

Staff Development for networked learning: learning from staff and students

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ABSTRACT

This study explores, through a case study the impact of both formal and informal staff development. It is suggested that the Kolb cycle and social constructivist theory provides a useful starting point for exploring development drawing on data gathered in interviews, a focus group session which can then triangulated with data from other sources. However, it is also recognised there may be a need for developing the Kolb cycle into a helix to account for reflection on experience which subsequently guides future action. Different types of staff development are then considered, distinguishing between formal and informal staff development. Finally issues arising out of these studies are identified and future areas for research suggested.

Keywords

Staff development, networked learning materials, online teaching, Kolb cycle, sociocultural theory

INTRODUCTION

The aim of this paper is to examine the impact of staff development and the needs of experienced lecturers who become involved in development of online materials and in tutoring online and, also to consider the role that these members of staff may play in future staff development. As the use and therefore development of online courses increases (see e.g. Ryan et al, 2000) the need for effective staff development will also increase. There is therefore a need to examine the type of staff development that has been provided for developers/tutors, to consider the impact this staff development has had on the individual and the implications of this for future staff development. It is also worth considering these issues within the context of continuing professional development and the lifelong learning agenda. There is an increasing need for a flexible workforce that continues to develop and learn whilst in employment; however, whilst there has been considerable in-depth exploration of student learning using models based on constructivist learning principles (e.g. Fry, et al, 1999) there seems to have been less such exploration in relation to staff development. Gus Pennington (recently retired chief executive of HESDA) stated in an address at recent meeting to disseminate the initial findings of the Promote project (personal communication J. McArthur, 2002) that there was a need for staff developers to start to research their own practice. Thus this paper aims to make a start, albeit a modest one, of exploring the impact of a range of staff development activities on an individual and to consider the implications of her experiences for her institution. Issues identified from this analysis will be related to the wider academic community with the intention that it will provide others with a possible methodology for exploring staff development, a range of issues to explore and perhaps some practical examples to test out.

A distinction is made here between formal staff development and informal contacts which could be considered as staff development. Formal staff development is here taken to be planned and structured activities which have a particular purpose, aims and intended outcomes. The formal staff development activities referred to here have been evaluated and feedback from module developers/tutors has been sought on these. It is therefore feasible to trace potential impact in terms of the final product – the completed module and also on the learning and development claimed by the lecturer involved.

However, informal contacts do not have a clear set of aims and intended outcomes and they may be no more than a brief discussion about an issue in passing or they may form part of more structured activities that have developed out of such an informal contact. An example of the latter, from elsewhere in the UHIMI is an instance of double marking, where the second marker questioned the

assessments and marking criteria adopted. This led to a formal, structured activity but one which was totally tailored to the needs of the individuals in that particular situation. It is perhaps incorrect to use the term 'staff development' for such contacts; however, it is suggested here that these kind of practitioner-led contacts and events can have a considerable impact on a person's developing competence and for that reason should be included in an analysis of what it is that helps to promote effective development in staff. In addition it allows for an exploration of how such interactions can be captured and used by the institution to promote dissemination of good practice and provide staff development tailored to individual needs.

The starting point for this exploration is a case study of one experienced lecturer's experience of developing an online module. This member of staff had considerable FE teaching experience some teaching experience at HE level which included delivery across the UHIMI network. The paper will examine her cycle of development from the development of one module, to the tutoring of that module and the subsequent joint development of a further module and peer review of another module. The Kolb cycle (Kolb, 1984) will be used as a starting point for this exploration; however, it will also be argued that the Kolb cycle, with its focus on the individual's development is insufficient and that a socio-cultural perspective (e.g. Wertsch, 1985, Bonk & King, 1998) allows for an exploration of the input of others into an individual's development at each of the four points of the Kolb cycle.

The impact of both formal and informal (as defined above) staff development on this lecturer's knowledge and experience to the development of skills and understanding in other members of staff will also be examined. The Kolb cycle (Kolb, 1984) will be used to examine the development of this lecturer. In addition we will explore the usefulness of concepts from sociocultural theory (e.g. Wertsch, 1985, Bonk & King, op.cit.) to consider the interactions at specific points of the Kolb cycle. In addition to looking at this individual's development the impact of others on her development and hers on theirs will be considered. This will then be considered in relation to how the institution may be able to or may wish to consider increased use of practitioner participation of provision of staff development.

