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Contents

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Papers

Learning to care on the Internet: evaluating an online introductory social work course

by Steven Hick

Introduction

The Internet has advanced more rapidly over the past few years than even the technology experts expected. It is changing the way people communicate with one another and learn in virtually every aspect of life. Education, and in particular social work education, is not an exception (Morgan, 1996). Rafferty (1998), for example, has no doubt that if higher education continues to integrate learning technology only into traditional teaching methods, and does not move forward to realize the enhanced pedagogical possibilities of new technology, then they are in danger of losing students. Surprisingly very little has been written about social work education and the Internet[1].

This paper reports on an evaluation of an online course that was part of a larger study[2] to develop an innovative Internet-mediated learning model for introductory social work education. Internet-mediated learning model refers to an approach to learning that emphasises online or Internet based activities as the primary medium for learning.

Learning models

Instructional or learning models prescribe how combinations of instructional strategy components should be integrated to produce a course of instruction. The learning model selected for this course is a combination of learning models[3] and a Collaborative Learning Model (Smith & McGregor 1992).

The components of the learning model include:

- use of practice;
- methods for communication between learners and between instructor and learners;
- methods to collaborate on assignments and learning in general;
- use of multiple examples;
- variations in feedback;
- sequencing strategies, and;
- use of advanced organizers

Web course: http://ial.carleton.ca/52100

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[1] No books have been written and the social work or human service journals covering technology related issues have only a few articles on education, most of which discuss general issues or are think pieces.

[2] The study was made possible with funding support from the Office of Learning Technologies (OLT), Human Resources Development Canada.

[3] Information concerning instructional design and learning models can be found at http://www.cudenver.edu/~mryder/itc_data/idmodels.html

Models for instructional design provide procedural frameworks for the systematic production of instruction. The models incorporate fundamental elements of the instructional design process including analysis of the intended audience or determining goals and objectives. Models may be used in different contexts. One model can be used for an entire course of instruction or elements from multiple models can be combined.

In the learning models used each tutorial must have its own learning goals or purposes, and the educational strategy of the tutorial differs depending on the goal or desired skill level. There are three teaching strategies in the context of developing a multimedia tutorial:

- didactic learning
- experiential learning
- reflective learning

Didactic learning mode: facts are presented in a manner that is similar to that used in a well-illustrated text (even though in the case of the multimedia tutorial, the text is electronic). The tutorial incorporates additional detail which might be similar to footnotes or appendices. It also includes visuals such as graphics, still and/or full motion video and may include sound.

Experiential learning mode: characterised by presenting the content in such a manner as to foster decision-making. The learner is expected to be able to apply the knowledge gained to scenarios or case studies and make appropriate decisions.

Reflective learning mode: takes the student to a higher level of application of knowledge than does experiential learning. In this mode the learner is presented with extended cases to help gain knowledge through insights and actively applies concepts and information to the situation under consideration. The navigation patterns must support the teaching strategy being used.

The research study, of which the evaluation is a part, began with a comprehensive review of literature on instructional technology, social work and learning styles, social work education, and multimedia distributed learning. The first phase of the study involved consultations with potential learners to determine the most appropriate learning model. The second phase involved identifying and analysing specific case studies, identified in the consultation phase, of distance learning models in remote communities. The third phase involved synthesising and analysing the information gained into learning needs. Finally, a learning model was constructed by matching content, learning activities and instructional formats with appropriate learning technologies. Based on this an online course was developed which is located at http://ia1.carleton.ca/52100.

This paper examines the data from a formative evaluation of the online course. The evaluation intended to determine how learning technologies impact the learning of social workers, as well as their satisfaction and preferences for online learning. A major aim was to determine the extent to which social work learners reject or support online educational technologies within both distant and campus learning environments.

Description of online course

The online course was developed for distance education and as it stands, contains all the elements for a totally Internet delivered course. The content for the course was drawn from experience teaching a first year Carleton University social work and social welfare course. It was developed using dynamic HTML, *JavaScript* and *Active Server Pages*. No template based development tool was used due to the imposed instructional design dictated by such software. Our survey of the 'easy-to-use' development tools such as *Toolbook*™, *ICON Author*™ and *WebCT*™ found that each contains an underlying instructional model or models which must be followed in order to use the templates. Our review of general web development tools such as *Frontpage*™ and *PageMill*™ found that while they are flexible concerning instructional design they do limit the navigational and display options available. It is important to note that since this project began these development tools have advanced and may provide a viable option. The main disadvantage of our option is that it requires extensive programming expertise and development time, and therefore may be too expensive for many academic applications. The flexibility to design the course to best meet learning needs is the primary advantage of our approach.

The course encompassed the features and elements identified in the model development consultations. The elements include:

- easy to navigate;
- self-test of key concepts;
- use of different media (video, audio, text, images);
- different levels (depth) of material coverage;
- a glossary of key terms;
- an advanced search capability;
- advanced communication and collaboration tools,
- simulations and interactive exercises.

The course, when completed, contained the elements identified above integrated with the combined learning model. It took a team of three people approximately 2000 hours to develop. It contains 300 images, 38 video and audio clips, and 72,000 words of text.

Formative evaluation

The evaluation study used what is frequently referred to in the literature as formative evaluation (Sciven, 1997). This type of evaluation is generally undertaken to help educators improve their course as it is being developed. It involves testing a course on learners and obtaining feedback, recommendations and preferences for improvement. A key aspect of this study was also to gain information on learner perceptions concerning the 'idea' of online learning itself, and their learning delivery preferences (Internet, TV or class) for both distance and non-distance education.

The original intent of the evaluation was to measure the comparative outcomes of Internet-mediated learning with traditional methods. A review of the literature found three findings that led to the adoption of a formative evaluation study. First, numerous meta-analysis studies (Kulik, Kulik & Cohen, 1980)[4] and other reviews of outcome studies have found that there is no significant difference (Russell, 1998)[5] in outcomes

[4] Kulik, J.K., Kulik, C.C., & Cohen, P.A. (1980) meta-analysis study of 59 evaluations of computer-based college teaching found that computer-based instruction made small but significant contributions to course achievement.

[5] Russell, T. (1998) have used *meta-analysis* in an attempt to bring together findings describing the effects of computers on learning from previously published research in hundreds of journal articles. This technique enables a statistical summary of quantitative data from research reports; the most useful o which is said to be the *effect size* or measure of impact of a particular treatment expressed as a percentage of a standard deviation. Thomas Russell reports on 355 comparative evaluation research reports and papers that find that there is no significant difference in test scores or learning outcomes between classroom learners and the technology mediated learning group. Available online at http://www2.ncsu.edu/oit/nsdsplit.htm

between classroom and Internet learning. Secondly, a complete lack of studies that examine online learning with human service workers or social workers was found, thereby providing limited knowledge to inform this study. Finally, I was confronted with several instances of extreme resistance from a few social work faculty members who claimed, among other things, that social work learners did not want this type of learning, nor would they respond favorably to it. These findings led to the conclusion that what is needed at this time is a more fundamental analysis of social work learner perceptions and satisfaction with an Internet-mediated course.

The informed consent and evaluation questionnaires were administered using online forms that learners complete and submit online. The evaluation questions contained open-ended questions requiring qualitative analysis and Likert scale questions requiring quantitative analysis. Demographic information concerning age, gender and Aboriginal ancestry was also collected. This method of data collection allowed us to reach a larger and more varied target audience of distance learners without the increased cost of travel. Recruitment was accomplished in two primary ways. First, we asked learners registered in Carleton University's introductory social work course to participate. This course is offered via the classroom, cable television and videotape mailing. Secondly, requests for participation were posted in relevant Newsgroups and ListServes. The potential universe or population comprises any introductory social work learner in Canada (and perhaps the world). The sampling technique for this study was a sample of convenience, whereby we invited people from the target population and accepted all those that chose to participate.

The sample size for the study was 51 learners. Thirty-two of these were from the Carleton University first year course entitled 'Introduction to Social Work and Social Welfare'. These students view the course either in a classroom or via television with limited classroom interaction. Of the approximately 250 learners in this course 32 participated in the study or 12.8%. This provides a very reliable and valid sample of the Carleton course. The remaining 19 participants were dispersed from various communities in Canada (with the exception of 2 participants who were from Europe). It is difficult to absolutely determine whether or not the sample is valid for the entire population of potential introductory social work learners in Canada. If one estimates that there are approximately 1100 potential learners of this type (based on 22 schools with 50 learners each) then our sample is about 5% of the population. This estimate may provide for a satisfactory sample for the type of exploratory analysis undertaken in this study. It is also important to note that this study intends to be exploratory in nature and will not attempt confirmatory statistics or hypotheses testing.

In as much as the course was an introduction to the basic concepts of social work and social welfare it is quite different from many other social work courses which focus on practice. The nature of this course may make it more appropriate or easier to deliver via the Internet than many other social work courses which focus on more abstract content requiring more discussion or interaction. Therefore, caution should be taken when attempting to generalize the results to all types of social work courses. On the other hand, experience working with Aboriginal social work teachers in remote communities indicates they believe that significant amounts of social work content can be delivered via the Internet, combined where appropriate with classroom discussion[6].

The online questionnaire contained eight open-ended questions, six demographic questions, three closed-ended questions and thirty-one Likert scale questions (see Appendix A). The quantitative data was analyzed using *SPSS 7.5* (Statistical Package for the Social Sciences) software. The qualitative data was analyzed manually by coding and categorizing key phrases.

Evaluation results

Demographic data

Learners had the following demographic characteristics:

Characteristics	%
Aboriginal Ancestry	8
Age 19-25	56
Age 26-35	24
Age 36-45	8
Age 46-55	12
Women	80

These characteristics would tend to mirror the general characteristics of an introductory social course. As well, only two learners had previously taken an Internet delivered course, while 52% had previously taken an ITV (instructional television) course. Of those who responded, 64% categorized themselves as either having beginner (4%), novice (12%) or average (48%) computer skills. There is a danger in this type of study of only advanced computer users self-selecting to complete a questionnaire on computers and learning. The above would indicate that this is not the case for this study with participants having a variety of computer skill levels.

Qualitative data analysis

The open-ended questions asked learners to state in their own words, their perceptions and preferences for the online course (see Appendix A).

Responses to questions 1 and 2 portrayed overwhelmingly positive initial reactions to the course which remained toward the end. Six learners were negative or concerned about starting the course, but in the end turned positive. For example, two learners were concerned that 'it would be complicated and they wouldn't learn anything', but after experiencing the course found that it 'was very clear and well laid out … making it easier to learn and understand'. Some others were overwhelmed by the amount of information, but once they got into it they found that it was 'not bad at all'. One learner was frustrated by not having the proper programs on their computer for audio and video, but was very pleased once they received help from their spouse. Another learner found that they 'kept getting sidetracked' by the hyperlinks, but was not sure if this was a negative or positive aspect. Only two learners had negative comments: one was 'totally bored' using the online course, frustrated by not having the correct software to run the audio and video, and one found the statistics from Statistics Canada 'just boring'. Another stated that the course 'lacked interactive things online'.

[6] Steve Hick's informal discussion with Aboriginal social work educators indicates that they would prefer Internet delivery combined with classroom discussion where necessary over student travel to campus courses or teacher travel to communities for intense blocks of classroom work. They generally prefer to have learners stay and study in the community, and find bringing educators into the community for condensed segments of instruction to be a problem.

The positive comments included the following:

- more interesting than the class itself
- really liked the links to sites that were relevant
- informative and useful
- could work at my own pace or able to go through course at own leisure
- very detailed very interactive (much more than ITV (Instructional Television)
- many learners said it was easy to use or user friendly or well organized
- someone who doesn't know computers very well (for instance, my mother) thought that it was quite self-explanatory
- audio, video and exercises helped illustrate and clear up any questions or confusion
- good idea and would work as well for me as class or ITV
- impressed that you could do so much with the format
- I liked the links and additional readings

The questions concerning a particular component of the course that help the learner learn (question 3) revealed several critical components. The three most commonly mentioned components that learners found helped them learn was the glossary, the hyperlinks to additional material, and the varying levels and depth with which the material was covered. Other learners mentioned the benefits of the video clips, or particular exercises that they liked. One learner thought that the lack of a classroom component was a problem, stating that 'I don't think I'd ever be happy without classroom discussion and stimulation to challenge schemas I've developed and to keep studies about people - human'.

The three components that were emphasized in helping learners learn (glossary, links, and variety of levels) illustrate how the capabilities of the Internet can benefit learning social work. Hyperlinks within the course and out to additional material are key features of the Internet itself. The notion of having a variety of levels for the learner to approach the material is a function of the learning model chosen.

The learning models emphasize three different learning modes: didactic learning which mirrors what a text (multimedia in this case) would accomplish, experiential learning which was contained in the exercises such as the poverty game, and reflective learning which allows the learner to extend their knowledge to other cases or apply concepts. Since the consultations with learners found this to be an ideal model for introductory social work, it should be of no surprise that in the evaluations the benefits of this were emphasized.

Learners did not emphasize the importance of the multimedia aspects of the online course. In fact, in answer to the question 'multimedia (audio & video) was essential in the course' 16% disagreed, 28 % strongly agreed and 56% agreed. Given that multimedia[7] has been found to increase learning due to dual coding[8] or multi-sensory input it may be surprising that this element was not more strongly emphasized. For example, Bagui (1998) found multimedia allows a learner to absorb information using two channels, reducing the cognitive load on a person's memory, and thereby improving learning. Perhaps students failed to emphasize the importance of the multimedia elements of the course because multimedia was not used effectively. As one student stated, 'the video should be interesting and talk more directly about what is being displayed on the screen'. Additionally, perhaps the quality of the video affected its importance (due to limitations inherent in today's Internet).

