

Blending differing teaching methods to support student learning: Traditional lectures, respected groupwork and network technology

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Summary: This paper discusses the philosophy, principles, design and evolving evaluation of the Learning for Practice 1 module which forms part of the new social work degree programme. Attention focuses upon the academic component of the module, in effect the theories and methods teaching. The blended approach will be outlined describing the main methods of delivery which combined traditional and elearning approaches. The three main styles of delivery; traditional lectures, online activity and group sessions are measured against a backdrop of established educational literature: The student voice is presented via a review undertaken at the end of the fourth year of the course life.

Keywords: lectures; elearning; groupwork; educational reflection; professional development

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Introduction

Practice is a setting for learning, a way of learning and an essential part of the learning students must complete. (Standards in Social Work Education (SiSWE, 2003)

The new Scottish Social Work degree heralded an enhanced focus upon the centrality of practice, firmly embedding it as the domain where academic learning fuses with practice in a meaningful and effective way. The increase in the number of required days in assessed practice learning confirmed the significance of practice within social work training and called for a reconfiguration of the existing social work programme. The SiSWE (2003) requirements additionally state that: 'Students must prepare for social work contact and involvement' (Standard 1) and whilst such preparation was already established within social work education, the new remit required an enhanced attention to preparation for practice. The delivery of the new social work degree at the University of Edinburgh sought to embed such preparation within a new 80 credit module, Learning for Practice 1. This paper will discuss the philosophy, principles, design and evolving evaluation of this module. The student voice is presented via a review undertaken at the end of the fourth year of the module's life.

The module included theories, methods and skills teaching, and a three week period of Introduction to Practice in an agency setting which informed the degree's requirement that students be assessed for their Readiness for Practice. It also included a specific preparatory focus to guide the students towards the 68 day period of assessed practice learning, which constitutes the first practice placement. The module assessment consisted of pass outcomes of this practice placement and of the 7,000 word integrative assignment, both of which were based upon the cumulative teaching and learning experience of the module. The students undertaking the module were a combined group of third year honours undergraduates and first year Master of Social Work postgraduate students.

For the purposes of this discussion, our attention focuses upon the academic component of the module, in effect the teaching on theories and methods as part of the overall preparation for practice. Other components of the module include the preparation for and evaluation of the period of Introduction to Practice, the Readiness for Practice

assessment and other features of the Preparation for Practice were all central and integral components which were threaded throughout the entire sequence.

The underpinning module principles

The module organisers embraced the challenge of the new configuration, viewing it as an opportunity to consolidate existing teaching practice, and to test and explore new ideas and contemporary learning tools. The theoretical genealogy of literature on student learning is both impressive and extensive and spans decades of study (Dewey, 1938; Freire, 1972; Rogers, 1980; Kolb, 1984). A literature review is not our intention here but we drew from this knowledge base, substantiated by our respective teaching experiences to define the following underpinning features which informed our planning and influenced the design of our new venture:

- The application of theory is a challenge to most students.
- There can exist a gap; real or perceived between the focus of academic teaching and the realities of practice requirements.
- Students learn in different ways and benefit from a range of learning methods.
- Students require support to learn how to learn.
- Learning to reflect takes time and benefits from the opportunity to practise.
- Learning happens best within a constructive learning environment.
- Students learn from each other as well as from the tutor.
- 21st century students need 21st century learning methods

Articulating this shared understanding of these aspects of student learning, led to us creating a framework for planning, developing and designing the new module. This process, in itself informed a model which was grounded in both educational knowledge and practice wisdom.

The model

Clearly the scope of this module was wide and its activities multi-faceted. It became apparent that a blended approach to learning would be most effective in order to accommodate all such aspects; blended in terms of methods of delivery and blended between traditional and e-learning approaches. Three main methods of delivery were selected: traditional whole class lectures, online activity and weekly group sessions. In effect, the lecture and group became the course bookends, with the online activity and discourse filling the learning space between.

Practice/academic partnership

Prior to the start of the new degree, we, like other Scottish universities had been involved in the Scottish Institute for Excellence in Social Work Education's (SIESWE) Learning for Ethical and Effective Practice (LEEP) programme, researching various aspects of social work education. The focus for the team at the University of Edinburgh along with colleagues from Glasgow Caledonian University had been the Integration of Learning. During our LEEP project (Clapton et al., 2006), we have described how, as academic tutors, for the purpose of this project named 'academic advisors', we stepped out into practice alongside the student to contribute to the integration of learning and to embody the bridging of the gap between class and field.