Background and setting

The University of the Highlands and Islands Millennium Institute (UHIMI) is federal, distributed institution based on a network of fifteen FE colleges and research institutions. At present the UHIMI does has HEI status but not university status and therefore its degree level courses are validated by the Open University Validation Service (OUVS). In January 2000 the UHIMI was funded through the European Adapt programme to develop and deliver a set of twelve level-one undergraduate 15 SCOTCAT credit modules (LINC – Learning in Networked Communities Broumley et al 2001). This allowed the institution to develop further its range of HE level provision in this region, and, perhaps most importantly, to develop online, networked modules. This is an important aim for the institution given the widely dispersed population in the Highlands and Islands.

THE CASE STUDY: METHODOLOGY AND FINDINGS

The case study follows the development of one member of staff who developed and tutored an online module as part of the LINC project, and who has gone on to tutor this again and is in the process of developing a second online module. In the LINC project she was part of a group of staff who developed online resources for their own modules and who were offered the same staff development. The data gathering for the case study was as follows:

- an individual face-to-face interview near completion of development but prior to delivery,
- a focus group interview after the first delivery of the module, and
- a final interview to explore issues specifically in relation to the impact of staff development was also carried out after delivery of the module to a second cohort.

The first module was evaluated by a peer reviewer who concentrated on subject review and an external evaluator who gave a pedagogic review. Formal student feedback is being collected (January / February 2002). Formal evaluation will also include external examiners comments linked to actual student achievement rates. Informal student feedback was gathered as part of the delivery process.

First interview

This interview explored the following main themes in relation to developing the first module:

- initial expectations and concerns
- the presence or absence of certain skills
- the impact of staff development and technical support

the research/reading undertaken by the staff member

the practicalities of developing the module

This member of staff identified herself as motivated, excited but scared by the prospect of becoming involved in this development – in her own words: *'I wanted to be part of it. It was a challenge to make it good – and I was scared stiff'*. She also considered herself a competent and experienced teacher – a claim supported by both students and staff - but lacking IT skills, beyond the basic ones. Of the two staff development workshops – each of two days – one she identified as excellent, the other as useless. The key features of the excellent one were a good mix of practical and theoretical. In particular this workshop provided:

pedagogy for online learning – the theoretical foundations. The need for, and role of interactivity in the online environment was particularly emphasised.

case studies and practical examples demonstrating the pedagogy in practice

some hands on experience

The second workshop went beyond that which was required at the time and was overly technical.

Technical support was provided within the institution; however, there was an initial misconception in terms of who would be responsible for different aspects of development. The initial expectation of this staff member was that she would develop the materials and that a technical support person would upload it into the learning environment; however, this was not the expectation of the technical member of staff.

Focus group interview and feedback from first delivery of module

The focus group interview took place at the end of the first delivery of the module. There were only three students during first delivery, none of whom completed the evaluation feedback. Student interaction did not develop to any extent but there was good student/tutor interaction. Generally the students were not well qualified to undertake undergraduate level study so whilst this delivery of the module allowed for testing the materials and providing experience in online tutoring it was not a good test of the module as a means of teaching larger groups. Since then informal discussion has taken place during second delivery of the module (second delivery finished in January 2002).

Final interview and second delivery of the module

The second delivery of the module has provided a useful test of the module. Forty-six full-time students were enrolled as part of the first year of a fully online degree. By January nine students had withdrawn – mainly due to domestic circumstances. The delivery of the module - using only the online environment with no additional face-to-face, video or audio-conferencing - has worked more effectively than anticipated by this member of staff. She has expressed surprise at the extent to which she has managed to get to know the students in spite of only 'meeting' them online. The contacts with students have made full use of all the interactive tools within the WebCT environment. The final interview focused on:

own learning and development as a result of developing online modules

student feedback

impact of others on self and impact of self on others.

The main learning and development identified from the overall experience is in relation to adapting teaching skills to a new medium. In addition IT skills have been developed mainly in terms of what software to use, how to use a VLE in developing online modules and also in terms of how to make more effective use of technical expertise of others. The final interview also suggested that learning in relation to student expectations had taken place but this is mainly related to delivering rather than developing the module.