Another surprising finding from this question is that no one mentioned the benefits of the communication and collaboration aspects of the course. This is unexpected since the initial consultations determined that this was an important aspect which should be included in the online course. There could be several reasons for the lack of mention of this element. First, learners did not have to communicate with each other to make use of the online course, or perhaps more importantly to pass the course. Secondly, learners were asked to try communicating with others, but it was not a requirement of the course, nor were any grades given for participation in online discussions. Finally, assignments did not require learners to collaborate in teams. A recent study (Hmelo, Guzdial & Turns, 1998) of computer-support for collaborative learning found that collaboration needs to be anchored. Students need to know what to talk about (online talk), when to talk, and that it is important to talk. They found that learners need to 'buy-in' to the need to collaborate, they need to see collaboration as integral to a project, and see the benefits of being able to communicate online across space and time. Based on the pre-development consultations it would seem that this is indeed an important element of an online social work course, but we can also surmise that without the necessity to communicate and collaborate built into course delivery, learners do not benefit from the feature.

Question 4 asked learners whether or not they feel the computer is appropriate to use in learning about social work and social welfare. Analysis of the responses shows that two thirds of the respondents feel that a course based entirely on Internet-mediated delivery is appropriate for a social work course. They believed that chat rooms, discussion groups, interactive activities, the video and audio, and the self-paced nature of the course were advantages that made the online course appropriate for social work. The other one third feel that personally they would prefer a face-to-face or classroom element, particularly since it is a social work course which is, as a profession, based on interpersonal communication. Even those with a negative response believed that the Internet was 'good as an aid' or 'a useful tool to assist learning as it reinforces the information given in class'. Many of the criticisms stemmed from concerns over getting help from the instructor when they had questions or required explanations. Not surprisingly learners had very similar responses to question 5 which asked them if they thought they could learn an entire course using the Internet tools. Again two thirds said they could learn an entire course using the Internet while one third said no they could not. Of those who could not learn this way, all except one, stated that attending a class is necessary. One other said they would also want a textbook to fall back on.

The answers to the next question contained a variety of suggestions to make the program better. Only 15% of the learners did not have a suggestion to improve the course. There were a range of suggestions, but they can be categorized as follows: 'more exercises and activities', 'option to print the text and audio material', and increased methods for learners to communicate with the instructor using chat rooms, ICQ (an

[7] Multimedia is the use of text, graphics, animation, pictures, video and sound to present information.

[8] Dual coding refers to the notion that people take in information through all the different senses and by using voice and visuals a person is able to more easily process the information for long term memory.

Frequency distribution for Likert Scale questions

Question	Strongly Agree %	Agree %	Disagree %
I would recommend that others take a course that is delivered via the Internet	44	44	12
The resources on the Internet enhanced my learning	40	52	8
It was easy to move through the course	60	40	0
Multimedia (audio & video) was essential in the course	28	56	16
Online activities stimulated my learning	48	44	8
The activities in this course gave me sufficient practice and feedback	20	68	12
Online self-testing is an important aspect of the course	64	36	0
The online course was easy to use	60	32	4 (4% did not answer)

online real-time chat tool), or email. For example, one learner said, 'I myself would incorporate more exercises and activities. I've always found a course is more interesting when you can do 'hands on' types of things... especially if you are finding the material hard to understand. It also gives you a clearer picture on what you've already learned'.

Another learner emphasized the importance of instructor feedback saying, ' I guess putting questions to learners through the movie clips. It would feel more alive for me if an oral question was asked, my answers sent off via e-mail, and then responded to. Maybe then I wouldn't feel so cut off. Instructor feedback is a main reason for my paying for a course'. Finally, one learner had a suggestion illustrating a solution to the problem of learner isolation from the instructor, "In distance education, I find learners tend to feel isolated, and that in class learners have special access to instructors and to other learners. I think that if the instructor of an Internet course continues to be as quick to reply on ICQ, and is as quick with email as he is with ICQ...then that will alleviate this trouble. I would actually make ICQ a recommended addition to the course, as it is a wonderful way to make sure you get answers rather quickly'.

Quantitative data

Likert scale questions

Learners were asked to select among 'strongly agree', 'agree', 'disagree' or 'strongly disagree' according to a number of variables concerning the features and preferences for online learning (see Appendix A). The overall response to the online course was very positive with a large majority responding with strongly agree or agree to all questions. A small percentage answered disagree to 6 of the 8 questions, and noone answered strongly disagree to any question.

Two questions, it was easy to move through the course' and 'online self-testing is an important aspect of the course' found 100% of respondents answering with strongly agree or agree. Although still very positive the weakest ratings were awarded to 'multimedia (audio & video) was essential in the course' and 'the activities in this course gave me sufficient practice and feedback'. Follow-up questions via email with several learners revealed that some thought these aspects of the course should be improved, and not that they should be deleted. One learner believed that the video should be more interesting with the instructor asking questions that could be answered via email. Several people thought that online activities are critical for the course, both to make it interesting and to help reinforce their learning. They wanted more interactive learning simulations like the poverty game (a student is given an actual welfare cheque amount and is challenged to survive for a month by selecting among various purchases). The course intended to contain one simulation per module or week of learning. This finding may indicate that additional simulations are required for an online social work course. Such activities are difficult to conceive and time consuming to develop, but the data shows that the additional effort is desirable and necessary. Perhaps because social work learning demands more experiential and reflective types of learning these types of activities are more necessary.

The question 'I would recommend that others take a course that is delivered via the Internet' is another important measure of social work learners' preferences for online learning. This question had 88% agreeing and 12% disagreeing. This disagreement finding is lower than the result for the question concerning the appropriateness of the computer for learning about social work (66% agreed and 33% disagreed).

This may be due to those learners (33%) believing that while Internet-mediated learning may not be appropriate for them that they would still recommend it for someone else. In the end, however, 12% just do not like it, and would not recommend it to someone else.

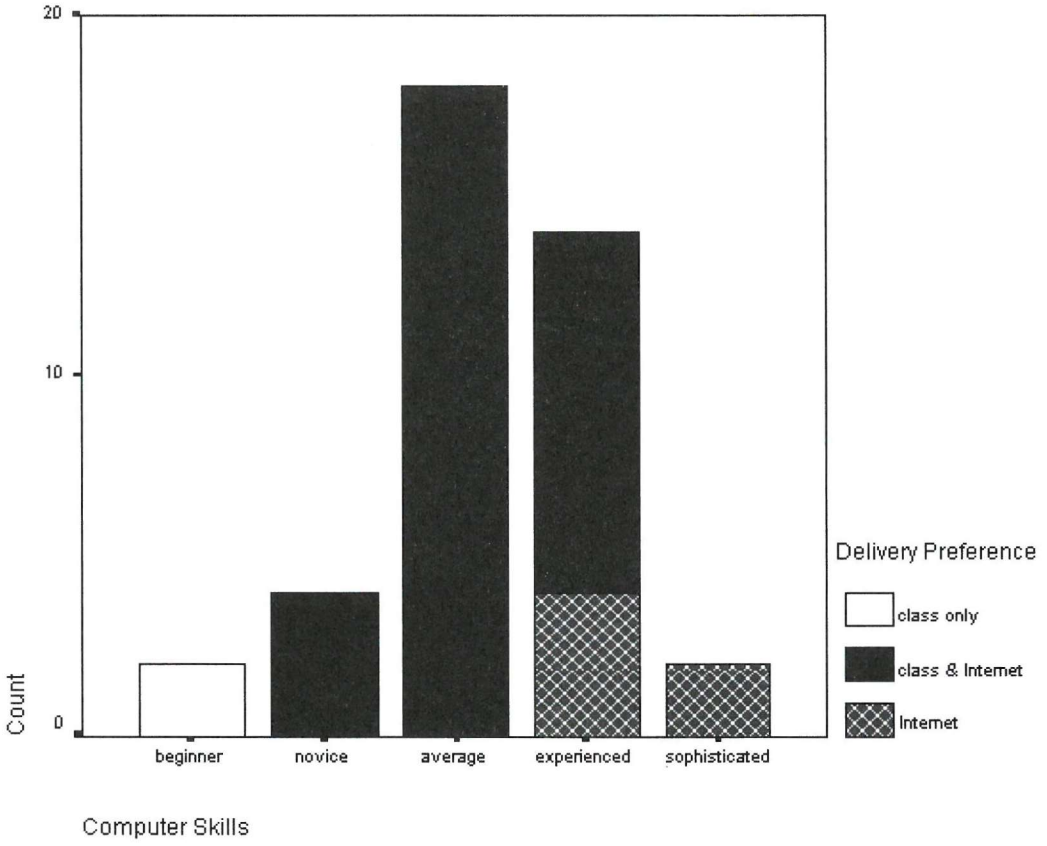
Learners preferences for internet course delivery

Chart 1 (overleaf) indicates an interesting finding for instructors developing courses that are not intended for distance education. Learners were asked what type of course delivery they would prefer for a *non-distance education* course: ITV, Internet only, classroom only, or classroom with Internet supplements.

Chart 1 clearly shows that learners prefer some kind of Internet component to a course even when it is not a distance education course. Sophisticated computer users all preferred Internet-mediated learning over classroom based learning, and all those with beginning computer skills preferred classroom only. This shows that the level of computer skills of a social work student significantly affects their preference for classroom or Internet based learning[10]. The Pearson Chi-square test shows that the relationship between computer skills and delivery preferences for non-distance education course is significant (chi-square = 70.112; CV = 32.9 at .1% level of significance). Overall 15% preferred Internet only delivery, 5% preferred classroom only delivery and a large majority (80%) preferred a mix.

those who preferred classroom only were over age 36. All those who preferred Internet only were age 26-35, and those between 19 and 34 preferred Internet and classroom combined. Several conclusions can be surmised from this data. First, learners who wanted a classroom only option tended to be older with low computer skills. Second, young learners (19-34) did not opt for the Internet only choice - instead it was the next age group (26-35) that chose the Internet only option. This may be due to the desire for starting students to have more direct contact with teachers while those in the age group 26-35 would tend to be more inclined to choose convenience, due to family and other obligations. Further, no Aboriginal participants preferred classroom only for non-distance education (25% preferred Internet only and 75% combination).

Chart 1: Delivery preference for non-distance social work learning



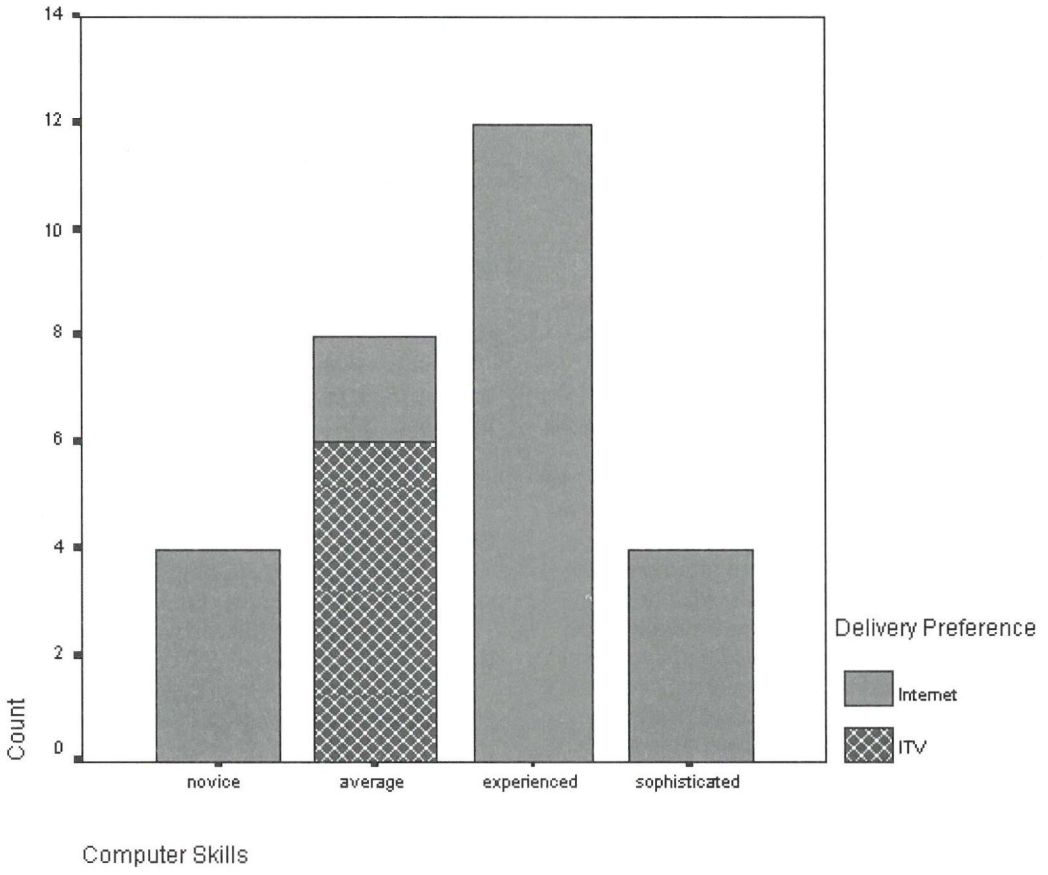
This has important implications for social work educators whether they teach at a distance or not. The data illustrates that many students clearly want an Internet component for their courses, and that very few prefer to learn by classroom instruction only. In fact, more students would preferto learn only via the Internet than would want to learn only via the classroom, and this is for courses that are local campus delivered courses. As the above chart shows, if your class is composed entirely of beginner computer users then classroom only instruction may be appropriate, but if you have a group composed of novice, average or experienced computer users an Internet component should be considered.

Age of learners also has an important bearing on delivery preference for non-distance social work education. All

Learners were also asked their preference for distance education social work learning. For this question we wanted to determine whether learners who have taken a course via ITV (television) preferred television or the Internet. Of the respondents 28 learners had taken a course via ITV. Of these 6 or 21 % preferred ITV to Internet delivery. Seventy-nine (79%) percent preferred Internet-based delivery over ITV. This is an important finding for educational institutions, such as Carleton University, that deliver numerous courses via ITV. A large majority (79%) of social work learners who have taken a

[10]The Pearson Chi-square test shows that the relationship between computer skills and delivery preferences for non-distance education course is significant. The chi-square value was 70.112 which is more than the CV at .1 % level of significance which =32.909.

Chart 2: Delivery preference of ITV learners for distance course



course via ITV would prefer taking their courses using the Internet. As well, all those who preferred ITV were average computer users, while novice and experienced computer users tended to prefer the Internet[11]. The Pearson Chi-square test shows that the relationship between computer skills and delivery preferences of ITV learners for distance education courses is significant (chi-square = 32.4 which is more than the CV at .1 % level of significance which =27.877).