Building upon both the success and our learning from this project, this new module extended the LEEP method of focusing upon the integration of learning, but this time whilst the student is still within academia, preparing for the transition into practice. In our new model, the field came into the classroom where weekly groups were facilitated by an equal mix of university staff and agency practice teachers. This ensured that from the outset, the practice perspective contributed to and validated the academic input. Student questions or doubts about the relevance or applicability of theory could be responded to with immediacy and authenticity. So, as with the LEEP project, where tutors were charged with the task of modelling and embodying the transfer of theory into practice, a reverse model operated here in which practice met the student at the outset of the learning journey, with the very

partnership between tutors and practice teachers demonstrating the relationship and dynamic between the two domains of student learning.

Teaching material and session design were centrally created, with the process, dynamic and structure of the groups reviewed fortnightly via facilitator debriefing meetings which allowed for ongoing reflexivity of approach. Furthermore, the course developed in an iterative manner; by which the organic nature of this development created a dialogue between practice teachers and tutors, confirming the appropriateness and relevance of the course content and the style of delivery. Parallel benefits accrued in that practice colleagues developed an enhanced understanding of the detail of the taught curriculum and enjoyed an earlier engagement with the students' learning journey.

Theoretical underpinning

The challenge of this ambitious module led us to revisit the debate on how students learn, how they can be supported to learn and how the obstacles to learning can be overcome. Social work education has long drawn upon theories of adult learning and has fully integrated the principles of the learning cycle, learning styles and reflective/reflexive learning (Kolb, 1984; Honey & Mumford, 2000; Payne, 2005). Active, participative, experiential and student centred learning are all established features of social work education with the demands of social work training leading the educator away from a purely transmission style of delivery (Schon, 1987). Our aim was to build upon the existing culture of social work education delivery but, being also aware of the particular needs of the 21st century learner, we turned to the established pedagogy of online learning. Laurillard (2008) outlines the place of network technologies within higher education and through the promotion of a conversational framework, she outlines

what it takes to learn and the significance of the continual, iterative character of learning. (p.16)

Salmon's (2005) call to academics to embrace the potential of technology to enhance learning, acknowledges an inherent resistance in accommodating this change. Ballantyne (2008) develops this argument

as it might apply to social work education. He proposes that reluctance to include e-learning methods in social work programmes may be reduced by a greater familiarity with the learning technology literature. This developing body of knowledge evidences the pedagogical validity of the use of e-learning tools.

The above is embodied in the approach of Mayes and Fowler (1999). They clarify the process of learning via their assertion that 'learning is a by-product of understanding' (p.4). Successful learning, they argue accrues as a result of the understanding which evolves via the progression through different stages including the performance of tasks, via tutor and peer feedback, and from the establishment of 'personal, social and organisational contexts'. This process of accretion seemed an essential element of our intended learning culture and particularly relevant for the scope of our module.

The pedagogy of online learning promotes a constructivist approach which mirrors much of the active, problem based learning of generic, higher education delivery. Mayes and Fowler (1999) summarise three stages of learning: Conceptualisation, Construction, and Dialogue. These stages, as defined within this pedagogical context offered us a useful template for the scale of our project as well as a framework for a blended, wrap around style of delivery which allowed us to retain the strengths of traditional input such as lectures; to maintain and develop the provision of group based learning whilst also introducing and maximising the potential of online activity. Wishing to avoid the recorded pitfalls of blending e-learning with traditional teaching in a clumsy, tokenistic way (Littlejohn & Pegler, 2007) or using technology purely as a way of relocating existing materials (Seagrave and Holt, 2003), we planned to construct our overall learning package on defined pedagogical principles.

Conceptualisation and orientation: Maintaining the benefits of traditional teaching methods

There can be a tendency to view the lecture as an ineffective vehicle for enhancing learning. Concerns about encouraging a passivity of learning and creating an unhelpful distance between lecturer and student, along with a hierarchical distinction between expert and novice, are

long established criticisms of this teaching method (Rogers, 1999). Considering the breadth of our remit, we decided to maintain some traditional style lecture input, but rather than this decision being based upon a cost effective way of imparting knowledge to large numbers, or being a symptom of resistance to giving up familiar practice, (Seagrave & Holt, 2003), our decision was based on defined educational principles.