Student feedback has been informal and generally positive. This could be because of a reluctance by students to comment negatively to a tutor; however, this is not necessarily the case. Weedon (2000) identified that students are prepared to respond with constructive criticism especially when asked to do so in writing so the positive feedback in this instance may well be genuine. The main learning from student feedback has been to develop a clearer introduction to the module and to become more aware of student expectations.

THEORETICAL AND CONCEPTUAL FRAMEWORKS: AN ANALYSIS OF THE EVIDENCE

The Kolb cycle (Kolb op.cit.) has been developed and extensively used by educationists to explore development of cognitive abilities (see e.g. Cowan, 1998). Although the focus here is on staff development it is argued that the learning and development that is intended through staff development can be explored in the same manner as we examine student learning. It has been argued by some that the constructivist models, such as the Kolb cycle, are inadequate for exploring learning as they do not sufficiently acknowledge input from others into the learning process – the notion that learning is mediated by the interaction with another person (Laurillard, 1993). As staff development is by its nature a social process it seems reasonable to argue that we need to explore its impact from a social constructivist perspectives. The Kolb cycle will therefore be used as a starting point for exploring development and the impact of others at the four different points of the Kolb cycle will be considered. This will include differentiating between inputs from different sources such as formal staff development, informal contacts and student evaluations. It should be noted though that this use of the Kolb cycle in the context of staff development is exploratory as is the extension of the Kolb cycle to consider the input of others into one person’s process of development. The issue of time development and its role in development should perhaps also be noted. The Kolb cycle includes the need for reflection on experience as essential for development. This requires time and it is also likely to be aided by feedback. Interestingly this was a point that all module developers returned to when interviewed and is likely to be of importance in terms of timing of formal staff development activities. Thus we also suggest that development and learning depends on reflection which leads to a further movement around the circle but at a higher level and that the second iteration around the cycle is linked to the first in spiral to create a helix.