Chart 2 shows that while there is a direct relationship between computer skills and preferences for Internet delivery over ITV for distance education, the data does not show that it is beginner users that prefer ITV to the Internet. Relating age of the learner with preferences indicates that those who prefer the Internet over ITV are all under age 35. Interestingly all Aboriginal respondents preferred the Internet to ITV.

A series of questions dealt with the features and display of the online course. These questions were intended to assist in improving the appearance and operation of the course and yielded little of research interest. Overall, learners found the features to be easy to use, the appearance pleasing and adequate and the arrangement to be logical. Four percent (4%) found the time it took for material to display to be somewhat frustrating. This was an encouraging finding showing that the intended learners do have sufficient bandwidth. We did, however, develop the video and audio with a 28.8 baud modem in mind. Everyone found the system either very easy (64% answered 9) or somewhat easy to learn and operate.

Overall, the statistical analysis confirmed the findings in the open-ended qualitative data. Social work learners responded overwhelmingly positively to online learning in general, and to the course in particular. The data confirmed what has been found in studies examining Internet-based learning in other fields whereby students appreciated the ability to learn at their own pace[12] and found the wealth of links to information on the Internet useful and informative[13]. All told, a clear majority of the participants (64%) would take a social work course such as this offered entirely over the Internet, and even more would recommend it to others (88%). The quantitative data also corroborates the open-ended responses by learners concerning the centrality of having Internet resources available for all courses.

[11] The Pearson Chi-square test shows that the relationship between computer skills and delivery preferences of ITV learners for distance education courses is significant. The chi-square value was 32.359 which is more than the CV at .1 % level of significance which =27.877.

[12] For example, a study by the University of Saskatchewan funded by the Office of Learning Technology found that self-pacing was an important feature of their Internet-based math readiness course. See University of Saskatchewan, Extension Division, Evaluation of the Internet-based Math Readiness Course (MRC) Trail, Office of Learning Technologies, Human Resources Development Canada. Available online at http://olt-bta.hrdc-drhc.gc.ca/publicat/MRCexece.html

[13] A recent evaluation of online learning for undergraduate pharmacy-related teaching found that the resources on the Internet provided added value and empowered learners to take greater responsibility for their own learning. See Sosabowski, M.H., Herson, K., & Lloyd, A.W. (1998) Enhancing learning and teaching quality: integration of networked learning technologies into undergraduate modules. Available online at http://www.cti.ac.uk/publ/actlea/al8.html#/contents

Conclusion

This paper has, at least, illustrated to those in social work who may resist online educational technologies in social work education that learners tend to want the Internet, and they do want to learn how to work with technology. Friedman, Ward and Biagianti (1998) argue that the practice of social work will be heavily affected by technology, and Gingerich and Green (1996) go as far as to say that by the year 2000 those who chose social work because it was not viewed as a technical field of practice will be faced with either learning about technology or choosing another profession. While this may be going too far, the literature does illustrate that using and learning new technology such as the Internet is important for social workers.

This study suggests that some social work students enjoy and want Internet-mediated learning whether for a distance education course or not. They also believe that it improves their learning. The finding that the learners surveyed prefer delivery with an Internet component (80%) or only through the Internet (15%) for a non-distance education course should signal to social work educators the strong aspiration by some students for Internet-mediated education delivery. For distance education courses the finding is even more resolute with 79% preferring Internet only delivery to video or television delivery. These findings were further confirmed by the responses to other questions where 88% stated that they would recommend an Internet delivered course to others or where 2/3 believed that 'a course based entirely on Internet-mediated delivery is appropriate for a social work course'. It is not surprising, however, that learning social work via the Internet is not for everyone. Twelve percent (12%) would not recommend it to someone else, and 8% found that it did not enhance their learning.

The study also confirms the design features of the tested course and may provide a model for others interested in introductory human service education via the Internet. Students found the features and navigation easy to use and appropriate. Learners also correctly emphasized the importance of careful consideration when developing online learning activities, and the significance of thoughtfully integrating online communication and collaboration into the course. In many ways, it may be the capability of the learning model used that impacts student reaction, as much as the delivery mode. In developing online learning, instructors are forced to be systematic in course construction, and this may have benefits that have little to do with the Internet.

The analysis demonstrates the value of Internet technologies in social work education and the desire of social work learners for the integration of the Internet into their learning environment. Opponents to online educational technologies, such as David Noble (1998) argue that it is university administrators and commercial partners who are pushing new technology into education against the wishes of students and faculty. He believes (although no data exists to confirm it) that "the few times students have been given a voice, they have rejected the initiatives (web technology in their courses) hands down". This study, and others such as Sosabowski (1998) show that students not only support such initiatives for distance education, but also prefer enhanced web usage for campus-based courses. This is not to deny that educators and learners must be watchful of both the commercialization of higher education and the commodification of instruction, as Noble discusses, but it is clear that the challenge is to engage new technology to enhance pedagogical possibilities that have results of human value and quality education, and not simply to reject online educational technology. Internet-mediated social work education is probably not appropriate for all types of content, especially in social work practice where human interaction and discussion is required. It may be suitable for some of the content for these courses, but not all. As well, some communities, such as remote areas, may derive expanded benefits from Internet delivery. To answer these important questions more research is needed on student reactions to other types of online social work courses, and the benefits that could be derived by remote communities.

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Appendix A

Evaluation for Online Social Work Course

By Steven Hick, Social Work, Carleton University

This tool is for a formative evaluation of an Internet-mediated course developed by Steven Hick for an introductory social work course. The following questionnaire will be completed online by volunteer participants after completing selected portions of the online course.

Questionnaire

Now that you have experienced the **Introduction to Social Work and Social Welfare** online course, please candidly complete this survey about the program. We are looking for both positive and negative comments about your experiences with, and opinions on, the function and usefulness of, the course. Remember, your comments are provided anonymously to ensure that you may write your honest opinions. What you say will influence future versions of this course.

Demographic Information

Age ☐ <18 ☐ 19-25 ☐ 26-35 ☐ 36-45 ☐ 46-55 ☐ 56-65 ☐ >65
Sex ☐ Male ☐ Female
Aboriginal Ancestry ☐ YES ☐ NO
How would you rank your computer skills? ☐ Beginner ☐ Novice ☐ Average ☐ Experienced ☐ Sophisticated
Have you ever taken an ITV course? ☐ YES ☐ NO
Have you ever taken an online course before? ☐ YES ☐ NO
Email Address _____

Part 1: Learner Satisfaction and Perception of Online Course

1. Tell me something about your feelings when first using the online course; what were your initial reactions?
2. How did your impressions of the materials change toward the end?
3. Did a particular component of the online course help you learn? If so, please describe that component.
4. Do you feel the computer is appropriate to use in learning about social work and social welfare? Why or why not?
5. Do you think you could learn an entire course with the tools you just used?
6. Would you take this course offered in this way? ☐ YES ☐ NO
7. If you could change one thing to make the program better, what would you change?
8. ONLY ANSWER THIS QUESTION IF YOU HAVE TAKEN AN ITV COURSE. What method of delivery would prefer for a distance education course ☐ ITV ☐ Internet
9. What method of delivery would prefer for a non-distance education course ☐ ITV ☐ Internet ☐ Classroom ONLY ☐ ☐ Classroom with Internet supplements
10. Do you have any advice for the instructor for implementing an online course?

Please check the boxes below that most appropriately reflect your feelings about using the online course.

Question	Strongly Agree	Agree	Disagree	Strongly Disagree
It was easy to move through the course				
Online activities stimulated my learning				
Multimedia (audio & video) was essential in the course				
The activities in this course gave me sufficient practice and feedback				
Email was an important part of the course communication?				
The online course was easy to use				
Online self-testing is an important aspect of the course				
I would recommend that others take a course that is delivered via the Internet				
The resources on the Internet enhanced my learning				

Please check the boxes that most appropriately reflect your impressions about using the online course. If you feel an item is Not Applicable, check NA.

Overall Reactions		1	2	3	4	5	6	7	8	9	NA	
Please describe your overall reaction to the online course	Terrible											Wonderful
The time it took for course material to display	Frustrating											Satisfying
The mix of text, images, audio and video	Dull											Stimulating
The way information was presented	Rigid											Flexible
Screen		1	2	3	4	5	6	7	8	9	NA	
Characters on the computer screen	Hard to Read											Easy to Read
Images and photographs	Fuzzy											Sharp
Character of shapes (fonts)	Not Legible											Very Legible
Screen layouts make tasks easier	Never											Always
Amount of information that can be displayed on screen	Inadequate											Adequate
Arrangement of information on screen	Illogical											Logical
Colors used in screen design	Displeasing											Pleasing
Performing an operation leads to a predictable result	Never											Always
Computer responds fast enough	Never											Always
Learning		1	2	3	4	5	6	7	8	9	NA	
Learning to operate the system	Difficult											Easy
Getting started	Difficult											Easy
Learning advanced features	Difficult											Easy
Time to learn to use the system	Slow											Fast
Exploration of features by trial and error	Discouraged											Encouraged
Exploration of Features	Risky											Safe
Discovering new features	Difficult											Easy
Remembering names and use of commands	Difficult											Easy
Remembering specific rules about entering commands	Difficult											Easy

Communities and welfare practice: learning through sharing

by Liz Timms

Abstract

This paper presents a case for embedding welfare practice in the context of community and for preparing for the demands of collaborative practice. Reviewing the process of launching online collaborative learning, attention is drawn to the different requirements on the educator and the principle of ensuring that educational, rather than technical goals, drive planning and delivery. Concluding comments refer to the potential of online learning for fostering inclusion, but warn that accessing and sustaining learning is likely to be impeded by technological obstructions such as unreliability and user-unfriendliness and material obstruction such as poverty.

Introduction

The subject of this paper is *Community Portraits*, an online course designed for welfare professionals. The course topic is the community and the teaching method is collaborative. This course has been developed within SCHEMA, (**S**ocial **C**ohesion through **H**igher **E**ducation in **M**arginal **A**reas) an EU funded project which is investigating the use of the Internet and computer mediated communication for collaborative learning in continuing professional development.

The first part of the paper sets out the rationale for the three main aspects of Community Portraits:

1. The community as a context for welfare practice
2. Collaboration as a method for working and learning
3. The Internet as an enabler of collaboration/collaborative learning

The second part outlines the experience of a trial run of the course in the Spring semester 1999 and presents some of the questions raised by early experiences.

The community as a context for welfare practice

The literature of social work has always recognised the professional relevance of the social situations and social institutions that impinge on clients' problems. Families and communities are implicitly part of this backdrop to practice as are broader political issues such as poverty and exclusion. What has not been so readily accepted is that incorporating this recognition into professional practice can take as its starting point either clients and their problems or communities, their dynamics and their implications for community members.

The casework origins of professional social work and government policies for service development have each encouraged practice that starts with clients and their problems. The case for the alternative, community focussed, starting point has been less commonly stated, but has been presented, most forcibly in the 1980's, by Hadley & McGrath (1980; 1984). The work of Smale at the National Institute for Social Work in the 1980's supported community-focussed social workers throughout Britain and produced case studies of social work practice and service with a community based approach (Smale & Bennett, 1989; Darvill & Smale, 1990). Hadley and Leidy (1996) later lament the demise of community social work in Britain in a policy shift to a market economy of welfare, referring to the irony that

> *"there are some in America who are looking to Community Social Work as a way out of the dilemmas created by the very system the British are now emulating". (p. 826)*

In Britain, the Barclay Working Group (1982) presented a case for community oriented social work based on their definition of community in terms of "local

SHEMA web address:
http://www.stir.ac.uk/SCHEMA

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networks of ... relationships with their capacity to mobilise individual and collective responses to adversity" (p. xiii) and their perception that:

> *"Social workers, as the spearhead of the personal social services, may find ways of developing partnerships between informal carers (including self-help groups), statutory services and voluntary agencies." (p.202)*

In an article developing ideas from the Barclay Report, Timms (1983, pp 405-415) suggested that:

> *"Social workers at local level will need to obtain a grasp of community life - cultural patterns and the meanings these hold for members of the community. ..... Clearly what is needed is a service that works in partnership with the community as a whole, supporting existing support systems, promoting new support systems when appropriate and mobilising appropriate specialist help only when that is the most precisely suitable action. In working with the community the emphasis would be on supporting and extending the caring systems that already exist - neither taking them over nor supplanting them."*

This partnership is well illustrated by Green (1989, p. 120) in a case study of his team's development of a community social work approach:

> *"Individual casework remains very important to the team and is vital to sensitive assessment of service required by clients and to intervention in personal problems. We do not live in isolation from the community and we have tried to capitalise on all available resources in that community to improve upon and take over some of our tasks. By mobilising the abilities of others we can find some time to practise our own skills more effectively."*

Martinez-Brawley (1990) sets out a full argument for a community-based approach to social work including theoretical bases, documentary evidence from small towns and a discussion of implications for practice:

> *"Community-oriented social work depends on an attitude of mind that sees community as a potentially nourishing and important source of support and identity to its members. The notion that community nourishes its members is not commonplace. It is probably not an idea that is in the forefront of consciousness when social workers help clients make decisions." (Martinez-Brawley 1990 pp 216-7)*

The presentation by Martinez-Brawley is thorough and illuminating. It suffers only from the limitation of her argument to small, territorial communities when it applies equally well to other conceptualisations of community. Since a pervasive element in the definition of community appears to be a sense of belonging, communities can helpfully be conceived and understood as sets of people linked by interest or location or whatever they feel holds them together. Wellman and his colleagues (1988, pp 130-184) have developed the notion of social networks as personal communities, a view which supports this consistent but more flexible approach to community. In a series of publications written in the late 1990s, (e.g. Wellman and Gulia,1999) the argument has been extended to include computer mediated personal networks: virtual communities as communities.

It may appear from these arguments that a community orientation in social work practice depends on a benign view of communities. Such an approach would be naive and probably ineffective. However, Martinez-Brawley (1990) and other authors (Timms, 1983, Hearn & Thomson, 1987) refer to the negative pressures and impact of communities on their members both as informative aspects of the life contexts of clients and as significant factors in relation to the potential of social work intervention. These authors are clearly aware of the role that local and personal networks play in enhancing or undermining the opportunities and constraints of their members. They also make clear reference to the research evidence indicating the contribution that local communities can and do offer to individual welfare as well as the power they have to undermine unwelcome social work intervention strategies.

