# Theme 2: New literacies and professional expertise

Jenny Bimrose, Alan Brown & Sally-Anne Barnes, Institute for Employment Research, University of Warwick (j.bimrose@warwick.ac.uk)

## Supporting professional learning of the careers guidance community

# 1. Abstract

An interdisciplinary team of researchers and professional associations in the UK are working together to create a comprehensive website for all those interested in career guidance and counselling research. This is being funded by the Department of Education and Skills in England. A key feature of the website development has been the construction of a shared knowledge base, by working with contextualised professional problems. The website provides the opportunity to raise issues, engage in development work and contribute to on-line discussions. This type of collaboration is necessary for active knowledge creation, which represents a social product. In this way, it is hoped that we can support professional learning - as existing available knowledge is combined with new insights to create new forms of contextualised knowledge.

# 2. Introduction

The overall purpose of the website is to bring research and practice closer together by facilitating knowledge sharing and transformation for all those interested in guidance research and practice, including: practitioners, policy makers, researchers, guidance trainees, tutors and trainers. Its objectives are:

- to develop an imaginative way of linking processes of knowledge acquisition, development, transformation and creation with approaches to tackling the core problems of guidance practice;
- to examine the ways in which learning to practise guidance are created and shared (beliefs, concepts, ideas, theories, actions) in the search for new understandings of effective guidance;
- to broaden and deepen the knowledge base of how to align processes of effective guidance practice with policy requirements across the UK.

A key feature of the development has been the construction of a shared knowledge base from the contextualised problems that policy makers, managers, practitioners, researchers and trainers face. This has involved the formation of groups which then acted as a centre of expertise for particular topics. These groups looked at key issues related to their expertise and provided a mediated commentary on key documents and research findings on-line. This has enriched the process and acted to validate the outcomes. The website has three main sections, as follows:

- LMI Future Trends consisting of labour market information focusing on labour market changes and skills needs in the UK.
- Making Guidance more effective containing a range of synopses, links, resources and edited discussions on six inter-related themes: Equal Opportunities; Impact Analysis; Using Research in Practice; Improving Practice; Lifelong Learning; International Perspectives.
- A **Database** linking directly to the National Library Resource for Guidance, based at the Centre for Guidance Studies at the University of Derby.

The website extends the use of ICT to support the knowledge development of the dispersed community of guidance practice (Brown & Bimrose, 2000). The composition and work of the six expert work groups (one each for Equal Opportunities, Impact Analysis, Using Research in Practice, Improving Practice, Lifelong Learning and International Perspectives) 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 for a community of interest that focused on the interweaving of guidance research and practice in a way that offers them significant advantages. For example, participants can: collaborate independent of time and space; participate in their own time and at their own pace; make contributions in different forms (e.g. text, images, links to documents, html pages or other notes); and explore something thoroughly by commenting on material and contributing to discussions, and in so doing elaborate on the knowledge that is already in the website.

Brown, Attwell & Bimrose (2002) stressed the importance of having sufficient time and space for face to face interactions to facilitate socialisation, externalisation (or active reflection), combination of new and existing knowledge, and the internalisation of different types of knowledge (Nonaka & Takeuchi, 1995; Nonaka & Konno, 1998). Opportunities to meet and talk through issues, engage in development work and link to continuing on-line discussions that facilitated the collaboration necessary for active knowledge creation were therefore built into the development process. The created knowledge represents a social product, but the process of collaborative knowledge creation also comprises a form of knowledge building where individuals (learn to) share their knowledge and create new knowledge together. Consequently, a platform, grounded in the realities of guidance practice has emerged, which should enable us to build continuing relationships with members of the community, especially those engaged in research, training or continuous professional development activities. The environment enables participants to: (jointly) develop, edit and modify materials; share annotation on material; facilitate the sharing of experience; and promote discussion, sharing and active collaboration.

It does this by: offering virtual (and in some cases real) spaces for debate and collaboration; supporting action research; offering active support and moderation; offering support to particular interest groups; and providing a forum for discussion of attempts to tackle complex problems in careers guidance practice.

#### 3. Collaborative development processes

Approximately fifty Individuals from various guidance organisations participated in the development process. Additionally we actively engaged in continuing dialogue with representatives of those organisations with a strategic interest in the development of career guidance policy and practice and/or the development of labour market information. 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). In working together online in order to become used to sharing knowledge, deepen their own and common understanding and creating further insights, it is crucial for participants to be able to coordinate, clarify and regulate the discourse themselves (de Laat *et al.* 2001). We therefore adapted a model of progressive inquiry (Hakkarainen and Muukonen, 1999) that engaged participants in the development in a step-by-step process of question and explanation driven inquiry. We called these 'team tasks' and they comprised a series of particular questions, grounded in practice, relating to one of the six broad themes.

de Laat *et al.* (2001) consider that by introducing a model of progressive inquiry, you develop scaffolds to structure and regulate the learning activities of participants. Our approach by making continuing use of face-to-face sessions added still greater support to the process of knowledge building relating around the interleaving of research and practice.