Development of the individual: stage 1

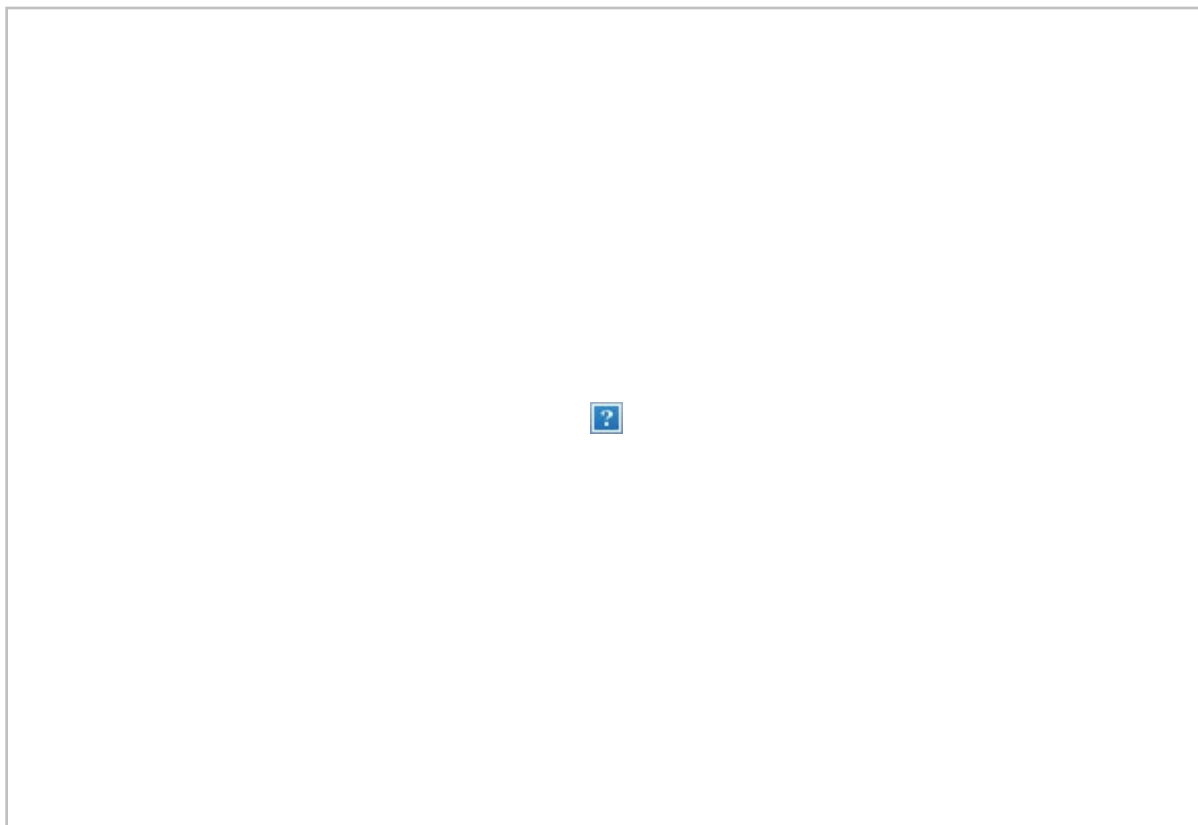


Figure 1: Beginning from a given generalisation: the development of an online module – this generalisation is based on others’ ‘experiences’ and communicated via staff development activities.

Figure 1 suggests that the individual ‘enters’ the Kolb cycle at the ‘generalisation’ (1) point of the diagram through the staff development activity which was based on generalisations from research and evidence in terms of best practice in development of online materials. The individual then tests these generalisations at (2) whilst in the process of development. This leads to an experience (3) which in this case is the actual completion and delivery of the module. Finally the individual moves to reflecting on this experience drawing on a range of evidence such as own experience of delivery, student feedback, feedback from others (e.g. student advisors, peer reviewers, external examiners) which can inform the development of a new generalisation about how such materials should be developed.

The model thus allows us to explore the potential development of an individual; however, at this stage it is also essential to consider what evidence there is which suggests that development has indeed taking place. In the case of students the evidence is often in the

form of successful achievement of a particular course; here it is necessary to examine the extent to which the module was successfully delivered and also the extent to which the individual was able to learn from this experience and transfer it into the next experience of developing a module. It is therefore essential to look at evidence from a range of sources. So not only do others feed into the process of development of the module the evidence produced whilst delivering and on completion of delivery.

Before considering such data it is worth exploring the second cycle of development – the development of the second module. At this stage it could be argued that the Kolb cycle is entered again at the stage of ‘generalisation’