The lecture became the foundation of the learning process and served as a vehicle for introducing new concepts, an orientation to the related ideas and a signpost to the subsequent stages of on line learning and group application. (Mayes & Fowler, 1999). A familiar selection of social work approaches was covered, including theories of loss, counselling approaches, systems theory, solution focused therapy and opportunity led work. A lecture on counselling approaches, for example introduced two selected models, person centred counselling and cognitive behaviour therapy. The lecture identified key theoretical underpinnings of these approaches, and via a traditional 'instructionist' approach (Reigeluth, 1999) 'imparted the necessary knowledge' in a lecture supported by power point presentation. To promote the students' understanding of the theoretical application, the lecture was followed by two videos of counselling role plays demonstrating each of the two approaches. A short period of questions and discussion concluded the class. Clearly this was a rather typical lecture structure. However, students were then directed to the next stage of the learning process; where they were required to read further material which was posted online. The active participation of students was promoted by encouraging them to engage in online discussions in order to explore their understanding of relevant concepts.. There was an explicit expectation from the lecture stage onwards that students were responsible for coming to the weekly group session, (the third stage), having undertaken the necessary preparation, including reading, and online dialogue. Such preparation would ensure that students be equipped to engage with the active application of the theory in a range of experiential learning activities in the secure environment of the group. For example, role play activities using imaginary practice scenarios, simulated realistic practice situations thereby creating the opportunity for the rehearsal of social work intervention. This process enabled students to practice and receive feedback about their communication style, and to explore their developing professional identity. The group experience offered specific insights for students in their preparation for the forthcoming period of assessed practice learning.

Our assertion here is that even at the lecture stage, students were

invited to be contributors to the learning activity and were encouraged to develop an understanding of the link between the initial introduction of knowledge and the subsequent stages of the learning process. It was intended that this emphasis would avoid the potential passivity associated with the traditional method. (Cherney, 2008). Furthermore it could be seen that this approach could offer students a working model to use for their subsequent practice learning.

Construction: Introducing online activity

We were interested in Tapscott's definition of learning generations and their differing experiences of new technologies (1998). As teachers, we fell into the Baby Boomer generation for whom television was the new technology of our time. Our students generally spanned two learning generations; the millennial, google/net generation, classified as being between the ages of 9 and 23 years, for whom the new technology of their age includes Facebook and instant messaging. Our second generation of students is defined as the Google Pioneer group, falling into the age band between 24 and 31 years, whose technological socialisation was based on mobile phones and playstations. Tapscott suggests that it is the more recent generation which comes to e-learning as 'digital natives'. This presents an obvious challenge to those of us for whom this is not an indigenous activity. In contrast to the fluency of the networking generation, we must make more deliberate effort to achieve the integration of a technological approach into our teaching methods. Undoubtedly the potential clash or gap between the respective generations of staff and students could result in a dissonance of approach and we were mindful that:

Today's students are no longer the people our educational system was designed to teach. (Prensky, 2006)

Whilst not wishing to display Luddite tendencies by an adherence to a wholly traditional approach, we were, nevertheless, reluctant to bolt on elearning activity tokenistically or without a sufficiently robust underpinning educational base.

The pedagogy of online learning advises that creating a social

space for learners is educationally significant, not merely in terms of ice-breaking and creating general support structures but in providing a learning environment which is meaningful and adaptive to today's 'digital natives,' (Prensky, 2006) These digitally literate students and their existing familiarity and engagement with online communities have sophisticated transferable skills which support their engagement with educationally based synchronous and asynchronous methods of learning. Web 2.0 communication such as instant messaging might appear to the Baby Boomers to be creating nothing more than an unifunctional method of 'chatting' but in effect can create a constructive, flexible and meaningful learning space for the contemporary student. Furthermore, such online learning environments are natural areas for the creation of collaborative development and in themselves are evidence of the new technologies' ability to harness the student centred focus promoted by Rogers, Dewey and others. The development of student-created learning is representative of the current opening up of knowledge and is a very real challenge to earlier instructivist approaches.

Therefore, at this second stage of our course, we created an online asynchronous discussion. . Students were expected to retrieve learning papers from the university webct system and engage in the online dialogue. This discussion was initiated by the lecturer who posed three questions on the week's topic. Such questions encouraged the students to connect the new learning to their existing knowledge and experience. This scaffolding activity therefore gave students the opportunity to explore the content of the lecture and the learning paper, to discuss the material with their peers and also to use their experiences and their own language to develop their understanding. The online method provided a parallel space to assist the students to construct their own individual and shared understanding of the specific topic. This transitional activity helped the students to both build upon the lecture input and to prepare for the weekly group. Online technology facilitated a version of the learning which takes place in-between formal sessions; in the corridors, in the café, in the pub. Undoubtedly, the staff presence, influenced the content and range of this discussion but nonetheless, the ongoing expression of thoughts, questions, ideas and confusions, the encouragement to draw upon their own experiences, the peer centred sharing all added to the constructivist stage of delivery and in effect assisted the acquisition of learning from the development

of understanding. An online learning community was developed to supplement real time class and group based activity. Online activity was encouraged but not mandatory, although it was our observation that students who did engage found themselves better prepared for the group session.