The implication is that social workers ignore the dynamics of the community at their peril. The argument for dovetailing formal social work services with their community contexts is logical and powerful. In Scotland it is built into core social work legislation (The Social Work (Scotland) Act 1968). Guidelines, still extant, are permeated with directions to attend to the community context of the service (Scottish Office 1968, Scottish Office 1969).

It seems unfortunate, therefore, that the implementation of more recent Child Care and Community Care legislation has most frequently targeted the most needy with formal service provision that arrives too late to be able to find, let alone sustain, the efforts of natural caring networks. (Smale et al. 1994, pp. 87-88, Hearn, 1995).

Collaboration as a method for working and learning

Collaboration has been an invariable feature of welfare practice in general and social work practice in particular. It has also been a focus of much criticism: the amount of our experience appears to have made little impact on the quality of collaborative practice that can be assured. Structures and procedures have been established, such as child protection committees and guidelines, but, helpful though these may be, they are likely only to deal with problems in collaboration that are structural or procedural. Essentially professional collaboration is an interpersonal process involving relationships with colleagues within and between professions and/or agencies. It is about people working purposefully with people, across boundaries of various kinds and regardless of personal congruity. It is not easy. It is therefore regrettable that, whereas a great deal of social work literature and education concentrates on workers establishing and sustaining effective working relationships with clients, the processes of productive worker-to-worker relationships are given little emphasis.

It might be argued that, like riding a bicycle, relationship skills established in one context will be intuitively transferred into the whole range of a worker's interpersonal relationships. It takes only a moment of reflection to recognise the fallacy of this. How many of us have been confronted by pleas of our partners or children not to 'social work' them when we have made inappropriate use of our social work skills in our personal relationships?

Even recognising the worker-client relationship as a base for collaboration, the components of that relationship are systematically different from worker-worker relationships at least in terms of purposes, processes, knowledge bases and power. Add to that the complexities inherent in user involve-

ment with its inevitable accompanying dynamic of differences in purposes, levels of power, interpersonal perceptions and processes, and it quickly becomes clear that there is a need for social work education to address situationally specific relational requirements of collaboration in social work practice.

The requirements and opportunities of collaborative learning may be connected in some way to preparation for, or review of, collaborative practice, but if any connection exists, its nature and impact are not clear. The process of collaborative learning itself is currently under sustained experiment and discussion.

Hartley (1999 p.4) mentions common reference to the advantage of collaborative learning in encouraging "active learning and more thoughtful participation from teachers and students". Referring to evidence that students who self-question and self-explain show greater understanding and more easily acquire new knowledge, he says,

> *"How much better therefore if such questions and explanations are addressed not only to oneself but to others, so that queries seeking clarification, challenges requiring justification, inconsistencies needing resolution, qualifying implications and differing views can become part of the argumentation and discourse processes of the group."*

The questions Hartley (1999 p.8) poses at the end of his opening statement for an on-line discussion of effective approaches to collaborative learning indicate that this educational form is at an early stage of development. The questions refer to the characteristics and advantages of collaborative learning; ask whether the difficulties have been underplayed and seek discussion of the possible shifts in teacher attitudes and skills that might be required. Most of the current discussion derives from continuing education and relates to the burgeoning of collaborative learning via the Internet. In attaching importance to learning exchange between peers there is recognition of the potential of the social processes in learning for enhancing the development of knowledge, skill and understanding.

Face-to-face collaborative learning has long been a part of social work education where there has been an emphasis on working in groups and learning from one another including, rather than relying on, the tutor. The Enquiry-Action-Learning method set out by Burgess, (1992) makes formal and substantial demands on students to contribute to, as well as to learn from, their peers. Perhaps implied in this collaborative learning process in social work education is not only a link to the collaborative requirements of practice but also a professional values message about non-hierarchical attitudes to people and their potential. But is this our intention? If it is, do we have the evidence that it works? If it does should we be developing more and new initiatives in collaborative teaching/learning processes?

The Internet as an enabler of collaboration/ collaborative learning

Formal education, when made compulsory, was intended for children. In Britain the law fixed the age at which a child could leave school, though school education has been available beyond that age on a voluntary, but encouraged, basis. The steady raising of the school leaving age in Britain has stopped at 16, not simply setting the boundary between childhood and adulthood, but increasingly recognising the importance of continuing education. The adult education of the 1930's and 40's became the continuing education of the 1970's and the lifelong learning of today. The change of language appropriately reflects a genuine shift from basic learning to read, write and count, to a sense of excitement about learning and its potential not only for life management and job-seeking but also for personal development.

More recently the spread of computer based learning in the school classroom, and the increase in personal ownership of computers, has interacted with the development of the Internet and the World Wide Web to open up exciting possibilities for educational development and involvement, now potentially barrier free as long as there is a political will to ensure access for all. The implications for life-long and distance learning were immediately recognised and seized, though, as with earlier distance learning, the perceived wisdom is that the new opportunities require of teachers new attitudes and skills. As many have discovered from experience, the straight transfer of lessons or lectures on to the World Wide Web, using whatever chosen learning framework, is neither adequate nor likely to be educationally successful.

More exciting than the use of the Web to overcome problems of distance in the provision and exchange of information is the recognition of the many other barriers that computer mediated communication can overcome: difficulties with mobility, restrictions on timing, social exclusion, shame or fear in interpersonal encounters, difficulties with unbalanced status or power in relationships. The flexibility and anonymity of the Internet can encourage and support access for everyone to information, learning, networking and socialising on a phenomenal scale where quantity and selection can be controlled entirely by the participant. There is huge potential for empowerment of people here. People can learn what they want, when they want, where they want: the locus of control shifts from the teacher to the learner.

Of course the Internet challenges the gatekeeping processes associated with previous information systems which required (and still require) authorisation to enter and retrieve information. On the Internet anyone can make information generally available that they legitimately hold and can legitimately disseminate. Information made openly available on the Internet is available to anyone able to find it. Even for many who are liberal minded this devolution of control to the individual is disconcerting. It raises many questions, from vetting the quality of information put online to dealing with potentially damaging impacts of some information on those who receive it. A natural impulse may be to seek to impose some controls on information input and access, thus inviting, if such controls are possible, reinstatement of power relationships in information flow. A more constructive approach is to seek to promote the advantages of the liberation of information while preparing to put in place appropriate actions to limit, mediate or respond to damaging impact as and where it occurs.

Clearly computer mediated communication facilitates collaborative practice as well as collaborative learning. In Scotland workers in remote areas were first to take up the opportunities that video-conferencing and online communication offered to overcome long and difficult journeys to case conferences. Academic centres in remote areas also seem to have been quicker to take advantage of the new technology than those in more central locations. But there is still work to be done everywhere to increase awareness of the many other barriers to learning, mentioned above, that might be breached if Internet access were made easily and freely available. From this it clearly follows that the flexibility of the Internet to encourage

the take up of learning opportunities by those otherwise obstructed could usefully be extended into social opportunities by presenting the learning as a collaborative - that is a social - process. The many examples of online collaborative learning recently and currently being undertaken, including *Community Portraits* and other SCHEMA modules, will hopefully yield evidence of feasibility, effectiveness and best practice.

SCHEMA and community portraits

The SCHEMA project, within which *Community Portraits* is being developed, is funded by the European Commission as part of the programme orchestrated by the Educational Multimedia Taskforce. The Project is co-ordinated by the University of Stirling in Scotland, with partners in Finland (Oulu and Lapland), Sweden (Orebro and Karlskrona-Ronneby) and Germany (Stuttgart).

The development aspect of SCHEMA involves the use of the World Wide Web and advanced communications for teaching and learning, including, if possible, the use of *Network Computers*™. The emphasis is on the use of the Web to meet the continuing professional development needs of health and welfare workers in remote communities. A major research interest of the Project is the extent to which the Web can support collaborative learning. Further details of SCHEMA are available from the Project's Web site http://www.stir.ac.uk/schema

A principle informing SCHEMA is that, in any educational enterprise, the technology used should adapt to the educational and social goals of the activities. The educational content and process, not the technology, must be the focus of student's attention. To achieve this, the technology, whether it is chalk-and-talk teacher, overhead projector or computer, must be learner-friendly and unobtrusive.

The community portraits proposal

The conception of *Community Portraits* derives from a module delivered in on-campus social work education in which students working in small groups, were required to explore and report on communities. The planners of this module made explicit their aim:

> *"to promote a pattern of social work practice and social work service that applies law and procedures as required, and theory as informative, within an active appreciation of the context of people's everyday lives and patterns of culture."*

The collaborative process of this social work module lent itself well to SCHEMA's remit to develop opportunities for continuing professional development for health and welfare professionals using collaborative learning. At the same time SCHEMA presented the module planners with a vastly extended arena for dissemination of their commitment to embedding welfare practice securely in the context of the community. There was a good match of technological promise with educational objectives.

Community Portraits is presented entirely via the Internet making use of a learning environment developed at the University of Oulu. It requires participants to work collaboratively in small groups to produce comparative 'portraits' of the communities in which they work. Groups of three participants, each from a different country, work together to produce a comparative portrait of their three communities. Participants are expected to use their cultural and individual differences of perspective to sharpen each other's awareness of their own work community. This collaborative process is also expected to enhance the participants' awareness of their own, as well as each other's, perceptual frameworks and should encourage them to recognise the advantages of collaboration for extending ways of gathering and interpreting information, deepening understandings and developing ideas and innovations. The extent to which these aims are achieved will be evaluated within the SCHEMA research framework.

Supervision and support for participants in *Community Portraits* is supplied via the Internet. The expertise of the SCHEMA developers and the technical teams throughout the Project is available to the tutor and to participants to assist their collaboration and to enable them to optimise their use of the technology available in the course of their work and in the production and presentation of their portraits of the communities on the Internet. While students are encouraged to make demands on the technology, efforts are made to ensure that the technology does not make demands on the students.

Engaging with the technology

It would seem that a feature of technologically driven projects is that excitement about the potential of imminent technological developments breeds creative notions amongst the technophiles (e.g. SCHEMA leaders) about applications. So it was that, presented with the opportunity for transnational, collaborative project work on communities using computer mediated communication, the practical possibility that the course could be conducted via desk-top video-conferences was naively accepted. Students would be able to see and talk with one another, so minimising the estrangement of remote links without speech or vision. This opportunity to see and hear each other would be a significant support for the major part of their work which would be in some form of electronic print. A clear aim was that technology should not be a barrier. It must be easy to use, even with no training. With the use of *Network Computers*™ the familiar problems of software incompatibility and of Apple Macs not understanding, and not being understood by, anyone else, would be overcome at a stroke. Participants would put their *Smart Cards* into their NCs, and enter a system which had on it all the software and Internet connection facilities that they would need and which rendered all their contributions compatible. This 'plug in and go' system, would require only one finger typing and the capacity to follow simple instructions.

Unfortunately development problems meant that *Network Computers* are not available and prohibitive pricing has effectively ruled out standard use of desk-top video-conferencing. One result of this was a need to scrutinise more carefully the options for learning environments within which *Community Portraits* would operate. Two frameworks were on offer from the University of Oulu, both designed specifically for collaborative learning. While one of these frameworks had initially appeared better suited to plans for shifting between small groups and plenary discussions, the alternative (*TELSIpro*) was chosen because it made few technical demands on participants.

Because of their fundamental contribution to user friendliness, *Network Computers*™, in their new guise as 'set-top boxes', are still regarded as vital to developments within

SCHEMA. The technical experts are therefore exploring various ways of re-establishing this facility, thus restoring a wider basis for choice of learning frameworks.

Preparing the programme: the teaching-learning shift

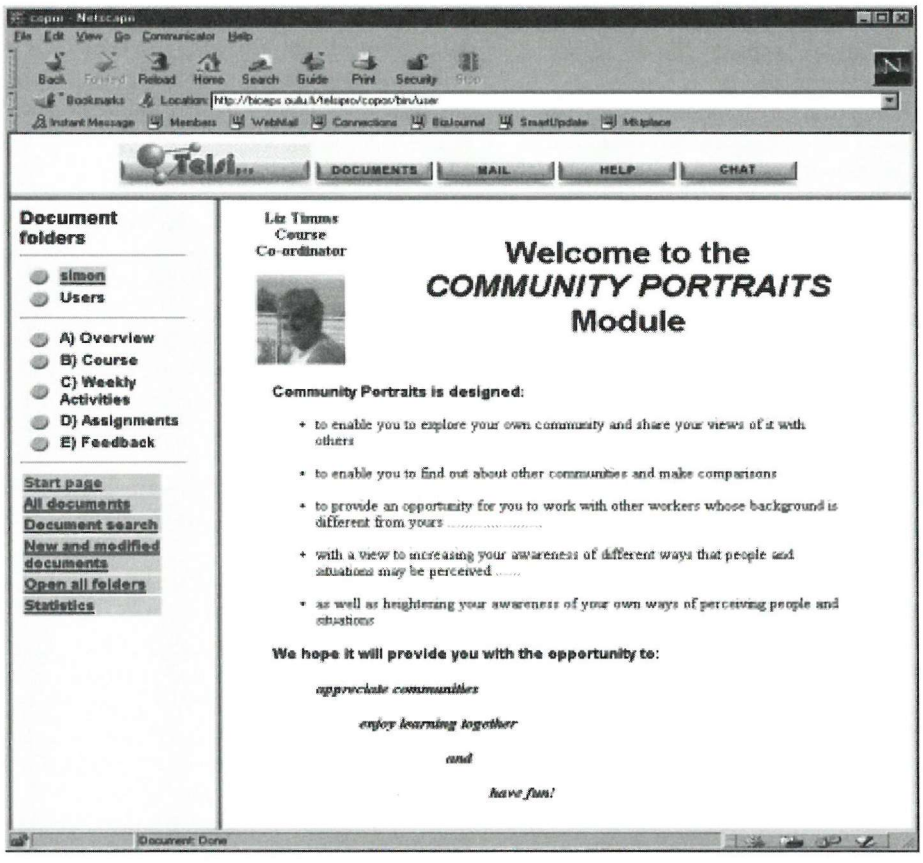
A significant lesson learned confirms the experience and perceived wisdom of online educators: that the demands of preparing for computer mediated learning are different from those associated with face-to-face courses. For anyone newly shifting from the real to the virtual classroom this requires some acrobatics in perception and thinking. However, prior attention to the plentiful advice does not necessarily prepare the novice for the impact that this shift may have on their perception of their skills as an educator. It can, initially, be a de-skilling experience in which good advice on the educational shift, reliable and user-friendly technical help and the occasional successful event contribute to sustained motivation.