Development of the individual: stage 2

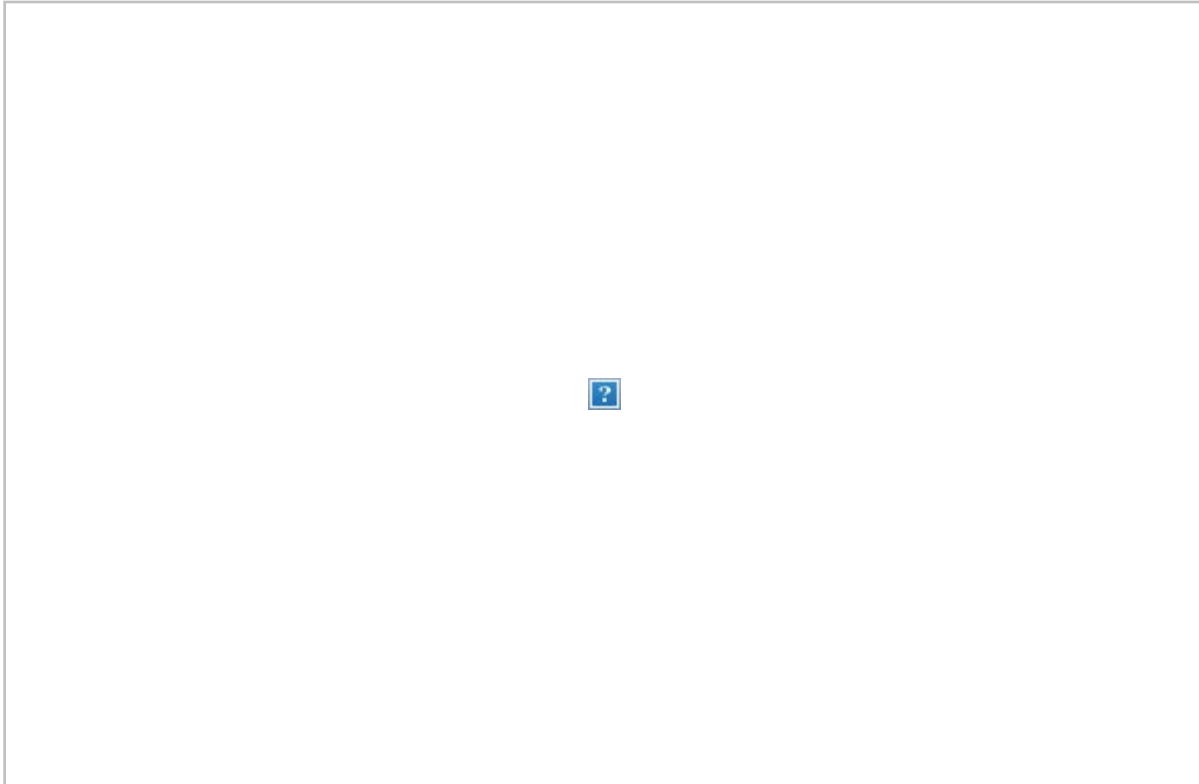


Figure 2: Beginning from a given generalisation: the development of a second online module – this time the generalisation is based on own experience but aided by feedback from others at certain stages.

As these experiences are linked it may be necessary to move from using two separate circles (Figure 1 and 2) to linking the two circles. In order to emphasise the development that has taken place, and that this has moved the person from one level to another, the two circles should be thought of as part of a helix. This also potentially allows us to link this conceptualisation to other ways of exploring learning and development, By integrating reflection and evaluation with staff development we stimulate the use of evidence and experience to provide the basis of practitioner-led professional development. In relation to online learning, itself a relatively new mode of learning, reflection on evidence becomes basis for the generalisations which start the process of staff development. This could allow for conceptualisation of development that is linked across a period of time and has had a range of inputs it also allows for examination of different types of staff development.

However, it should be noted that for any development to be claimed there should be evidence which supports that such development has occurred. In this instance this is based on the interview data and claims by the individual *and* the feedback and evaluation of the actual delivery of the module. It seems that triangulation of data is important in terms of assessing any impact that is claimed. It might also be feasible using this model to explore when development has not taken place – there would be no movement up the helix to feed into the next stage. This would suggest that simply circling the Kolb cycle once is not sufficient for development and learning to occur. Perhaps this is an overextension of the model; however, it might allow us to compare the impact of different types of staff development activities and it also suggests that staff development activities ought to be linked in a series of events which allow for testing out of generalisations that are initially provided by the staff development activity.

So what does the data from this case study suggest in terms of learning and development for this module developer/tutor? The data from the first interview claimed that the input in relation to pedagogy for the online learning environment had an important

beneficial impact on development. The final interview singles out the following: interaction, student centredness and motivation. These claims are backed up by log records of students' visits to various parts of the course and participation in online discussions and tutorials. It would therefore seem that the benefits of the first workshop is clearly in evidence.

Formal versus 'informal' inputs into the development of the individual

The formal staff development was provided by two workshops and the IT support which was available to some extent on a 'needs' basis. It has been established that according to this individual one of the workshops was effective and there is evidence which links what was provided at this workshop to the final outcome; it also seems clear that the other workshop was not considered effective. The combination of theory and practice in workshop one was appropriate for the needs of staff starting a new process. The content of the second workshop did not fit with the current needs of the staff in relation to their own development since workshop one. Such an analysis is important not simply because it provides the most effective staff development but also because it can help minimise staff development activities which are deemed unsuitable by participants. Academics are experiencing increasing pressure on their time and are unlikely to engage in staff development activities if these activities are not seen as worthwhile. So whilst it could be argued that 'learning' occurred in both workshops the kind of learning that occurred in the second workshop might be to avoid such workshops!

