

# Knowledge sharing in guidance: Moves towards research–informed continuing professional development

By

Jenny Bimrose, Institute for Employment Research, University of Warwick

Alan Brown, Institute for Employment Research, University of Warwick

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## Further details available from:

Dr. Jenny Bimrose, Principal Research Fellow, Institute for Employment Research, University of Warwick, Coventry CV4 7AL

Tel: 024 765 24231 Fax: 024 765 24241

Email: j.bimrose@warwick.ac.uk

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#### Abstract

A 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 will both facilitate and support the development of a community of interest that has the potential to make continuing professional development, and subsequent practice, more research-informed. A key feature of this website development is the construction of a shared knowledge base, by working with professionals on contextualised problems associated with practice. This has been achieved by the formation of groups with relevant expertise to represent a centre of expertise for particular topics, including equal opportunities. The groups have several tasks. These include the identification of gaps, key areas or problems and the provision of a mediated commentary on key documents and research findings on-line. The process will represent a major contribution to research capacity building within the career guidance and counselling community.

### 1. Introduction

An interdisciplinary team of researchers in the UK from the University of Warwick (Institute for Employment Research), the University of Derby (Centre for Guidance Studies) and the National Institute for Careers Education and Counselling are working in partnership with the Institute for Career Guidance and the Guidance Council to develop a major new research resource for the guidance community, currently known as the National Guidance Research Forum (Website). This is being funded by the Department for Education and Skills (Access to Learning for Adults Division) and will be ready for launch in summer, 2004. Its overall purpose is to facilitate knowledge sharing and transformation for those interested in career guidance and counselling research and practice, including: practitioners, policy makers, researchers, guidance trainees, tutors and trainers

Specifically, the objectives of the website 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 is created and shared (beliefs, concepts, ideas, theories, actions) in the search for new understandings of effective career guidance and counselling;
- to broaden and deepen the knowledge base of how to align processes of effective career guidance and counselling practice with policy requirements across the UK.

The structure of the website will comprise three main domains, as follows:

- Future Trends consisting of labour market information focusing on labour market changes and skills needs.
- A Database linking directly to the National Learning Resource for Guidance, based at the Centre for Guidance Studies at the University of Derby.
- Effective Guidance (with the following sub-sections):

- Equal Opportunities;
- ~ Impact Analysis;
- ~ Using Research in Practice;
- ~ Improving Practice;
- Lifelong Learning;
- International Perspectives.

The project extends the use of information and communication technologies, developed during a previous ESF funded ADAPT project to support the knowledge development of the dispersed community of guidance practice (Brown & Bimrose, 2000). A shared knowledge base is being constructed, not from an *a priori* comprehensive blueprint, but by being grown more organically from the contextualised problems that policy makers and practitioners face. This initially involves the formation of groups who meet to discuss issues of policy and practice and these discussions are continued on-line. These groups operate as a centre of expertise for particular topics and have several tasks. Specifically, to:

- Identify gaps and specify key areas or problems related to their expertise;
- Offer a mediated commentary on key documents and research findings;
- Provide support for others with particular interests in this area. For example, these groups can provide a focus where people can pose particular questions.

In this way, it will be possible to advance understanding through processes of knowledge combination, where existing available knowledge is combined with new insights to create new forms of contextualised knowledge. Online support for a community of interest focused upon the interweaving of guidance research and practice offers advantages. For example:

- It offers the chance for others to collaborate independent of time and space;
- It makes it possible for people to participate in their own time and at their own pace:
- Contributions can vary in form (e.g. they can contain text, pictures and links to documents, html pages or other notes);
- Participants are able to explore something thoroughly by commenting on material and contributing to discussions, and in so doing elaborate on the knowledge that is already in the database.

An important feature of this development, however, is that it is the combination of opportunities to meet and talk through issues, engage in development work and link to continuing on-line discussions that will facilitate the collaboration necessary for active knowledge creation. The created knowledge can thus be regarded as a social product. It represents not only learning, but creating knowledge collaboratively is also a form of knowledge building where individuals (learn to) share their knowledge and create new knowledge together.

### 2. Relationship between research and practice

The need to reconceptualise the relationship between research and practice for it to have an impact upon policy is highlighted by Gold and Villeneuve (2003) Their argument revolved around the need to go beyond dissemination. Knowledge transfer is still widely thought of in terms of researchers producing research and then disseminating it (push factors). Some researchers have begun to focus on helping decision makers access, appraise, adapt and apply research (pull factors). In a review of 24 studies that asked over 2000 policy makers what facilitated or prevented

their use of research evidence the most important factor was personal contact! (Innvaer et al., 2002). This means that dissemination and uptake strategies are necessary but not sufficient in many cases - relationships matter. Some researchers and decision makers are going beyond separate dissemination and uptake efforts and are engaging in true joint knowledge production. When this model is used, many people still encounter difficult barriers to effective collaboration and exchange. The most commonly mentioned were a lack of:

- understanding of each other's culture and work environment;
- a common language; and
- understanding of the relative roles and responsibilities in the process.