The practical details that required attention in order to have *Community Portraits* ready and workable for students were tedious, extremely time consuming and constantly demanded rethinking the teaching-learning process. There needed to be a deep-seated cushion of enthusiasm to sustain motivation. At each step of construction it was necessary to reflect on how every detail of the material - the tasks or the timing or whatever - would be experienced by the students. Unlike face-to-face teaching, there would be no opportunity for on the spot modification in response to puzzlement or worse in a student's reaction. It is possible that, in the students' interests, the tasks and activities, week by week for the whole course need to be spelled out in detail with accompanying time estimates and that this information needs to be set out in full at the beginning. Distant students with other work commitments need to know what is expected of them so that they can plan their time. This problem may not be peculiar to distance learning and different course processes may demand different responses.

The practical difficulties of planning and managing the presentation of detailed guidance and instruction were usually resolved with advice to tabulate the course. This proved a breakthrough: tabular presentation of course aims and activities against the sequence of weeks showed clearly where multiple demands were being made on the same time space: it enabled good ordering of the educational process. Nevertheless it was difficult to see how to retrieve some of the flexibility for ongoing negotiation with students, reflecting and modelling a partnership approach to learning and practice.

Community Portraits: starting the trial run

For the trial run of *Community Portraits* nine participants were 'enrolled': two in each of two sites in Finland, (Lapland and Jyvaskyla) two in Stuttgart and one in each of three sites in Scotland. Four are postgraduate students, three are university lecturers, one a youth strategy worker and one a retired social work team leader. One of the nine never 'appeared' and one joined fully in the eighth week having had technical difficulties getting access. One person is participating with two colleagues to support her by helping with the community-based tasks and



being ready to stand in on the Internet link if and when needed. Three small groups were formed, each group made up of participants from different countries where possible, or at least from different sites. The collaborative work of the small groups must therefore, of necessity, take place via the Internet.

Prior to first log-on in February, participants were sent on a hard copy of information about the TELSIpro learning environment which was also available on line. The *Community Portraits* material was entered in TELSIpro with a start page, as shown, welcoming participants to the module. Participants were then e-mailed their user name, password and the Web that when they logged in they should browse the online course material. They were also asked to enter an introductory statement about themselves and, if possible, a photograph. Those not equipped to send photographs electronically sent them by 'snail' mail for SCHEMA staff to enter them. The first photograph arrived electronically within an hour of the start-up mailing: a motivating successful event!

The *Community Portraits* trial run has settled down to one group of three, one of two which then integrated a late starter, and one of two (with two extras in one community). The pattern of activity has varied from group to group. One pair has made regular use of the Chat facility to negotiate and complete staged tasks and use of the documents folder to present their ideas to other participants. The other groups have made no use of Chat, though one group is trying to overcome technical problems to do so. Participants in these latter two groups have made individual contributions to their small group but their exchanges are slow to produce collaborative results.

Launching the collaborative process

As all social workers know, intervention starts with the very first signals of communication and the messages sent and received at that point, whether through content or process, may determine the rest of the working relationship. But we also know that faulty starts must be redressed.

So it has been with this trial of *Community Portraits.* The course was launched with a mass of information and too little guidance to students about how to begin to engage with it. Not enough time had been allowed for people to join in and familiarise themselves with the system. Neglecting the significance of informal interchanges in the development of collaborative relationships, it was short-sightedly decided to use a substantive course exercise as a vehicle for people to begin their interpersonal exchanges. The demands of the relationship building prevailed, however, and the week by week planned programme of collaborative activity fell behind. The more realistic response of the participants required the tutor to adjust, revise and slow down. Since *Community Portraits* is a structured programme of collaboration towards the completion of one major task, with a long deadline (twelve weeks) this adjustment seemed appropriate.

Erratic behaviour of the technology may explain some hesitations in the collaborative process. In particular Chat buttons have sometimes disappeared from all participants' screens, and sometimes disappeared unpredictably on individual machines. For some participants no Chat button is ever available. Early responses from participants indicate that ease of use of the technology is highly significant for the development of collaboration and that the reliability of the technology is crucial. Given the importance of small talk in the development of successful collaborative relations the unreliability of Chat buttons is serious.

Such technical problems also test collaborative skill. When queries about technical problems have been raised in the plenary mail tray a 'me too' response, rather than a separate statement of the problem, represents a collaborative approach to the engagement. This may seem a small point, but it has significance for understanding what helps or hinders the development of effective computer mediated collaboration.

There is a possibility that the experience of a slow establishment of collaborative relationships in *Community Portraits* is an indication that online relationship building may reflect its face-to-face counterpart but in slow motion. The author's previous experiences in face-to-face exercises simulating collaborative working have persistently resulted in evidence that collaborative relationships take time to develop and that the process benefits from being steered. Provision for this time would need to be built into any collaborative learning programme according to the time factors associated with the medium of communication.

There is still much to be learned about the processes and dynamics of collaboration in general. The visibility of collaborative relationships developing in online learning may yield significant insight into this process and indicate training needs for collaborators across all media of communication.

Collaborative learning or collaborative working

It became clear during the planning of *Community Portraits* that learning through collaboration is different from collaborative learning and requires differences in approach to course delivery. Much discussion of collaborative learning appears to refer to studying academic material on which students work together to promote not only their own but one another's learning. Material is staged and group and individual academic tasks are set with deadlines for completion. It is possible to set the whole programme out and for individual students to pace themselves differently, as long as they are prepared for their collaborative events and interchanges. Collaboration may be required and enhance the learning but acceptable results may be possible with minimal commitment to the collaborative process.

At the core of *Community Portraits*, however, is a collaborative task, broadly outlined, with a long deadline for completion. It is designed so that student groups themselves collaborate to decide the form and content of their final product and how they will produce it. Collaboration is essential: individual pursuance of the goal would be counter-productive. The conclusion drawn from the comparison is that learning about collaboration through the experience of collaboration requires a different process of course presentation from conventional collaborative learning. We need now to consider what the requirements of experiential collaborative learning are and to revise the delivery of *Community Portraits* accordingly.

To mix the learning environments - or not

Reports on computer-mediated collaborative learning most frequently advise a face-to-face induction before beginning online activities, but the decision was taken, perhaps naively at the time, to offer *Community Portraits* exclusively online. In reviewing the delivery it will be important to set the gains of easier access against possible losses.

The loss of the contribution of transnational differences to collaborative learning and learning about oneself as well as others might be redressed by alternative arrangements

that mix transnational and local group work. On the other hand, the exclusion of some candidates as a result of a range of absolute barriers to their face-to-face involvement poses a more serious problem. Planning more varied ways of delivering *Community Portraits* is good practice, but to do so to the exclusion of struggling with the educational demands of total online delivery would fail to attend to the potential of computer-mediated-communication for social inclusion. Having noted this potential, proceeding to neglect it would constitute discriminatory practice.

Conclusion

A broad conclusion midway through *Community Portraits* is that the educational potential of computer mediated collaborative learning on the Internet is considerable, particularly in terms of its extensive power to include. The caution is that accessing and sustaining learning is likely to be seriously impeded by technological obstructions, such as unreliability and user unfriendliness, and material obstruction such as poverty.

As current technological developments rapidly increase opportunity for erosion of technical barriers it is crucial that efforts are made to ensure that there is access for all, otherwise an unjustifiable divide will develop between the information rich and the information poor that is likely to doubly disadvantage many, including a high proportion of those who rely on social work services. Work in SCHEMA, ancillary to *Community Portraits,* which is focussing on computer supported community networks in two Swedish cities, advocates the adaptation of the module as a basis for networking within and between communities with a view to fostering social inclusion. (Ferlander and Timms 1999).

The core work unit of SCHEMA at Stirling is a group of three staff who have been working together in a succession of information technology projects related to teaching and learning over the past few years. They have woven their different skills and resources together in a way that enables them to spin creative ideas off one another to varying levels of the feasible, the possible or the ridiculous. Their funding allows and requires them to do so. It is clear that in their desire to work at the cutting edge of technology and education they assume that success is never guaranteed and possible failure, which has to be contemplated, is to be enjoyed as a challenge and with a sense of humour. The team sets an example of fruitful skill mix in which all value the opportunities of online collaborative learning, but not everyone who works with them is expected to be technically smart.

Experience as a newcomer in SCHEMA has demonstrated the value of technical specialists being committed to tolerant encouragement of the technically illiterate educator and technophobic learners. Where, as in SCHEMA, the technical experts accept full responsibility for easing access and acceptance, user motivation is sustained and learning takes place.

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Learning social work online: A WebCT course on policy issues among Chinese students

by Yu Cheung Wong & Dr.Chi Kwong Law

Abstract

Learning will take a new form in the next century. Online courses are gaining a role in social work education. Learning in this new environment requires a new set of learning concepts and approaches. Chinese social work students can experience the unique adaptation process required for learning through online courses. An attempt has been made to introduce an online course on social policy issues for a group of Hong Kong BSW students. The process and insights of their learning are documented and suggestions for enhancing students' learning under this new environment are made.

Introduction

With the introduction of the Internet and tremendous progress in computer technology, we have gradually realized that new approaches and concepts of learning are taking place (Rafferty, 1998; EC, 1997, Cheng, 1998; Friedman, Ward & Biagianti, 1998). These new approaches have the potential to turn the traditional mode of lecturing and tutorial into history. In other words, teachers' role as information transmitters will be minimized if not totally eliminated (Cheng, 1998).

The growth of knowledge as well as technology has reached an unprecedented size and pace. It is not possible to rely on the traditional way of teaching and learning to disseminate 'knowledge' to the students. For students/professionals to survive in the next century, they have to develop new concepts and approaches to learning (EC, 1997; Friedman, Ward & Biagianti, 1998). It is important for teachers to carry out studies on:-

- the new approaches and concepts of learning;
- the ways to develop these learning approaches among the students; and
- the process of learning under the new approaches.

It is also important to study what the roles of teachers are supposed to be in this new teaching and learning scenario and how are we going to assess students' learning and our teaching effectiveness.

The connectivity, reciprocity and unlimited storage of information provided by the Internet and computer technology has produced online courses that represent one such new approach to learning. Students no longer need to attend lectures, they can learn at their own pace and gain access and search relevant resources and information on the Internet. Students can also make use of the connectivity of the Internet to maintain communication and discussion with other students, teachers and even outside experts, as well as students from other courses or countries (Quellette, 1998). Students can also be involved in online collaborative projects on specific issues and present their findings to teachers and classmates as well as to targeted audiences. They can do this through constructing their own webpages, organizing and maintaining online discussion groups, chat rooms and even conducting video conferencing.

This learning environment will probably become a predominant mode of teaching and learning in the future. However, students at this juncture, who are used to traditional teaching and learning, might experience confusion and unsatisfactory learning outcomes. To conduct online courses among Chinese students may even require the teachers and students to undergo a very different adaptation process. This article tries to document the process of producing one such course and the learning of the local Chinese students.

URL of this course:
http://ecourse.hku.hk:8900/SCRIPT/xspolicy/scripts/serve_home
Readers can use "guest" as the username and password to login to the course.

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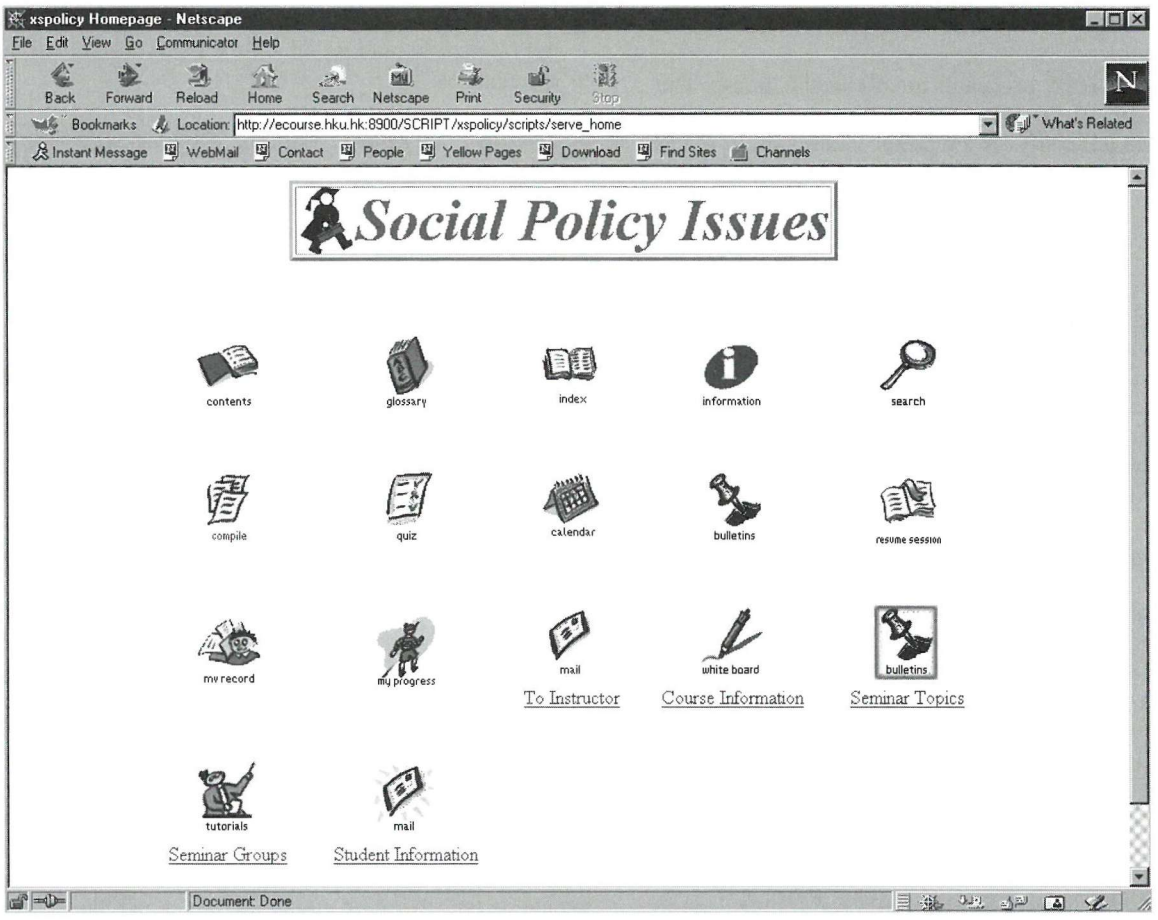

Hong Kong, potentials for learning online

Hong Kong, a former British Colony became HK, Special Administrative Region after returning its sovereignty to China on July 1, 1997. This small, previous British colony, with less than 1100 sq. km had a population of 6.8 million at the end of 1998. 98%are ethnic Chinese (HK C&SD, 1999). The new Chief Executive elected by a 400 electoral college appointed by Beijing has announced his ambitious plan for bringing HK into a competitive position in Information Technology. He aims at "developing HK into a leading city in the world for the development and application of information technology, especially in electronic commerce and software engineering" (HK Government, 1998). Despite the subsequent economic meltdown after the establishment of the Special Administrative Region (SAR), the government under his leadership has pursued vigoursly, among other drastic changes, the IT strategy. A new policy bureau was formed with the name ITBB (Information Technology and Broadcasting Bureau) which, at the end of 1998, published a strategic plan entitled 'Digital 21: Hong Kong Special Administrative Region Information Technology Strategy'. The strategic plan spells out the objectives and strategies for developing IT in HK. Among other things, it points out that to maintain a competitive edge, Hong Kong has to engage its residents in lifelong learning and acquiring new skills in and through advanced Information Technology (HKITTB, 1998).