A criticism of this method may be that not all students will participate in such discussion. Our belief was that useful participation might include the observation undertaken by the 'silent' student. Our experience endorsed this belief, and confirmed that reading and watching how the discussion unfolded was relevant activity which could promote learning whether or not the student actively contributed to the creation of the debate. In turn, the third stage of the learning structure could pick up and process this through the group session (McKendree & Mayes, 1998).

It is acknowledged that not all students relate easily to the online domain (Seagrave & Holt, 2003). Some may resist such proactive involvement; a feature similarly demonstrated in experiential learning where the expectation to look to self can be defensively resisted (Rogers & Freiberg, 1993). Any technological access problems were less frequently encountered the second time we ran this activity but sometimes such problems contributed to students' expressed frustration with the approach. We found that an important feature of the academic role was to act in a generative manner, to appreciate the emotional disorientation which some students may experience, to contain such resistance and to continue to encourage engagement. (Seagrave & Holt, 2003).

The pedagogy of online learning advises on the position of the vicarious learner and opens up the possibility of future work where we might pass on to subsequent student cohorts some of the content of the discussion, to create cross-cohort transfer of knowledge acquisition (Mayes & Fowler, 1999).

Overall, the group facilitators were confident that the online activity which was included in the third year of the course life, increased the likelihood of the student undertaking the reading of the learning paper with enhanced awareness which heightened the overall engagement with the week's subject. Our experience confirms our belief that the online space assists all students including the more reticent student, takes account of learning preferences, and acts as a useful learning bridge between the large lecture and individual participation in the group.

Group learning: Dialogue stage

Traditional groupwork skills and methods were employed in order to create a safe learning environment (Doel & Sawdon, 2001). In accordance with well tested practice, account was taken of the importance of planning and preparing the group activity, monitoring the group operation within and between sessions and ensuring realistic consistency of facilitator approach. Attention was given to promoting the privacy of each group, recognising the diversity of learning and experience within the group and ensuring trust among group members. The remit was focussed on the purposeful integration of learning and activity, with facilitators maintaining a keen balance between ensuring the content of each class, while also attending to the process of the group. The weekly agenda for individual groups was a combination of the review of each week's learning and support of the learning process, along with discussion and practice application of the week's topic. The group was the final point in the week and provided the third stage in the defined learning structure.

The groups took place each Friday morning across two semesters and were therefore ideally located to 'catch' the week's learning. In order to encourage a conscious focus on the student's individual learning, we drew upon the concept of the 'one-minute paper' as outlined by Stead (2005). We adapted Stead's questions by asking the students to focus on the week's learning overall, as opposed to focusing upon a single lecture as outlined in the original idea. Each student was therefore asked the following two questions at the beginning of each group:

- What was the most important thing you learned in class this week?
- What question remained unanswered?

Students were asked to write their answers on post-its and to then present their responses to the rest of the group. The ensuing discussion facilitated an assimilation of students' developing understanding of learning styles, learning cycles and study skills as well as providing the opportunity to develop their presentational and verbal communication skills. It became necessary to assist students to maintain the required focus on their learning as opposed to the tendency for them to give a critique of a specific lecture. We therefore made a further amendment to the second of these questions, by asking the students to consider how their understanding of their learning styles might assist them to

tackle the outstanding issue. This encouraged a more reflective focus on working upon their individual learning strategy, (Bolton 2005). A working model was therefore created to facilitate the students' assimilation and integration of various aspects of their classes, to develop links between the subject focus and the reality of practice and to develop responsibility for managing their own learning.

Stead's paper indicates that this method works well in the short term but students tend to tire of it. This matched our own experience and in fact we found that by semester two, most students had successfully adopted the approach and were able to move on to a more sophisticated style of reflective learning.

