this should not be an end in itself, the PLS should be set up so that when an activity is completed it will automatically link to relevant source materials and perhaps generate a list of suggested further action points. In support of Personal Reflection, there will be open text space where users can reflect on anything, although a suggested approach will be given. This might start with a few simple but open questions, such as ‘What do you hope to achieve through this module?’ and ‘How do you currently use LMI?’ There will also be links to shared blogs, where users will be invited to comment on some common questions, and share their reflections. There will also be gentle prompts to encourage users to feel confident enough to respond to other existing contributions on the same topics. Users will have the facility to import documents or links relating to LMI (or potentially anything else) to their PLS – again they will have the option to share such resources if they wish. The PLS differs from an e-portfolio in that the PLS will be designed to be used by the practitioner to meet their own needs, not those set externally.

The vision. We will have succeeded if the initial response of the user is sufficiently positive so that they want to engage. Their immediate reactions should be, ‘I’d like to be able to record this somewhere as it looks useful’ and then – in relation to the PLS – ‘fantastic, that’s going to be really handy to keep all this useful stuff together in case I want to come back to it’. The terminology should not be a deterrent to engagement. A PLS should be developed that is not complex - something that offers simple headings (planning, review, resources, reflection…) and perhaps some suggested pathways through the learning objects. Text extolling the virtues of sharing thoughts in a public blog to get some peer support might be helpful. It could also invite learners to use their space to inform future developments by suggesting further topics to explore. Ideally, it would be a private space to bring together learning outcomes and reflect on ways forward. It will be flexible, of immediate practical use and identified by the user as of potential future use too. It is hoped that as the PLS evolves it will become a powerful showcase for the potential of WLP in action. By having a tangible topic (LMI) a clear target user group (guidance practitioners) this may show a possible way forward for personal learning environments. This module offers the chance to move away from abstract concepts towards practical realisation of the idea. At this stage of development it is both exciting and frustrating to lack clarity about what the PLS will finally look like. However, it will evolve from close collaboration between the IER and Knownet technical team, informed by feedback from a group of practitioners offering formative evaluation throughout the developmental process. We have a vision, but also confidence that remaining open-minded about the exact realisation of the PLS at this stage is one of the best ways of ensuring a successful outcome as the project draws to a close. The PLS will be the missing link, the glue that pulls the constituent parts together into a coherent whole and allows each user to manage and generate their own particular learner experience!

User engagement. Our approach appears to reflect the findings of Mason *et al*. (2005) that in the successful delivery of an e-learning programme 'learning objects' themselves have to be informed with all 'the major elements of a rich learning experience: a discursive element (key issues and follow up readings); an interactive element (group or individual activity or online discussion); an experiential element (the activity); a reflective element (choice of readings and level of engagement)' (p. 100). All the elements mentioned are present in our proposed on-line module. However, the voluntary nature of participation in the module does mean that a particular user may not fully engage and this does raise questions about how to ensure users are motivated in the absence of any formal tutor support. However, the desire to create fluid, interactive learning units depends on user interaction to both come alive and evolve further, and this process will never be complete. It seems fitting that the commitment to lifelong learning and development of professional competencies applies as much to the module developers as to the intended users!

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