As with other countries' IT policies, the application of IT in education is a major focus. The Government has set up a Quality Education Fund (QEF) in 1998 with a total of HK$ 5 billion (US$ 640 million) for innovative educational projects to improve the basic level education program. Many of these projects are related to the application of IT in education (HKQEF, 1999). It has also invested HK$ 1.2 billion (US$ 154 million) to install extra computer hardware in all public and subsidized primary and secondary schools (HKED, 1999).

In higher education, the University Grant Committee (UGC) that finances the major tertiary education institutions, has funded a 5 year large scale project entitled 'Consortium for the Promotion of Teaching Skills and Technology (T&T)'. This project promotes effective and innovative teaching skills and strategies and applications of educational technology in higher education (T&T, 1999). Alongside this initiative, each individual institution has launched its own IT development plan as well. For example, the University of Hong Kong has made an endeavor to launch itself as a 'digital university' (Ng, 1996). The project includes an increase in network quality and connection points; a contract with IBM to provide each first year student with a Pentium notebook computer at a very low price and the promotion of *WebCT*™ course tools for teachers to prepare online course with their technical support, etc.

The Department of Social Work and Social Administration of the University of Hong Kong has also kept trying new and promising teaching and learning methodologies to prepare our students to face the ever changing external situation and new challenges. For example, we have ventured into:

- the new approaches and concepts of learning;
- the ways to develop these learning approaches among the students; and
- the process of learning under the new approaches.

Characteristics of local Chinese learners

The students in our BSW programs are all local Chinese. The majority are graduates of secondary schools who have successfully entered the University after a public examination. A few are mature students.

There are a number of local publications studying the characteristics of Chinese students as learners (Watkins & Biggs, 1996; Tang, 1996; Lee, 1996; Walker, Bridges & Chan, 1996). These studies are important because they provide us with background information for assessing how well the students are likely to adapt to new learning environments that may not fit into their existing learning strategies and habits.

The background and the subsequent learning process can provide us with useful information for our future course design and the type of learning strategies that we need to cultivate among our students.

Characteristics of Chinese students:

1) *Collaborative:* Students are used to working closely together (Tang, 1996) but are reserved in expressing their ideas if it means standing out from others. The phenomenon of regression towards the middle is quite obvious among the students in our experience. In group projects, we have heard students saying to us that they did not want to stand out because they run the risk of being kept at a distance and isolated. Probably, for Chinese, the sense of belonging to a community and not feeling isolated is very important.

2) *Respect for authorities:* This might be good for teachers in the traditional sense. However, as a consequence, students' learning seldom goes beyond what teachers proscribe and in case of doubt, they rely on lecture notes and teachers instead of looking up resources and developing their own understanding and arguments. In cases of contradictory opinions between students, the first reaction is to ask the teacher for answers and to judge and resolve their conflicts. However the development of critical thinking and the ability to resolve conflicts are considered as essential in social work training. To induce such changes in mentality among the students, teachers have to be conscious of their roles and of the expectations of students. On the other hand, teachers can try to introduce specific learning experiences such as collaborative community projects (Chan et al. 1997) in which students are exposed to deprivation and social injustice to stimulate debate and critical thinking.

3) *Structured learning:* Students are used to learn in a structured manner, with fixed class hours and handy study materials such as text books and notes. This is even more typical for University students. University courses are not dramatically different from what they experience in their secondary schools, except that they do not wear school uniform and fixed classrooms are no longer available. The new experience is no more (or fewer) roll calls in the classroom, and they can just disappear from class if they have something else to do (such as private tuition to earn money or social activities in the student residential halls).

In a way, these characteristics run quite contrary to the idea of active learner that is essential for learning online. Besides, the heavy workload (students have to undertake concurrent placements for two full days a week during term time and study several other compulsory and elective subjects) and unscheduled work hours might limit their persistency in reading the online materials and taking part in discussions.

4) *Language limitation:* Although students are supposed to use English in their studies (reading and writing), in their daily life, including fieldwork placement and in the majority of their term courses, Cantonese, the local dialect is still predominant in their daily conversation and teaching. With free access to telephones and proximity of classmates and friends around, written communication is uncommon and using English for this purpose is rare. In traditional courses, lectures (except practice courses) are delivered in English but students can ask questions and sometimes teachers will explain difficult concepts and local examples in Cantonese. Online courses require a great deal of communication in written English in discussion groups. When a student wants to ask a question and express an opinion, s/he has to type in English onto the bulletin boards. This is a difficult task that they don't encounter in traditional courses.

Having said this, the BSW 3rd year students have already been exposed to different learning environments which might have a strong impact on their learning style and habits. For example, they have gone through a half-year collaborative community project for social work skills training and a summer block fieldwork placement. This learning experience differs from the more passive, receptive and traditional approach to learning and requires active learning based on approaching and solving real problems. Although these courses do not deliberately aim to change their learning strategies, we expect the students have experienced a new learning paradigm that is not common in the University.

Based on the information we have gathered from social work students on their learning strategies (Chan et al., 1997), they appeared to have a strong tendency towards both deep learning motivation and strategies as well as to surface learning motivation and strategies. The measuring instrument known as SPQ (Study Process Questionnaires) aims at measuring the motivations and strategies of students' learning that are considered as significant factors in determining the learning outcome of the students (Biggs, 1987; 1991). The theory behind SPQ identifies that it is not only the information processing capacity of students that impacts on the outcome of learning, but so do the learning motivation and strategies adopted.

The SPQ measures three learning motivations and three learning strategies. They are deep motivation and strategy, surface motivation and strategy and achievement motivation and strategy. The surface approach (surface motivation and strategy) is used by students to get the course assignments or tasks out of the way and rote learning is often involved. The deep approach (deep motivation and strategy) refers to the motivation to learn for understanding and actualize interest in a particular subject. Students using this approach will try to read widely, interrelating with previous relevant knowledge. Finally, students adopting achievement approach (achieving motive and strategy) aim at getting higher grades and in order to do so organize their time and working space efficiently.

International comparison on SPQ scores has indicated significant difference among students across countries (Biggs, 1987; 1991). Comparison among local students studying different disciplines has also been conducted. Our study of

BSW students as a group in our Department indicated a high tendency towards surface as well as deep learning motivations and strategies but an exceptionally low score in achievement motivation and strategy. The social work students in our Department may vary in their surface and deep learning motivations and strategies but the common characteristic among them is unwillingness to take achievement as their learning motivation and strategy.

An online course on social policy issues using WebCT (www course tools)

WebCT™ (Goldberg & Salari,1997) is a course development tool that facilitates the process of teachers producing online courses. Using *WebCT*, teachers with basic training in producing webpages (a little bit of knowledge in html editing is sufficient) can transform course materials into online format for each module. WebCT can also be used to set up and manage an online course with a whole array of course tools such as bulletin boards, quizzes, student tracking and grading facilities. With several hand-on sessions, teachers can use these facilities with minimal support. There are other similar course development tools available such as *WebFuse* and *TopClass*. (McCormack, & Jones, 1998).

The computer centre of the University of Hong Kong has been promoting use of the *WebCT*™ since 1997. As a result, over a hundred courses are registered for a *WebCT* account. Most teachers use this course development tool to supplement the traditional mode of teaching and the actual number of online courses are still limited.

Social Policy Issues is an elective course offered to BSW Year III as well as for the MSW Year II students. A teacher of the Department had offered this course in the first semester using traditional teaching. The authors of this article, using the course materials for the first semester, produced the current online course using *WebCT*™. In the first semester, over 30 students from social work programs had already enrolled and they completed the course. When the course was re-offered in the second semester, another 18 students enrolled. Most reported that they were attracted by the innovative mode of learning.

The reasons for choosing Social Policy Issues as the first online course in our Department were threefold. Firstly, the course involves more conceptual and analytical contents than practice courses that involve more skills and demonstrations. Immediate feedback during class that is essential in skills training is not required in this case. Secondly, this is a subject for which a lot of local references are available in digital format, or can be transformed relatively easily. For example, more and more local pressure groups have posted online materials. Thirdly, the HK Government has produced a comprehensive websites on government policies and made minutes and papers of the Legislative Council available to the public.

An online course offers different learning experiences from traditional courses. Students can take a non-linear approach to study. They do not have to follow the learning sequence starting from the first lecture to the end. They can easily move from one module to another to search inter-related issues and materials. The links in the course materials enable students to access related information in the form of video, newspaper, websites, policy documents and articles, etc. They can also enter the bulletin boards to ask questions, join discussions and discover the opinions and concerns of other students on the different topics of the course materials. If they want immediate response, chat rooms facilities provide useful tools. They can also review their understanding of course materials by doing a quiz or answering short questions for various modules.

Although the advantages offered by an online course seem attractive, the decision to pursue them is not easy for a teacher who has taught a course comfortably for a number of years. Perceived difficulties in technical complication, heavy commitment in other priorities and lack of immediate urgency are hindrances to teachers becoming involved in developing online courses.

Academic staff with stronger interests in enhancing students' learning are more open to involvement in developing new teaching designs. Even if not very proficient in using computer technology, they know that the key to inducing a lifelong learning attitude among students is to have a teacher who is open to learning new ideas and skills as a model.

A senior teaching staff member in our department expressed her interest in developing online courses because she saw an enormous opportunity to develop social work education in mainland China. Online courses enable students in China to obtain essential social work materials and keep themselves in contact with experienced social work teachers at a relatively low cost. Matching the concern of the teachers with the benefit offered by online course is important in encouraging teachers to venture into online courses.

In practice, to produce an online course, the following tasks have to be done:-

1) *Converting lecture notes into course materials:* The original lecture notes are not intended for online reading, they are very brief. Online materials have to be more comprehensive with clearly stated objectives and structure for students to follow. Besides, we have to prepare indexes and glossaries for easy reference. There are all together nine modules of study, each related to a policy issue.

2) *Preparing case materials*: Discussion among students on local policy issues is an important component of learning in this course. There are several major policy proposals issued by the Government during the semester, case materials that are suitable for bulletin board discussion have to be updated and posted onto the server. Since students are not used to reading online course materials on their own, discussion and case studies are useful tools to attract and sustain students' interest.

3) *Prepare Quiz*: A quiz and short questions are useful for students to check their progress and understanding of the key concepts. It is introduced after each module of study.

4) *Collecting and digitizing course materials:* Policy papers, clippings from local online newspapers and digital resources from the library and NGOs were collected and uploaded to the server. When the course was taught in the first semester in traditional mode, we taped the presentation of the teacher when he explained key concepts to enhance the visual impact for the students. Moreover, local television channels had produced news reports on related issues and, with their permission, the video clips were digitized. All the video clippings were transformed into MPEG files and stored on two CD ROMs. They were

distributed to each student. The files were linked to the course content. The students can just click on a link in the course material and open the related Mpeg file in the CD ROM.

5) *Interviewing the students:* In order to have a better understanding of the students' learning process, six students were interviewed individually and a focus group was conducted to study the process and outcome of learning.

Since the preparation process is very time consuming, the authors invited several students to help out. The nine modules were posted onto the *WebCT* server one by one throughout the semester. The workload on the teachers was still tremendous and some of the module contributors were not able to meet the scheduled time for posting.

The learning process and reflection

Importance of engagement in discussion

In the first module of study, the new learning environment excited the students. Most were very active in hitting the course contents and posting messages on the bulletin board related to the course materials. The first module related to the issue of welfare retrenchment which started off with a case discussion on the government's review report on the comprehensive social security system (CSSA) – a means tested monetary support for low income and unemployed families. The monetary amount delivered by the social security system has reached a record high during the current economic turmoil. There were heated debates in the local media and in social welfare fields with students involved actively in the discussion. Around 200 messages related to the topic were posted on the bulletin board in the first two weeks.

Other teachers of online courses have also observed that some taciturn students become very active in bulletin boards. One such student has become the most active member in the bulletin board discussion, posting 157 messages out of the total of 838 posted throughout the course. He was active both in expressing his ideas and responding to the opinion of others. Disregarding this particular student, male and female students posted similar numbers of messages on the bulletin boards.