The second feature of the group's remit was the focus on the week's topic. Here the students were offered a third style of learning delivery to build on the lecture and the online activity. The expectation to have read the week's learning paper was generally realised and the pattern of undertaking some form of simulation, often a role play encouraged the student's individual responsibility for their own preparation. This application of theory within the supportive group environment developed the dialogue which had begun online; 'The conceptualisations are tested and further developed during conversation with both tutors and fellow learners and in the reflection on these.' (Mayes & Fowler, 1999, p.7). The dialogue developed further through the iteration of learning as evidenced by the students' growing authority and confidence in providing feedback to each other and their increasing willingness to engage in self reflection.

Evaluation

We designed a semi-structured questionnaire and distributed it to all the students who were involved in the fourth year of this module's life. The evaluation was undertaken at the end of the academic element of the module, that is at the end of the university based learning and just prior to the commencement of the period of assessed practice learning. All students were asked to complete the questionnaire as part of the usual module review but were asked to indicate if they did not consent to the inclusion of their comments for the purpose of the evaluation. All 68 students gave their consent. The questionnaire asked for students' views

on each of the three stages, mirroring the structure of the academic learning outlined in this paper.

Facilitators' feedback on the students' learning as evidenced in the weekly group was sought within the final debriefing. This was recorded and written up by one of the authors.

The lectures attracted mainly positive feedback from students with comments being made about the high standard of delivery and the relevance of the topics: '... lectures were excellent, well structured and engaging'. Interestingly however, the lecture 'stage' attracted much less elaboration than the other parts of the questionnaire with feedback tending to be less detailed. This differed from the comments made about the online activity and group learning which were more fulsome, illustrated and reflective indicating the extent to which students had personalised this learning. This is perhaps in keeping with the stages of the module sequence and might reflect the more remote, less active elements experienced through the instructivist method, as compared to the more active participative learning of the other two stages

In response to the questions regarding the online elearning, students commented on the reassuring routine of the reading and discussion stage which fell between lecture and group. The organisation of this aspect of the module and the accessibility of the technology were commented upon positively as was the content of the learning papers. The digital natives seemed to find this communication tool familiar and similar to other areas of their social networking, so that it did not feel like formal learning. If this is the case, then we have achieved our goal of facilitating the social learning, collaboration and connectedness outlined in the online pedagogy.

Group learning was by far the most popular area of learning for the students. They found the groups which had taken place weekly between October and March to be supportive, safe locations where their learning was developed and consolidated. They found the facilitator input to be of a high standard and their modelling of group facilitation and professional identity exemplary. Perhaps atypically, the majority of students rated the role play activity very highly and wished for an increase in this method of learning which they recognised as expanding their ability to apply theory to practice.

Groupwork is a respected method of social work education and all six facilitators were naturally highly committed both to the module and to the group style of delivery. Four out of six of the facilitators had been

involved with this module since its inception and the remaining two, since its second year. The module and the content were therefore familiar to the facilitators who had confidence in the sequence as well as in their own skills. All facilitators had positive experiences of groupwork in their own social work training. By comparison, the online activity at this stage in the module evolution was only in its second year and for all staff concerned, was an initial foray into the online world. It is therefore perhaps unsurprising that the element of the module favoured most by the students is that which was most familiar to the facilitators.

Overall, the module was highly evaluated by the students with positive comments being made in relation to the organisation, the standard of material and the attainment of module learning outcomes. We appreciate that there are limitations to this evaluation which was undertaken by the paper's authors who in turn were group facilitators and module organisers. Reliability and generalisation are therefore restricted but we believe that we have demonstrated an accurate presentation of our project's activity and our findings. Our questionnaire aimed to include the usual end of module review as well as aspiring to a more in depth evaluation of our teaching methods.. On reflection, such lines of enquiry require distinction and we believe that our project is worthy of a more robust research application in order to access more central aspects of the learning journey. We believe there to be a strong case for warranting further research of this evolving module and its blended learning methods.

Conclusion

This paper has described the context and underpinning principles of the Learning for Practice 1 module set within the new social work degree at the University of Edinburgh. We have argued that our module delivery benefited from the blend of traditional and newer teaching methods. We remain committed to the inclusion of purposeful, online activity and our own learning, familiarisation and skill in this area will continue to increase and to flourish in order that our delivery across the three teaching areas is cohesive and robust. Undoubtedly, the evaluation of our project needs to be formalised and strengthened in order to create reliable and transferable knowledge. However, our

argument, we feel is worthy; that there is educational validity in maintaining tried and tested teaching methods blended with the best of online advances. This integration meets the needs of contemporary students and facilitates the attainment of sound educational objectives for supporting student learning, developing their reflective abilities and enhancing their application of theory. The potential for maximising network technologies to enhance professional education and practice via, for example the use of wiki collaboration, eportfolios and simulation tools such as Second Life are manifold. As educationalists, we have much to learn; we are still in the transitional stage of being immigrants in the world of digital natives.