The IT support was provided by a member of staff who was an expert in the particular learning environment used for online module development. Although this may be considered support activity it has been included as staff development because there is clearly a need to identify the extent to which module developers need to be IT literate and therefore what staff development needs to be provided in this area. Interestingly there was an initial mismatch in terms of expectations between the two parties in that the module developer expected to develop the materials only and the 'uploading' into the learning environment would be done by the technical expert. However, the module developer was required to undertake the whole process but was provided with support whilst doing so. This suggests that it is vitally important when designing staff development support to clarify the relative contribution that each is expected to make. In addition to this, and this is particularly important for staff development of online materials, is the consideration of what knowledge and understanding is required of IT. It is clear from the overall evaluation of the Adapt project (Broumley et al, op.cit.) that there is a need to develop a checklist identifying minimum requirements in IT skills. This is not to preclude those with IT skills below the minimum level to develop materials, it is to ensure provision of initial training to prevent later frustration! This was suggested by several of the module developers. It was also clear from the interview data that those with very limited IT skills had difficulties in working out what their needs were and this meant that the requests for help from IT support staff became very vague and difficult to act on.

The workshops and the IT support constituted the main part of the structured input. In addition the module developers claimed that peer support from other developers was valuable; however, the impact of this kind of support is considerably more difficult to measure and evaluate. However, it could be suggested that one aspect of this support links to affective needs and the need to belong to a community. Research such as Wenger 1998 has clearly demonstrated that this is important in terms of developing effective members of staff. In this instance, the daily environment of the module developer was such that she was relatively isolated as this new module development was not part of the degree team development at that time. Interview feedback stated that the informal peer support provided: reassurance; opportunity to discuss issues relating to material, techniques and teaching and learning issues; and the opportunity to learn from the mistakes of others. It is clear that it did impact positively on affective needs but in addition it also served as a mechanism for learning about relevant techniques.

To summarise, there is clear evidence that the staff development provided has had different impacts on this individual. The analysis here is only scratching the surface and it is likely that more in depth analysis of the different types of inputs over a period of time could prove valuable in terms of developing a greater understanding of what makes for effective staff development in this area. It is also clear that the informal peer support has been of importance in terms of learning and development. More in depth analysis of the informal network and its impact might provide for an opportunity to use peer support as staff development in a more structured format. This is likely to enhance the staff development provision of an institution and provide further development for individuals within an institution. It could potentially allow for chance, unstructured encounters to become the basis for further structured activities that are based on individual needs and draws on the competences of individuals within the institution.

Impact on others

Thus far the emphasis has been on exploring the development of a single individual and the input into that development. The paragraph above suggested that individuals within the institution could become involved as staff developers. In terms of the model above (the Kolb cycle) this would mean that these individuals became part of the influences in the 'outer ring' of inputs into another person's development. The second interview suggests that this module developer has indeed become involved in such a way, albeit on an informal and unacknowledged basis. As already recognised one such area is in relation to providing reassurance and encouragement to become involved. This may sound fairly trivial but in many cases an enthusiastic peer can encourage others to become involved in new developments where institutional 'decrees' may simply meet with resistance. It also becomes possible for

the skills that have been learnt to be passed on – suggesting an ‘apprenticeship’ model of learning which fits well with the social constructivist approach (e.g. Rogoff, 1990). This raises a range of issues of what the relationship between formal and structured, informal and structured and informal and unstructured activities which any institution would need to consider. These will be returned to in the final section – with some suggestions for debate rather than solutions provided. To conclude on the issue of involving members of staff as developers of others this is the advice from this member of staff:

Let us get involved! Recognise what we can contribute formally and informally. Allow us to provide encouragement to those people who are hesitant about taking on the work. Don’t force participation but use ‘experienced’ online developers/teachers to encourage gently and positively.

Pace the staff development. Identify key principles and offer development of these in a timely and easily digestible manner. ‘Knowledge which does not get used in practice is rapidly consigned to cold storage’ (Eraut, 1994)

Be explicit about similarities and differences of teaching in various modes.

Avoid pretentiousness – and ‘experts’!!

In addition in response to the following question: Do you feel that your own development in this area has benefited from helping/supporting others in the development of online materials? The response was:

Supporting others has encouraged reflection on my own work

It encourages me to be critical of my work , the delivery mode, the student response

It allows me to learn from others – a fresh viewpoint.

So not only might those that are experienced and working with less experienced help to develop the less experienced – their process of learning may also be enhanced.