However, the enthusiasm dropped later. The distribution of the messages referring to course contents posted throughout the semester showed nearly 20% were related to the first module. During our interviews with the students, some reported that case discussion on hot issues was very important. They have had plenty of raw data from local media for discussion and the outcome has been very substantial and meaningful. However, in the subsequent modules, the discussions were somewhat different and they lost interest. Besides, the content of discussion, though counting as part of the course assessment, constituted only a very small percentage of their course marks. Hence, the students' involvement in discussion and studying the course materials will come mainly from their sources of motivation.

Some students have reported that teachers' involvement in their discussion was insufficient and that they (students) were not very interested in discussing with their fellow students because it was not substantial. They wanted greater participation by teachers to make authoritative remarks when students disagreed. However, as the teachers were busy in preparing the course materials, their involvement in the discussion group was not satisfactory for students.

In retrospect, the teachers should have struck a balance between course preparation and taking part in bulletin board discussion. It can be quite boring to read online materials, even more so than attending lectures. Without well-prepared course materials, the situation will be worse. On the other hand, without teacher's taking part in the bulletin board discussion, it can turn out to be quite meandering and unfocused and is not an effective tool for stimulating learning.

Technical Difficulties

The computer proficiency of the students varies. Two students did not start reading the course content after 3 weeks had past, reporting that they did not know how to get connected to the University server from home. Knowing this, other students volunteered to help out. Another student kept forgetting his login account and password and has created several accounts for the course.

Some students also experienced difficulties in viewing the video clips in the CD ROM. Although the teachers had explained to them about the required software that was available for download, some students still found difficulties in viewing the video content.

Five tutorial sessions were conducted in the computer laboratory where students discussed seminar topics via the bulletin boards (see below). However, as the computer rooms with more advanced computers were not available, we had to settle for computers without a CD-ROM drive. Some computers were always out of order. It was not uncommon to find students struggling hard with the computers and network for 20 minutes before they could take part in the discussion.

Technical problems related to connection and software compatibility posted serious questions to the viability of the courses. Low bandwidth and difficulties getting online through the free PPP connection to the University server, frustrated students in taking part in online courses unless they lived in a University dormitory where the connection is much better (only one third of HKU students has dormitory residency). With the advancement in computer network technology and the improved computer proficiency of the students, (students entering HKU from 1999 are required to attend class on computer proficiency and to pass in the related test for graduation), hopefully, the situation will improve.

Limitation of online tutorial

At the start, the authors considered conducting the whole course on an online basis including both the course materials as well as tutorials to see whether complete online teaching is possible. We planned to arrange for students to be online together at a scheduled hour and take part in online tutorial discussion through the bulletin board. In order to allow students to become familiar with the operation of the bulletin board, the first session was conducted in a computer laboratory where each student could have a networked workstation. All eighteen students took part in the discussion. Students were then divided into two discussion forums with each teacher responsible for one forum. Within just one hour, a total of 251 messages were posted and students found that they could hardly catch up with the discussion and requested face to face sessions with the teacher to clarify the course contents.

Thus, starting from the second tutorial, students responsible for the tutorial discussion posted their presentation and questions on the bulletin board and classmates took part in

the online tutorial together in the computer laboratory. A few students who could not come to the tutorial joined the discussion from home. After the laboratory, students directed question to the teacher for clarification in Chinese. The same format of tutorial lasted until the end of the course.

Some of the weaknesses of face to face interaction is that they are transient, easily forgotten and the status of a person inside a group can carry more, or less, weight than the substance of his/her discussion. Online discussion overcomes this limitation and using nonverbal communication can help make the message clearer and participants need only concentrate on one message at a time. However, face to face interaction can also create a supportive and humorous atmosphere that encourages communication of ideas and learning. This experience helps us to re-affirm that we should adopt a complementary approach between using technology and direct human interaction in learning.

Recommendations for improving learning online for Chinese students

Encourage participation in discussion
The convenience in discussing with students and teachers is an important feature with great value for students' learning. Students can bring in their experience, stimulating as well as challenging their classmates. One strategy is to engage students in studying real cases and issues. It is hard to know whether students are studying the course materials, but since WebCT allows teachers to trace the involvement of the students, their involvement in and the content of discussion can tell how well they are learning. It is possible for teachers to identify students who have fallen behind and sort out the issues that hinder their learning.

Assessment
Assessment has a significant impact on how students study. Course regulations require a 30% course work and 70% examination assessment structure. As a result, taking part in bulletin board discussion, despite being assessed, carries only a very small percentage of the total assessment. If we are convinced that discussion among students and teachers are important to students' learning, more weight in assessment should be given to it. Since the online course used the same course title as the traditional course taught in the first semester. Students have to sit for the same written examination. It is disappointing that the university administrative system cannot yet accommodate the new initiatives in teaching and learning which requires alternate form of assessment structure and measures. The simplest way forward is to adopt a separate course title in the beginning.

Introduce collaboration
The strength of Chinese students in collaborating with others, can be made better use of in our course design. We can engage the students in collaborative projects as a means of learning strategy. Instead of identifying all the resources for the students, teachers can ask students to take more active part in collecting data and information, in analyzing current policy issues. They can use online resources as well as interviewing, discussing with policy makers and interested bodies. Their findings can also be made public (at least for the students and teachers) through the students' webpages creation function available in the *WebCT™*

According to the constructionist perspective of learning (Harel & Papert, 1991; Phye, 1993), the production of socially meaningful products (social artifacts) is a strong motivating element for learning; the setting up of policy webpages on specific topics is socially meaningful enough to stimulate learning. Since the local Chinese social work students have a high level of deep learning strategy and motivation and a low achievement strategy and motivation, this might have a more effective impact than giving more weight in marks to bulletin board discussion.

Complementary teaching strategies
In our experience, students enjoy and treasure direct interaction with teachers and fellow classmates. Going to the extremes of eliminating direct human interaction and pushing students to learn completely in front of the computer might not be appropriate for BSW students. A proper mix between facilitating students to study online by themselves and having face to face sessions with teacher and classmates are important.

Introduce positive elements into the learning environment
Babara (1996) suggested what constitutes a positive learning environment. They are:-

1) lively interaction with others;
2) a sense of teamwork;
3) an understanding of purpose;
4) a passion for learning;
5) immediate feedback;
6) active participation;
7) encouragement for risk taking;
8) a sense of connectedness with the task and its meaning;
9) a feeling of responsibility of the outcome.

Online courses have their potential as well as limitations in constructing such an environment. It's a challenge for us to build one that can both facilities the students to face the demands of the future as well as making learning an enjoyable and fruitful experience.

Conclusion

We are aware that learning will become a different activity in the next century and we have witnessed the beginning of the process. Both teachers and students encountered different types of difficulties in overcoming these changes. We have started an online project targeting the local Chinese students and documented the process and challenges for both teachers and students. The Chinese students carry certain characteristics that are of benefit in this new learning environment, but at the same time there are hurdles also. It is important to find out effective means of encouraging students to shift from the traditional conception of learning to a new set of concepts on learning.

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Reviews

The information age: economy, society and culture: volume III - end of the millennium

Book review by Bob Sapey

Manuel Castells, 1998
The information age: economy, society and culture: volume III - end of the millennium
Blackwell Publishers Inc., Massachusetts
ISBN 1-55786-871-9
Paperback £16.99, pp. 418

Despite the title of this third and final volume of Castells' work, it is not a millennarist project and does not indulge in the type of futurology that will dominate the popular sections of many bookshops this year. On the other hand it is not quite as much the conclusion that might be expected from this study of the informational age. In Volume 1 Castells had described the impact of the informational economy on the structure of organisations, the nature of work and the social meaning of space and time. In Volume 2 he discussed the nature of resistance to this revolution throughout the planet and therefore it might be expected, that in the third volume he would draw some form of conclusion as to what the outcome of this might be. However he finishes this book by rejecting the notion that intellectual theorising and analysis should lead to prescription as this has been far too destructive throughout the 20th century. Instead he continues to explore certain issues raised in the first two volumes in greater depth - first the collapse of the Soviet Union, second the nature of social exclusion and the rise of the 'fourth world', third the importance and influence of the global criminal economy, fourth the question of whether we are entering a 'Pacific Era' and finally, the nature of the unification of Europe. I shall attempt to describe these briefly in this review.

The collapse of the Soviet Union was an event that affected quite dramatically, the whole of this world and in Castells' view, occurred because of the crisis of industrial statism, brought about in part by the informational revolution. His historical analysis of this statist economy considers the power mechanisms that sustained the Communist Party and their role in preventing the USSR from changing to the informational economy. Not least among these was the growth of the shadow economy, controlled by a network of the nomenklatura and the bosses which relied upon the inefficiency of the central command system for its success. While Gorbachev had attempted to implement four dimensions to his perestroika, disarmament, economic reform, openness and democratisation, the interests of these and other power groups ensured that he was only really able to succeed with the third, which became known as glasnost. At the end of this state, its condition of absolute decomposition was reflected in the ease with which Yeltsin and his aides were able to dismantle it.

This history which we have all recently lived through may have ended the experiment that dominated our planet this century, but it provides new problems for 'nowhere is the ongoing struggle between global economic flows and cultural identity more important than in the wasteland *created by the collapse of Soviet statism on the historical edge of the information society*' (p. 69).

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Problems of social exclusion however, are far more widespread. Castells considers three areas in depth in the following chapter - Africa, the USA and, children. The position of Africa as excluded from the informational economy was highlighted in the first volume and here he attempts to understand why the nation state on this continent should have become predatory, rather than developmental as has been the case in the Asian Pacific region. Many factors have led to this including the impact of colonialism on the nature of ethnic identity in Sub-Saharan Africa and more recently the role of the IMF and World Bank in relation to both industry and agriculture. These factors combine to leave the greater part of this continent without the communications infrastructure to permit it to join in the informational revolution and with imposed economic policies that have led to poverty and misery.

While the USA is clearly at the other end of the economic spectrum, there is an increasing polarisation between rich and poor within the country that has left large parts of the population in poverty and misery also. What is important in looking at the USA is that it is likely to be typical of what will happen in other countries as they follow the informational path. Castells argues that there is a systemic relationship between the '*new, network society and the growing dereliction of the ghetto*'. The causes lie in deindustrialisation, the individualisation and networking of the labour process, the incorporation of women into the workforce under conditions of discrimination and, the crisis of the patriarchal family. The result is the exclusion of large groups of people from the economy and the subsequent rise of an alternative criminal economy which affect African-Americans far worse than any other group. The response has been to massively increase the prison populations although, '*in the words of Robert Gangi, director of the Correctional Association of New York: "building more prisons to address crime is like building more graveyards to address a fatal disease"*' (p. 149).

'*If any doubts were left about the fact that the main labor issue in the Information Age is not the end of work but the condition of workers, they are definitely settled by the explosion of low-paid, child labor in the past decade*' (p. 149). In this final section of his chapter on the rise of the fourth world, Castells examines the issues of child labour, the sexual exploitation of children and the killing of children, particularly through war. His analysis once again links these issues to the informational economy in that he argues that at the roots of the causes of the '*wasting*' of children are the mechanisms that are generating poverty and social exclusion.

Chapter three then considers the rise of the global criminal economy alongside the globalisation of the legitimate economy. The use of technology and the development of networks are features of both of these processes and Castells warns against the inclination of many social scientists to ignore this particular phenomenon. His analysis focuses in-depth on the role of organised crime in the Russian economy and, on the importance of *Narcotrafico* in Latin America. In addition to drugs, this global economy deals in the trafficking of weapons, nuclear material, women and children, body parts, the smuggling of illegal immigrants and money laundering. While certainly not a philanthropic enterprise, this crime does offer an alternative form of survival to many who are socially excluded and indeed is dependent upon the existence of such misery as much as upon the demand for its products from those with wealth. The size of this economy dwarfs that of many small countries, is significant in many medium sized economies and threatens the sovereignty of many states who's legitimacy is already under pressure from globalisation.

The next focus of Castells' analysis is the Asian Pacific region, in particular the economic success of Japan and the four Asian Tigers (South Korea, Singapore, Hong Kong and Taiwan), and of the potential of China. He considers the role of the 'developmental state' in these successful economies and of their recent relationships with civil society and attempts to develop some theoretical understanding of the changes that have occurred, which he argues cannot be explained by either orthodox neo-classical or Marxist economic theory. He also concludes that for a range of reasons to do with the historical and cultural differences between these countries, we are not at the start of a Pacific era, rather that while there is a great deal of interdependence, these countries have directly entered a world economy.

The case of China is fascinating and unlike his analysis of the other five which looks back at their development, here he is also looking forward at the ways in which the Chinese state is steering its economy towards informationalism. He argues that China's leaders do not have the arrogance of Gorbachev who thought he could not fail in his reform programme and as such they recognise the need to maintain control of their transformation. Indeed, he suggests that this is precisely why the Chinese Communist leaders look to Singapore as a model rather than to the former Soviet Union.

Chapter 5 moves back to Europe and gives a brief, but informative view of the process of unification thus far. Again, Castells examines the interaction of economic and identity issues in shaping the need for unification and the resistance to it. He rejects the notion that Europe might become a federal state, arguing that the desire to maintain some form of national identity while recognising the need to unify in economic terms will lead to what he terms a network state. While this is not a tested approach to government, he nevertheless believes it will be worth experimenting with in Europe. While national identity is clearly important and offers either the greatest resistance or the greatest enthusiasm for Europe (for example Scotland or Catalunya might claim their national identities as opposed to the UK or Spain and inside Europe) he also asks the question of whether there is a European identity. While the answer at the moment is probably no, there is evidence that many people aspire to this and he suggests that if this is a project identity, it is likely to be formed around the maintenance and defence of social, employment and welfare rights in opposition to the tendency of globalisation.

These three volumes constitute an important empirical analysis of our planet in the midst of the informational revolution. They are certainly worth reading and the author's style makes this an easy and pleasurable task.

Editor's Note:
The first two volumes in Castells' trilogy were reviewed in 11.3 and 11.4

Review of worker safety advisor (version 2.0) for PC

Software review by Colin Barnes

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Software Specifications

The Worker Safety Advisor (WSA) Version 2 was developed by Judith Granger and other experts (mostly with experience in Child Protection services) based at the University of Texas. The package was developed using Macromedia Authorware 4. It runs on any computer that runs windows. An Internet version, that requires the Shockwave plugin, is available from http://www.uta.edu/cussn/wsa.html.