Gold and Villeneuve (2003)argue that relationships between researchers and decision makers are needed to overcome these barriers. Brokering is about building these relationships and involves:

- nurturing relationships between those involved in joint knowledge production;
- finding the right people and linking them;
- helping to set agendas and facilitating their interactions;
- building relationships between communities;
- understanding each other's realities;
- creating a common language and frame of reference;
- helping to establish realistic expectations, roles and responsibilities.

### 3. Knowledge creation

It has previously been argued (Brown, Attwell and Bimrose, 2002) that one way to build a more interactive and collaborative approach to knowledge creation was to utilise the ideas of Nonaka and Takeuchi (1995) and Nonaka and Konno (1998). They stressed it was important to ensure that there was 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. We also consider that this is important if we are to build up the continuing relationships with members of the learning community. This will enable us to meet our longer term aims for this research that include the continuing enhancement of the achievement of practitioners, especially of those in training and those engaged in continuous professional development.

Overall, the key to knowledge development to enhance career guidance practice is to set up a genuinely collaborative environment for a wide range of participants. The environment is intended to enable participants to:

- (jointly) develop, edit and modify materials;
- share annotation on material;
- facilitate the sharing of experience;
- promote discussion, sharing and active collaboration;
- offer virtual (and real) spaces for debate and collaboration;
- support action research;
- offer active support and moderation;
- offer support to particular interest groups;
- provide a forum for discussion of attempts to tackle complex problems in careers guidance practice.

### 3.1 Collaboration

Staff from many organisations involved in guidance arel participating in this innovative attempt to establish a learning community to enhance careers guidance practice. Organisations have included careers companies; Information, Advice and Guidance partnerships; Further and Higher Education; Voluntary/Community Sector Organisations; higher education; the private sector; various government organisations and employment. Additionally we are engaging in continuing dialogue with representatives of those with a strategic interest in the development of career guidance policy and practice, including the DfES; the Institute for Career Guidance; the Guidance Council and the Learning and Skills Council.

## 3.2 Drawing on the experience of others

By working together, participants develop greater competence using what group members already know as an important component and co-constructing plans of action to extend that knowledge (Scardamalia and Bereiter, 1994). For practitioners working together online to become used to sharing knowledge, deepening their own and common understanding and creating further insights, de Laat et al (2001) thought it crucial for participants to be able to coordinate, clarify and regulate the discourse themselves. They recommend that in order to support the clarification and direction of the discourse, a model of progressive inquiry could be used. Hakkarainen and Muukonen (1999) believe that progressive inquiry can engage members of a community in a step-by-step process of question and explanation driven inquiry. We have adapted this approach to our context as follows:

Creating the context: a context needs to be created in order to clarify why the issues in question are relevant and worthwhile for members of the group to investigate - this will be achieved through our face to face meetings.

Setting up initial lines of investigation: this can help guide the process of inquiry. Again our face-to-face meetings will set the parameters for the initial lines of investigation that will be subsequently followed up using the website.

Feedback and interpretation: once the initial group has received feedback from other participants on the initial lines of investigation, then members of the group (and in our case members of the wider community of interest) are invited to construct their own interpretations. de Laat et al (2001) see the construction of personal working interpretations as guiding the participants to use their background knowledge to offer an explanation for the problem. An attempt is then made to reconcile these interpretations and/or set up new lines of inquiry. A first knowledge base of the group's understanding of how the problem might be tackled is created.

Critical challenge: this developing knowledge base needs to be subject to a wider scrutiny and be open to challenge (and alternative interpretation) - this can occur as more members of the wider community of interest become active participants and start to use the website. Alternatively, if initially as so often happens, there are relatively few active virtual contributors, we hold further face-to-face meetings in order to generate and respond to critical challenges and changing interpretations. de Laat et al (2001) argue that the wider community can then be asked to assess the strengths and weaknesses of different interpretations and identify any contradictions, gaps in knowledge and so on.

Searching deepening knowledge: further advance in the different lines of inquiry can then be made by obtaining new information and combining this with existing knowledge. New information may help participants reconstruct their understanding of issues, problems and solutions.

Engagement in deepening inquiry: progressive inquiry involves a process of continuing refinement as ideas are revisited, and more searching questions are asked, thereby deepening the enquiry.

Constructing new working theories: by finding answers to subordinate questions, de Laat et al (2001) argue that the members of the community of interest approach step-by-step towards answering the initial question or problem statement.

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

# 4. Key ideas underpinning the development of the new site: lessons learned so far

One intention is to support processes of reflection, consolidation and community development. This means encouraging the posting of material is a secondary function - material needs to be related to a specific purpose.

To aid processes of reflection and development we need to be able to represent our resources in ways that are meaningful for the community at a particular time. In order to do this we will need to 'tag' each component of contributions with key words in a way that would enable members to browse and reflect in a way that was meaningful for them rather than relying on pre-ordained particular topics and structure. (Contributions will be formatted in 'lightweight' HTML for ease of reorganisation.)