CONCLUSION AND SOME ISSUES ARISING

This paper has explored one person’s development in some detail. It has been argued that development and learning arose out of some of the staff development activities offered but not out of others. Evidence was presented to support these claims. It has also been suggested that it is worth considering an exploration of learning and development in terms of both formal and informal input. Informal contacts can potentially be a powerful mechanism for staff development as it is linked to peer support and is often offered on a ‘needs’ basis but may only be one-to-one. This is in contrast with formal staff development which is usually based on identified needs and aims to reach a larger population; however, in doing so may not identify the most important individual needs. It may be that it would be useful to consider these two as being opposite ends of a continuum and that further analysis should explore how these interact. It may also be valuable for an institution in terms of developing a ‘register’ or record in terms of skills that individual members of staff have in such a way that these members of staff can then become more effectively involved in the apprenticeship model of staff development. The paper has not explored these issues in relation to different models of staff development that are used in other institutions. The Edinburgh based Promote project (personal communication J. McArthur, 2002) has undertaken such an exercise. Clearly linking this exploration to those models might be a useful next step. These models include practitioner led action research as a means of an individual’s staff development. Perhaps what we are considering here is developing that into practitioner led staff development. A useful structure for such informal staff development may draw on reflective practice and use some of the techniques suggested by Brockbank & McGill (Brockbank & McGill, 1998). It should be noted here though that this paper is not arguing for a model where all staff development is ‘in-house’ and delivered by the practitioners. It is clear that one of the first formal workshops led by external experts was greatly valued and had a real impact. What is argued though is that we should aim to gain a clearer understanding of what each can provide so that it is used to the greatest effect.

This paper aimed to undertake an exploratory analysis of one person’s development and learning in relation to developing and teaching online modules. It has made some suggestions about the impact that staff development has had on an individual and considered this in relation to considering future ways of providing staff development in this area. However, in doing so it has raised a number of issues that would be worthy of further exploration. These issues are likely to include the role of and relationship between formal and informal staff development and to recognise the importance of motivation and affect on development of staff. In exploring the relationship between these two forms of staff development the institutional frameworks to support different types of staff development would need to be considered. It might also focus on what are the most useful concepts and theoretical frameworks. This paper has explored the value of the Kolb cycle and setting this within the context of socio-cultural, mediated learning. There are other ways of exploring learning and these may be more effective in informing future practice. Evaluation of staff development beyond simple tick box sheets also seems necessary in order to develop a relevant methodology to explore these

issues. Finally, but perhaps most importantly there should be a consideration of how we link outcomes from staff development to the impact it has on student learning.

REFERENCES

- Bonk, C.J. & King, K.S. 1998 *Electronic Collaborators: learner-centred technologies for literacy, apprenticeship and discourse*. Hove, Lawrence Erlbaum
- Brockbank, A. & McGill, I. 1998 *Facilitating reflective learning in higher education*. Buckingham, Open University Press
- Broumley L, Weedon E (2001) *The LINC Project - Learning in Networked Communities: Interim evaluation Report*, UHI, (available from http://www.uhi.ac.uk/adapt-linc/web_pages/eval/internal.htm)
- Cowan, J. 1998 *On becoming an innovative university teacher*. Buckingham, The Society for Research into Higher Education & Open University
- Eraut, M. 1994 *Developing professional knowledge and competence*. London, Falmer Press
- Fry, H., Ketteridge, S. & Marshall, S. 1999 *Teaching and learning in higher education: enhancing academic practice*. London, Kogan Page.
- Kolb, D. Kolb, D.A. (1984) *Experiential learning: Experience as the source of learning and development*. New Jersey, Prentice Hall
- Laurillard, D. 1993 *Rethinking university teaching: a framework for the effective use of educational technology*. London, Routledge.
- Rogoff, B. 1990 *Apprenticeship in thinking: cognitive development in a social context*. New York, The Free Press
- Ryan, S., Scott, B., Freeman, H. & Patel, D. (2000) *The virtual university: the internet and resource-based learning*. London, Kogan.
- Weedon, E.. 2000 Do you read this the way I read this? *British Journal of Educational Technology*, **31**, 3
- Wenger, E., 1998 *Communities of Practice: Learning Meaning and Identity* Cambridge (UK), Cambridge University Press
- Wertsch, J. (1985) *Vygotsky and the social formation of mind*. Massachusetts, Harvard University Press