Three versions of the WSA are on the CD, the 32 bit version with the WSA icon, the 16 bit version for older computers, and a version to demo the WSA. The WSA and associated files occupy approximately 6 MB of disk space. It costs:

A. Unlimited use of the Worker Safety Advisor for teaching by an institution of higher education, e.g., colleges and universities = $250.
B. Sale of the Worker Safety Advisor for unlimited use (no source code provided).
   a) $300 per computer/user site for the first 2 computers.
   b) $200 per computer/user site for 3 to 5 computers.
   c) $100 per computer/user site (or network node) use on 5+ computers (minimum of $1000).
   d) For large number of users, contact the developers to negotiate an agreement.
C. Modifications of the Worker Safety Advisor simulation to fit your needs can be provided for $35 per hour.
D. Sale of the Worker Safety Advisor source code with license to modify the source code with unlimited use of the modified simulation = $1500.

There are other options available upon request. Proceeds from the sale of the Worker Safety Advisor will be used to further the University of Texas at Arlington child protective services technology efforts, for example, to develop additional modules.

Usability

No problems were encountered loading the software onto several Pentium powered PCs and the Word format manual of how to use it (also supplied as a booklet with the CD) was easily found after installation.

As well as the manual, there is a 'demo version' of WSA supplied to allow users to a quick guided tour through the nine screens providing information on fifty topic areas. Although most of the information on worker safety is not available in the demo it is worth trying it as options are suggested to ensure that you see all of the features of the software in an organized fashion.

WSA is remarkably easy to use so long as one is able to use a mouse (a version able to be controlled via a keyboard or voice input might be welcomed by some people with disabilities). Help on how to navigate around the 414 pages of advice pops up as the cursor moves over the particular topics. These yellow panels dissolve away when one clicks away from them (or, at least, they usually did so.... In the pages with scenarios of situations in which child protection workers encountered threats of violence the yellow Help panels remained when one selected a particular scenario thus obscuring the new text. However, this was easily corrected and was the only bug I was able to find).

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Content and presentation

The Worker Safety Advisor (WSA) is a performance support system designed to improve workplace performance by providing on-demand access to the integrated information needed to complete a task or solve the problem at hand with minimal support from other people. The WSA increases one's ability to recognize, prevent, assess, handle, and recover from situations that endanger one's physical and emotional well being.

The WSA presents workers with several computer screens on which they specify the situation about which they need safety information. The WSA then searches a database of worker safety information and presents relevant information in an easy to read format.

While designed for child protective services, the WSA can be used in many situations such as:

- Advising students about safety issues before they go into a field setting
- Advising home care workers about safety issues
- Advising volunteers who work with clients

The simplicity, speed and straightforward nature of the package (and the fact that it will run on even old and low performance PCs) makes it very practical as a working tool in busy, cash strapped social work agencies. On the other hand, however, in these days of more and more powerful multimedia systems, I found the single, rather primitive, animation (on the escalation of crisis and response styles) rather a disappointment. There has recently been a series of TV advertisements in the UK to recruit to the armed forces on dealing with threats of violence. The camera takes the viewpoint of a soldier approaching a threatening incident and then the viewer is asked to choose one of two scenarios. The advertisement then reveals the correct one and invites the viewer who chose it to enroll in the army. One of the advertisements had the soldier removing her sunglasses thus causing a villager wielding a large machete to appreciate the soldier was a friend not a foe. If some of the excellent scenarios in text within this software were made interactive in a similar form the package would, I believe, have much more impact.

Goal and objectives of the worker safety advisor

The goal of the Worker Safety Advisor is clearly stated in the documentation with the package. It is to provide advice to child protective services (CPS) workers on how to perform their job more safely. The performance objectives are:

1. Workers who use the WSA will express a higher level of confidence about their knowledge and abilities regarding worker safety in CPS practice as measured by pre and post scores on a worker safety survey of WSA users.
2. Workers who use the WSA will be able to better recognize situations as unsafe and recommend appropriate actions to take in unsafe situations as measured by a survey of WSA users.
3. Workers who use the WSA will be able to assess the physical and emotional dangers of an unsafe situation as by pre and post scores on a worker safety survey of WSA users.
4. Workers who use the WSA will have fewer unsafe incidents as measured by self reports in a survey of WSA users (i.e., a positive correlation will exist between WSA use and having fewer unsafe incidents when adjusted for factors such as CPS experience, previous personal protection training, etc.).
5. Workers who use the WSA will have fewer unsafe incidents as measured by CPS incident reports (i.e., a positive correla tion will exist between WSA use and officially recorded unsafe incidents when adjusted for factors such as CPS experience, previous personal protect in training, etc.).
6. Workers who use the WSA and experience a threatening situation will take more appropriate action during the incident, more appropriate actions to recover from the incident, and more appropriate actions to prevent future threats as measured by a survey of WSA users.

It is to be hoped that the authors will evaluate the package in situ to gather data on how far it will meet these. If they do so, they will be able to produce later enhancements of the package which will be geared to better achieving these laudable goals.

Comments

I was surprised to find how universally applicable the advice given was in relation to Human Services work. With the exception of slightly different language (e.g. In the UK the term 'learning difficulty' is considered more appropriate than 'mental retardation' which is used in WSA), the contents of this package will make good sense to Social Workers whether they work Stateside or not. All the advice within the package is cross referenced to a series of (North American) texts with full bibliographical details.

As the documentation clearly states, the Worker Safety Advisor is intended to provide guidance only. The WSA is not a replacement for training, nor is training its goal. The WSA is seen as a refresher for information previously presented during training. However, the WSA or the information it contains might be used as a training tool. The authors state that WSA should be part of an organisational effort that includes worker safety training and policies and procedures on handling safety incidents or problems.

Conclusion

I believe this package (or one like it) should be associated with every client record system and, maybe, linked to records where violence is known to be a risk or where the worker has to encounter particular crises with a family (e.g. removing a child from a parent by order of the court). No such package can answer all the questions a worker or supervisor may wish to ask in these sort of circumstances. However, the computer, prompting even a minimal risk assessment of the situation, must be a good start to reducing potential harm and avoidable stress.

Billy breaks the rules

Software review by John Bennetts & Paula Nicholls

Billy Breaks the Rules CD-ROM by Cowan L & Bateman S (1999)
ISBN 0-9531563-4-6
Further infromation from: Information PLUS, 3 Hill of Heddle, Finstown, Orkney, Scotland. Tel: 01856 761334 Email: informationplus@compuserve.com
WWW http://www.orknet.co.uk/iplus

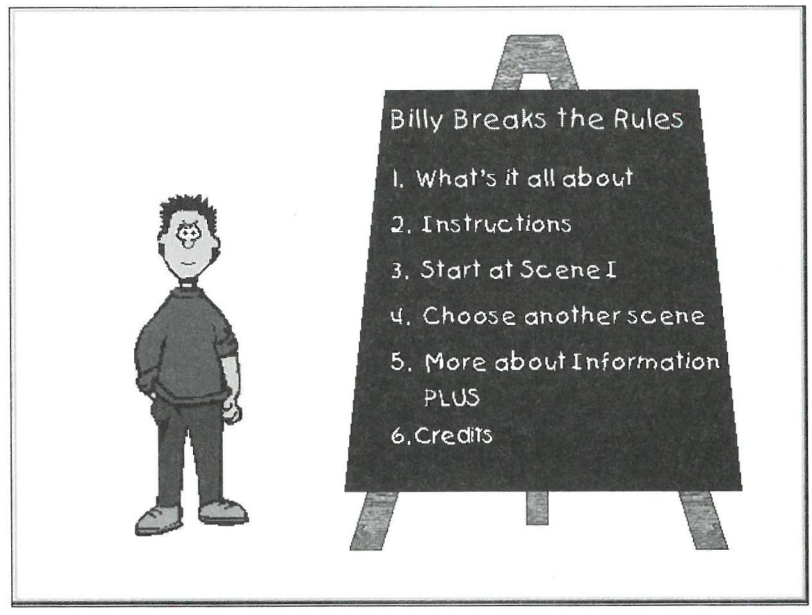
CD-ROM for Windows 95 or Macintosh
UK - £27.20 plus £4.76 VAT = £31.96 + £1.50 p&p
(£2.00 p&p for non-UK orders)

System requirements

Pentium PC running Windows 95 or higher with 16-bit colour and 16Mb RAM and a Windows compatible sound card or Standard or Power Macintosh with 12Mb RAM.

Description

This is a multimedia CD-ROM in the form of a game, which is designed for use with young people who live in an alternative family setting such as a foster home or a care home. It is intended to be used in conjunction with an adult helper in order to facilitate discussion about the issues which can arise for many young people within that setting.



The game begins with Billy stealing money from his carers, and the young person then follows him though a series of dilemmas that arise from the consequences of his behaviour. There are fifteen 'scenes' illustrating the interaction between Billy and his carers over this issue, and showing Billy's reaction to events. The scenes then offer a number of 'options' from which the young person can choose when making a decision on Billy's behalf. These lead through a variety of pathways to ten alternative outcomes. Each of these contains issues for further discussion and evaluation entitled 'talking topics'. In addition each scene contains entertaining animations, designed to enhance the player's enjoyment, and involvement.

John Bennetts is an out of hours duty social worker and Paula Nicholls teaches on a foundation course for learning disabled teenagers at Salisbury College. They can be contacted via CHST.

This product is intended to allow for the important issues of rules, sanctions and behaviour to be dealt with in a safe and realistic way.

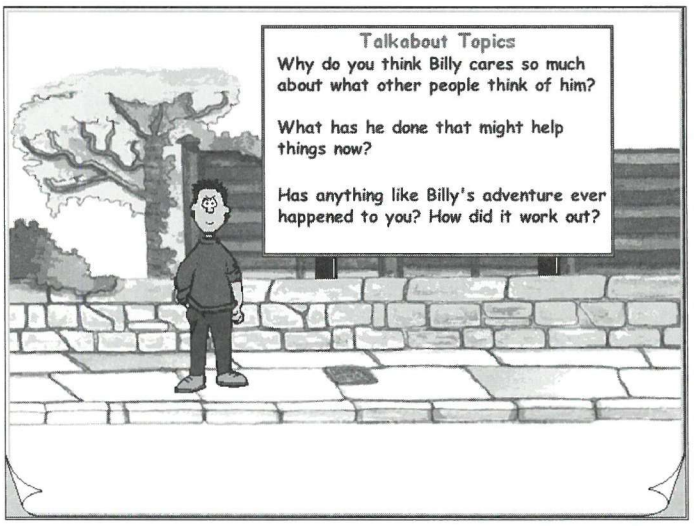
User feedback

We found the CD-ROM easy to install. After changing the Windows colour setting in accordance with the instructions in the user booklet, the CD loaded and ran without further intervention. The introduction's language and style is jargon free, while the game is visually attractive with crisp colourful cartoon graphics which draw in the user and make it appropriate to the target group. It is structured in a straightforward way which avoids over elaboration and makes it easy to use. Furthermore the guide to the scenes, options, and outcomes in the accompanying booklet is useful and clear, and makes the product easy to navigate for the adult helper.

The game has been enhanced by the imaginative use of multimedia features, which would successfully foster the involvement, and attention of the user. Full use has been made of the opportunities for music, speech, sound effects, and visual imagery, and the animation is inventive and amusing. Its' primary use is to tell the story, but it is also used to allow inanimate objects to comment on the action, and at times the supporting characters spontaneously express appropriate concern and support for Billy. Every scene includes incidental animation in the form of comments, visual humour, and sounds which are purely for fun.

Clicking on any of the four corners of a scene allows you to choose options, move backwards, exit and get help. This was a useful way to use the 'page' and makes the product easy to use.

The issues, and responses and consequences are well thought out, lifelike, accurate and representative. Being able to 'go back' through he story at any point means that reflection is built in. This allows the user to retrace their steps and look at where the negative or positive outcomes originates. This can be useful either for reflection or to target a specific issue. Altogether there are enough options and consequences available at each stage to make dilemmas lifelike and relevant to most situations.



The 'talkabout topics' given at the end of each story are an effective way to stimulate and focus follow up work and further discussion with the young person using the product

They also acknowledge the boundaries resulting from the intended role of the software: namely that it is a tool for discussion and not an end in itself.

A further strength of the product is that its structure and style also make it appropriate for use with young people who have learning difficulties and/or social and behavioural difficulties. We particularly like the way that the options appeared singly, giving an opportunity for discussion. As they are only read out by the computer on request any stigma which maybe attached to being a non reader is negated.

How could it be better?

These are suggestions for minor improvements which could be included in further versions of Billy Breaks The Rules.

It would be helpful if the instruction booklet was clearly marked as such, and the first part of the content relating to the Introduction and Control information might be better if it was bulleted. However the rest of the booklet is well structured.

No age range is given for the product, and therefore there is likely to be an assumption on the part of the potential buyer that it is targeted solely at young children. We felt this software is in fact also suitable for teenagers, and for young adults with learning difficulties.

As noted above, the corners of each scene are used as a means of moving through the software. On the first scene bubble labels appear indicating which function belongs to which corner, and this I found very helpful. Unfortunately these are not included throughout, and it soon becomes difficult to remember which is which. For clarity it might also be better to transfer the options function from one of the corners to the figure of Billy thus highlighting that the ownership of the decision lies with him.

At the outset of each scene the new developments which have taken place in the story are presented automatically in written form which is simultaneously read aloud. It is not possible to play with incidental animation until this has taken place. We felt that it might be better to give the young person time to explore the incidental animation before the narration, so as to avoid their being distracted from the discussion issues within the scene. One way to do this might be to delay the narration until the young person is ready to select it and listen to it.

Limitations of Review

The product was run using Windows 95, and was not tested on any other systems. Neither has it been possible to make an informed comparison with other software with similar content.

Summary

The reviewers enjoyed using the product and felt that it does what it sets out to do. The authors are aware of its' limitations and are explicit about the need for an adult helper. 'Billy Breaks The Rules' is a good start to the childcare adventure series.