This means that resources will be concentrated on *supporting active discussions*. We will offer more support in terms of reflection and consolidation of active discussions, in organising material to support the discussions and possibly establishing relationships with current or past discussion topics. The discussions themselves may cross topic or subject boundaries and evolve and change shape over time. We will aim to facilitate the 'organic growth' of the discussions.

In particular, this means we will move away from a pre-ordained subject or topic basis. We have found that such an approach encourages contributors to try and fill the boxes with more and more content and even then people may be disappointed that there is not more on a topic. Here someone coming to the Forum for the first time is faced by topics organised around 'what have people been talking about.' [Note it is striking that on the current site there has been lively discussion around some topics that were not part of any individual or collective plan. Other topics that everybody agreed were important have not had a single contribution in practice.]

We will experiment with *organising the site around whether the person's primary orientation is toward practice or research*. It is not our intention to divide the community, but rather attempt to maintain that balance between accessibility and

usefulness that a number of existing contributors raised. Everyone will have access to the same material, but what is foregrounded will depend upon which option is taken.

If the site is to be useful to both practitioners and researchers then we should encourage *participants to be more explicit about their purposes and desired outcomes*. At the moment we have tended to ask people to put up things they believe will be useful to an imagined audience. In future more effort will go in supporting discussions that 'take off'. There were a couple of examples on the current site of people keen for support for particular purposes (a research query or a request for help in learning how to do research), and although they did receive some replies, there was not a co-ordinated attempt to offer support.

This approach also links to the point about how 'users of the site should be playing oracle to each other - posing questions and receiving useful answers.' This will be central to our future purpose.

### 4.1 Active moderation:

The idea of supporting active discussions implies a much more active approach to moderation. We will develop a tool to support browsing, reflection and review (for example, this could allow 'highlighting of key words or key points' that could themselves be searched or the links between them be investigated). There will also be summaries and more active editing (full unedited copies of individual contributions and the discussion as a whole will be archived). This could involve key word headings for each substantive point (paragraph); summary paragraphs for ease of scanning - you could scan all the summaries, rather than the full discussions. The consolidation process will also apply not only to particular discussions, but also on key issues across discussions in order to give a sense of key components in the discourse of the community. A moderator may wish to branch a discussion or someone may suggest that a number of people hive off to a semi-private 'birds of a feather' discussion area.

The semi-private 'birds of a feather' discussion areas would allow more detailed or specialised discussions (for example, about a particular project). People could be invited (through their regular email) to join a particular discussion. When the semi-private 'birds of a feather' discussion was complete or at regular intervals the main discussion could be given summaries if appropriate.

4.2 Adding value to key documents through discussions or tutorial support: We have had requests for help in learning how to do research from a number of practitioners. The current site has some useful support material on this, but this could be even more useful if we could add value to documents over time with examples of how people fared when they tried to put these ideas into practice, plus a record of discussions on this and on-line tutorials at regular intervals.

### 4.3 Glossary builder or lexicon:

It may be useful to have some categorical system of things that have been discussed plus some suggestions of linked ideas when searching: 'show me things related to the following combinations...(e.g. equal opportunities and low pay).'

### 4.4 How will the site look?

The only things you will see without asking would be the consolidated summaries and reviews and the current active discussions. After that the normal route would be to search by key words to create a dynamic view of the things most relevant to the issues chosen. (If you really wanted to 'explode' a total view so you could wander about you could do so, but the point is that unlike previous versions, you would have to choose to 'get lost').

### 4.5 Strategy for coping as the number of contributions expands:

Initially as the site runs with say up to ten active discussions then navigation should be fairly unproblematic. Over time, however, the active discussions will generate and themselves constitute rich resources that could be potentially useful to others. Here the tagging and key words will enable reorganisation of some of the material to support new discussions, but the material also needs to be *capable of being searched around an issue that is defined by the user*. [This may or may not lead to a discussion.] Essentially the question is: 'show me what the site can offer on ...e.g. factors influencing subject choice post-16.'

The initial query will throw up (diagrammatically?) a map with different content, relationships and links. The search could then be progressed through those pathways or by utilising a refined key word search. There would also be options for the user if they could not find what they wanted: for example, to start a discussion with a clear purpose; ask for help from the community; follow a link to the University of Derby database and their search facilities.

Note also the links with the National Learning Resource for Guidance at Derby means that material generated can also be conventionally archived. This includes the discussions as well as the uploaded files and other contributions.

### 4.6 Using the website:

It will be necessary to have a section of the site that explains our purposes (regarding knowledge creation; supporting active discussion etc.) so that people using the site will realise that the intention is to create a self-directed community.... The precise direction is at least partially open, and the current discussion shows that it is for the community itself to decide how best to use this resource at the interface of (theory?) research and practice in guidance.

# 4.7 What happens next:

We are currently building the new site and hope to have all the functionality described and implicit in the above. We hope it will be ready for public launch in Summer. 2004.

# 5. Conclusion

This initiative represents an exciting opportunity to create an inclusive and dynamic research community for guidance. 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.

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