#### 4. Lessons learned so far from the development of the website

#### 4.1 Some problems

Until now, the use of ICT to support for knowledge sharing and development has often failed to deliver the promised benefits. What spaces there are for sharing knowledge tend to be used as collective file repositories or areas for shorter discussion. There are of course, exceptions. For example, technical and software developers use the Internet as a means for co-development of software, especially in the growing Open Source Software Community. Yet this is an exception that proves the rule: the constraints of daily work and research practice mean networked collaboration, even amongst those involved in dispersed communities and engaged in common international projects is limited. The recent upsurge in web logs (blogs) is an interesting case where, whilst not invented for knowledge development, there are signs of emergent practice in sharing knowledge (Nardi, 2004). But networked collaboration is a social activity and the use of ICT can only support social interactions.

Seizing upon this idea, many people in the field (including us) thought that there may be value in adopting and/or adapting ideas about 'communities of practice' to the notion of developing ICT support for knowledge development. However, many researchers appear to have forgotten Lave and Wenger's (1991) original assertion that communities are always emergent. ICT based solutions often appear to approach communities as if they were monolithic and time bound. Support for knowledge development and collaborative practice lacks the flexibility for changing group membership or for changes in the roles, authorities and actions of members of a group. This difficulty is compounded by the problematic understanding of 'group' by many computer software developers (at least in the way in which a group is expressed or represented in their software). Furthermore, and more critically, at some point the idea emerged of communities of learners. That learners may form a community is neither here nor there. The problem is that they do not form a community of practice. Practice in distributed learning is seldom strong enough to generate sufficient shared experience in day to day activities to develop a community of practice. The very word 'community' has become devalued in relation to discussions of collaboration and the use of ICT. It has become a synonym for any group sharing a common space through the Internet.

From the above it is apparent that we have problems with both 'community' (who are they and what goals, values and practices do they share?) and 'practice' (what is the practice being shared?) when considering ICT support for knowledge development. Our ideas need to be informed by something other than 'communities of practice'. The difficulty in this work, and the attraction, is that it is interdisciplinary, involving a wide range of knowledge and skills drawn from a wide range of different disciplines and more importantly practices. Maybe a 'boundary crossing' analogy would be more appropriate. We need to evolve and develop new forms of collaboration in order to support collaborative processes and to realise new forms of knowledge sharing and we feel we need some representation to help that process!

## 4.2 Supporting practice

Lave and Wenger (1991) describe how knowledge and skills of 'communities of practice' are developed and exchanged within different communities, and how the social interactions and rules by which those particular communities of practice operate evolve and change. We cannot replicate those communities either through face to face or computer mediated networks. We can, however, develop processes and tools to support the different processes and practices that occur in the 'communities' we seek to support. We need to remember, however, that members of 'our community' belong to a variety of very different 'communities of practice' with each community having evolved different cultural and historical practices.

There is therefore a degree of choice as to what practices we decide to support. In reality, most ICT based systems claiming to support communities of practice are technologically driven, based on what is feasible with present technologies. However, in so doing they often infringe other practices or processes that members of the community see as important. Similarly, the idea that communities are emergent and dynamic has escaped the designers of computer based support systems. The idea of emergence covers a number of different spheres – membership, activities, rules and practices. We need to develop flexible systems that recognise the way communities evolve and allow different people to play different roles within those systems at different stages in their development. In particular we need to allow branching – in terms of new conversations or work areas branching from the main threads or even new communities breaking out.

One way forward could be to use the notion of 'boundary crossing' as a means of supporting the development of knowledge within 'our communities'. So far, most approaches pursuing this line have looked at how communities can be introduced or confronted with practices drawn from different communities, in order to promote reflection and knowledge development. This may not be appropriate here. Instead, we should look at how different ideas developed within communities can branch,

whilst retaining a relationship to the main stem. It is important that participants can develop and follow ideas outside the mainstream of the discussion, whilst remaining in the 'system'. It may well be that it is in the process of defining the relationship of such schisms to the original main 'idea set' that new knowledge can be created.