References

- Ballantyne, N. (2008) Multimedia learning and social work education. *Social Work Education*, 27, 6, 613-622
- Becker, S. and Henricksen, T. (2006) *In Search of the Next Generation Online Learning Environment*. <http://www.ectolearning.com/ecto2/static/Ecto%20-%20Next%20Generation%20Learning.pdf>. [retrieved 29.3.09]
- Bolton, G. (2005) (2nd ed) *Reflective Practice: Writing and professional development*. London: Sage
- Cherney, I. (2008) The effects of active learning on students' memories for course content. *Active Learning in Higher Education*, 9, 2, 152-171
- Clapton, G., Cree, V., Allan, M., Edwards, R., Forbes, R., Irwin, M., Paterson, W., and Perry, R. (2006) Grasping the nettle: Integrating learning and practice revisited and re-imagined. *Social Work Education*, 25, 6, 645-656
- Doel, M. and Sawdon, C. (2001) What makes for successful groupwork? A survey of agencies in the UK. *British Journal of Social Work*, 31, 435-451 (cited in Preston-Shoot, M (2007) *Effective Groupwork*. Basingstoke: Palgrave Macmillan)
- Dewey, J. (1938) *Experience and Education*, New York: Collier Books.
- Freire, P (1972) *Pedagogy of the Oppressed*. Harmondsworth: Penguin
- Honey, P. and Mumford, A. (2000) *The Learning Styles Questionnaire*. Maidenhead: Peter Honey
- Kolb, D.A. (1984) *Experiencing Learning: Experience as the source of learning and development*. Englewood Cliffs. NJ: Prentice Hall.
- Laurillard, D. (2008) *Digital Technologies and their Role in Achieving Our*

- Ambitions for Education*. London: Institute of Education
- Mayes, J.T. and Fowler, C.J.H. (1999) Learning technology and usability: A framework for understanding courseware. *Interacting with Computers* 11, 485-497
- McKendree, J. and Mayes, T. (1998) The Vicarious Learner: Supporting discussion and reusable dialogues for on-line learners. in B. Pauling (Ed.) *The Changing Technologies of Learning: Reshaping the boundaries of the university*. http://www.heacademy.ac.uk/assets/york/documents/resources/heca/heca_vu07.pdf [retrieved 6.7.09]
- Payne, M. (2005) *Modern Social Work Theory*. (3rd ed.) Basingstoke: Palgrave Macmillan
- Pearlman, B (2006) New Skills for a New Century: Project Based learning teaches kids the collaborative and critical thinking abilities they'll need to compete. *Edutopia Magazine*. cited in S. Becker and T. Henricksen *In Search of the Next Generation Online Learning Environment*. <http://www.ectonline.com/ecto2/static/Ecto%20-%20Next%20Generation%20Learning.pdf> [retrieved 29.3.09]
- Prensky, M. (2006) 'Don't bother me Mom, I'm Learning!' *How computer and video games are preparing your kids for twenty-first century success and how you can help!* St. Paul, MN: Paragon House.
- Preston-Shoot, M (2007) *Effective Groupwork*. Basingstoke: Palgrave Macmillan
- Reigeluth, C.M. (Ed.). (1999). *Instructional-design Theories and Models: A new paradigm of instructional theory (Vol. 2)*. Mahwah, NJ: Lawrence Erlbaum.
- Rogers, C. (1980) *A Way of Being*. Boston, MA: Houghton Mifflin
- Rogers, C. and Freiberg, H.J. (1993) *Freedom to Learn*. New York: Merrill
- Salmon G (2003) *E-tivities*. London: Kogan Page.
- Schon, D.A, (1987). *Educating the Reflective Practitioner*. San Francisco: Jossey-Bass
- Segrave, S and Holt, D. (2003) Contemporary learning environment: designing e-learning for education in the professions. *Distance Education*, 24, 1, 8-24
- Standards in Social Work Education (SiSWE). <http://www.scotland.gov.uk/Publications/2003/01/16202/17015> retrieved 20.3.09
- Stead, D. (2005) A review of the one-minute paper. *Active Learning in Higher Education*, 6, 2, 118-131
- Tapscott, D. (1998) *Growing up Digital: The Rise of the Net Generation*. New York: McGraw-Hill