# 4.3 Community of interest

For us, 'our community' (interested in careers guidance research and practice) could best be described as a 'community of interest': a group interested in sharing a discourse; sharing thinking; and sharing values to some degree. Group identification, however, may not be strong. They have fairly loose ties. Indeed perhaps one reason why people may value a 'community of interest' in this area is that the 'community of practice' associated with careers guidance in the UK is fragmenting<sup>1</sup>. Maybe some people involved would like at least to be able to construct a 'shared story' about what is happening in their professional field. Our community has interests in learning or practice or working and learning. With a community of practice you would expect a much stronger sense of mutual engagement, joint enterprise and sharing of goals with a common repertoire of shared practices.

From the developers' perspective we could emphasise the value in testing ideas in multiple contexts and of building awareness and understanding of the activities and perspectives of others. We could see an ideal (from our perspective as site developers) where we seek progress from passive awareness to engaged interaction of participants. However, we also need to recognise that for some participants the ideal is passive awareness.

# 4.4 Professional development

The intention is that professional development around research and practice should be grounded in the questions, concerns and enquiries of a group of practitioners, such that the aim is shared, rather than individual, development. There is a role for coaching, observation by colleagues (knowledgeable others) and examples of how practitioners can engage with research. For example, a journal article could be annotated to help practitioners 'break the research code' - how to make judgements

<sup>&</sup>lt;sup>1</sup> note careers advisers and personal advisers (offering a range of advice to young people at risk of social exclusion) now have different knowledge domains. We, and they, are not sure where the boundaries are between different types of practitioners involved in giving Information, Advice and Guidance in different settings - are the boundaries clear, fuzzy or contested? How far do they share at least some domains of knowledge? Also, since devolution, the four constituent parts of the UK are now following very different agendas as to how they deliver careers guidance.

about the conclusions or 'warrant'. There could also be value in collaboration on problem-oriented case-work (working on interpretations of a 'shared case'). One other issue relates to how to resolve emotional tensions arising from an inability to perform in the way you think is appropriate (for example, if you have insufficient time to offer the quality of service you believe you should).

## 4.5 Knowledge-building perspectives

Knowledge combination is the key challenge for us. In distributed (computermediated) discourses conversations can often dwindle, so we are supporting the 'knowledge spaces' for our 'community of interest' so that they can contribute to the public life of ideas. For example, the evolution of a research project could itself be outlined as a way of representing the research process through public disclosure of plans, summaries, development etc. Ideas and concepts can be worked on by perhaps just a few members of the community in a public space, but then the wider community may benefit.

The inter-linking of discourses, and the facilitation of different 'views' of material, can help build (or highlight the disjunctions in) coherence, comprehensiveness and links between theory and practice within and between different areas. The use of summaries, syntheses, reflections and annotations in our heavily mediated environment can help with the transition between, to adapt Donald Schön's (1983) analogy, the cliff-top of critical analysis and the swamp of everyday practice.

One of the difficulties incurred by successful knowledge-building approaches is that ideas and contributions, and the space they take and the time to search them, starts to increase rapidly. It is important that representations show relationships between topics and that these representations are to some degree under the control of participants in the 'community of interest'. Sharing of individual representations of knowledge relationships and how these relate to individual 'stories' may facilitate collaborative knowledge development and combination of different types of knowledge.

Scardamalia and Bereiter (1994) highlight how the growth of 'individual and communal knowledge resources' can revolve around the development of 'improvable ideas'; cultivating the abilities of synthesis and reflection as the basis for a 'disposition' towards knowledge-building; and building a discourse aimed at knowledge transformation. They also sought to use linking narrative accounts of

participants' learning goals, achievements and self-reflections with accounts of practice through activity reports and learning logs (on a daily or monthly basis); and they highlighted the value of 'rise above' sessions.

Our practitioner-researcher interactions are linked to wider concerns of the 'community of interest'. We have recognised the importance of scaffolding knowledge-building: helping to develop models and viewpoints and overcoming problems of isolated contributions. Maybe we have gone a little too far in this respect, and the clear sense of direction and development we have subsequently imposed upon the existing contributions may prove to be a little daunting for future prospective contributors. However, the site can be seen as a representation of the stage the 'community of interest' as a whole has reached. Knowledge-building involves learning how to find different types of knowledge and learning how to learn together with collective responsibility for developing expertise and conceptual ideas.

## 4.6 Boundary crossing

The emphasis of activity theorists is that there is value, when working in a boundary zone, in working on a 'shared object', such as a development project, leading to expansive learning and developmental transfer (Engeström et al., 1999). In the context of the careers research and practice site the challenge may not be to develop something jointly, but rather whether we can stimulate more 'information brokers' at the edge of their existing communities. Also in this context, 'activity systems' like 'communities of practice' may represent an over-socialised model where the communities and systems are quite large and distinctive. Our individuals belong to quite a large number of groups and communities, and from that perspective crossing boundaries (and coming back to a new reconfigured position) may be of value precisely because there is not a single community – except our 'community of interest.'

Benedict Anderson points out that all communities by their nature have initially to be 'imagined' and then people and ideas have to be mobilised to give the community a concrete existence (Anderson, 1983). So maybe our 'community of interest' imagined as a much looser association with weak ties is a model to which we should aspire. Maybe we can keep the 'field of dreams' analogy too. Not everyone has to play, some people can come, be relatively passive but still get what they want – the spectators are important and involved even if they make only limited contributions.

#### Conclusion

This paper has tried to weave together ideas drawn from research and from our own practice in supporting the development of knowledge in communities of interest. For us to go further in this direction we need support in two ways. The first is the need for a more focused research approach on collaboration and knowledge development in communities of interest that are underpinned by complex relations to a variety of work-related practices. We need much more experience of the use of ICT to support practice and to support communities that are interested in a range of practices, some shared, some competing, some within and some outside the participants' conventional occupational boundaries. We need a more profound understanding of the nature of practice and community and how ICT might support the evolution of both. We need to understand more of how communities emerge, evolve and change. We need to understand the different roles within our computer-supported communities and how these roles evolve and are passed on. We need to know more of the nature of informal learning and its relationship to knowledge sharing and development.

Secondly, we need to look at the processes of collaboration and software design for projects and research into knowledge development. As should be clear from the article, we believe in the value in this context of forms such as action research, participatory research or accompanying research. The development process is very rapid in this field, and we need research to feed into development. Research and development processes need to be modelled in common. Iterative and co-design of software applications and programs require participatory design processes and at the same time informed reflections on the process. This is itself a process of collaborative knowledge development and also of boundary crossing. It implies the development of a new community (or communities) sharing (or perhaps exchanging) languages, practices and purposes.

This initiative represents an exciting opportunity to create an inclusive and dynamic community of interest bringing guidance research and practice closer together. It will enable us to examine the ways in which learning about guidance is created and shared (beliefs, concepts, ideas, theories, actions) as well as providing a potentially powerful engine to assist with the search for new understandings of effective guidance to benefit all clients.

Please join us in our endeavour: visit http://www.guidance-research.org

#### References

- Anderson, B. (1983) Imagined Communities: Reflections on the Origins and Spread of Nationalism, Lodon: Verso.
- Brown, A. Attwell, G. and Bimrose, J. (2002) Utilising Information and Communication Technologies for dispersed communities of practice, in Lally, V. and McConnell D. (eds) **Networked collaborative learning**, Sheffield: School of Education, University of Sheffield.
- Brown, A. & Bimrose, J. (2000) Establishing a virtual forum for collaboration and knowledge transformation to support careers guidance practice, in **Careers Guidance: Constructing the Future. A global perspective**, Institute of Career Guidance & Trotman: Stourbridge
- de Laat M., de Jong F. and Simons R-J. (2001) **Supporting self-regulation of learning activities in online communities of practice,** Nijmegen: Department of Educational Sciences, University of Nijmegen.
- Engeström, Y., Miettinen, R., Punamäki, R.-L. (Eds). (1999) **Perspectives on** activity theory. Cambridge: Cambridge University Press.
- Hakkarainen, K. and Muukonen, H. (1999) Collaborative technology for facilitating progressive enquiry: future learning environment tools, Paper presented at the Computer-supported collaborative learning (CSCL '99) conference, Paolo Alto, California.
- Nardi, B. (2004) "Getting in Conversation with Each Other Electronically": Blogs as Mediating Artifacts at Work, Learning and Technology at Work: An international invited seminar, Institute of Education, London, March 22 – 24 2004 [www.ioe.ac.uk/tlrp/technomaths/seminar04]
- Nonaka, I. and Konno, N. (1998) The Concept of "Ba": Building a Foundation for Knowledge Creation, **California Management Review**, 40, 3, 40-54.
- Nonaka, I. and Takeuchi, H. (1995) The knowledge creating company. How Japanese companies create the dynamics of innovation, Oxford: Oxford University Press.
- Scardamalia, M. and Bereiter, C. (1994) Computer support for knowledge-building communities, **Journal of the learning sciences**, 3, 3, 265 –28.

Schön, D. (1983) **The Reflective Practitioner. How professionals think in action**, London: Temple Smith.