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New technology in the human services

Volume 12, Nos. 3 and 4

Social services in the information society: closing the gap

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Upfront

by Jackie Rafferty

This double issue of the journal, Volume 12, Numbers 3 and 4 is the second part of the conference publication for HUSITA 5. HUSITA is the acronym for Human Service Information Technology Applications and represents a human network that first met in 1987. Volume 12, Numbers 1 and 2 contains papers within the themes of:

- Information and communication technology (ICT) for specific user groups,
- Social service provision supported by technology

This issue focuses on papers relating to:

- ICT in teaching and learning social welfare
- Human services in the information society: the broader context

We are pleased to present papers from both East and West with papers from Hong Kong and Japan as well as North America, Europe and Australia. A truly international coverage but with much in common as well as the differences in terms of the successes and challenges described.

Information and communication technology in teaching and learning social welfare

Within the papers on ICT in teaching and learning social welfare the development of the use of the Internet and the World Wide Web account for many of the similarities whilst the same tools point up the difficulties of adapting global systems to local circumstances.

In the ENITH (European Network for Information Technology in the Human Services) Berlin conference in 1995 John Bates described integrating the use of information technology as similar to the challenges of integrating anti-oppressive practice into the social work education curriculum. The first paper aligns these two subject areas as Joseph Kwok and Hoi Wah Mak describe the implementation of a course to raise students' awareness and knowledge of discriminatory attitudes and behaviour towards disadvantaged groups in society. Their paper *Using Internet databases in teaching 'Discrimination and Society'* takes us through the use of web based resource materials linked to *WebCT*, an online learning environment and discusses the advantages and disadvantages within these media.

The anti-oppressive theme continues within Adele Weiner's paper *Taking an HIV/AIDS education course to the 'Net.* Her paper covers the little written about area of transferring a traditional course curriculum to an 'interactional, international, Internet-based educational experience'.

Richard Ramsay and Jim Karls paper describes the development of the PIE classification system and a CD-ROM program that has been developed to provide students with a self-instruction method of learning the system and its underlying concepts as well as a tool for practitioners. *Person in environment classification system: adding CD-ROM options to the social work learning menu* is a response to the problem that although the classification system became a social work best seller in the USA there is little evidence that it is in widespread use. The 'speculation' is that the system was too time consuming to use in a paper and pencil format and that the CD-ROM would address this.

The earlier papers in this theme have discussed the use of ICT to deliver the social work curricula. One area of the curricula which has been sorely neglected in most countries is learning about the use of information within the social work process and how ICT impacts on that process. The Netherlands have undertaken considerable work on this topic and the paper by Herman van Lieshout and Hans Schrijen reports on research undertaken to see how 'social informatics' as it was termed has been embedded within Dutch Schools of Social Work. *Integration versus Isolation? Implementation strategies for ICT teaching in social work curricula* looks at the management of change and innovation requirements for successful implementation. An issue that is common to many of the papers in this journal and a complex area to which this paper makes a welcome contribution.

The management of change theme is picked up once more within *LaSwop – Law and social work practice multimedia project* written by Stuart Evans and Phillip Swain from Australia. Their paper discusses the events leading to the multimedia development 'LaSwop' and the issues and considerations that arose in translating it into practice within a resource-limited academic setting. In common with several other papers this paper also addresses the educational principles behind the program which is a welcome development.

Within the Centre for Human Service Technology we have experience of networking isolated, unsupported individuals which was found to be useful but did not necessarily help them gain recognition and support within their own schools. Through the 80s and 90s in the UK there was recognition at the very top levels that innovation in teaching had to take into account ICT but this was not reflected in those institutions which were being driven by research agendas and ratings rather than innovation in teaching. It is only as the information society has begun to take effect globally and the need for schools to be both effective, efficient and competitive that senior and middle managers within educational institutions have begun to embrace the ICT innovations and slowly the previously isolated individuals are being recognised as innovators. As the concept of virtual universities becomes more and more of a reality both the Lieshout and Schrijn, and Evans and Swain papers are a salutary reminder of the amount of infrastructure and attitudinal change required in order to move from traditional to ICT based learning. The last three papers in this section continue to explore the complexities of innovation.

David Burton and Brett Seabury's paper *The 'virtual' social work course: promises and pitfalls* looks at the impact the internet and web technology is having on social work education through the proposal of a comprehensive model for the virtual social work course and descriptions of how they have operationalised the model in two different courses. Each course was taken by both classroom based students and cyberspace based students. The paper introduces the problem of who 'owns' courses based in cyberspace and the resolution to this question being dependent on whether social work educators move forward collaboratively or competitively.

From the examples of individual projects we move to a broader overview of the use of information and communication technology in social work learning. Steven Hick's paper *Rethinking the debate: social work education on the Internet* argues for a theoretical framework to guide our actions and analysis on using technology and viewing its educational use within the relationship between science and technology in society. He frames learning technology use within the 'technophobia/technophilia debate and uses an evaluation study of an on-line learning course to illustrate the issues finishing with the challenge that "we should use technology to pursue historically challenging goals of basic human rights and justice".

Ann Wilkinson's paper *Environments for social work learning in the Learning Age* finishes the section of the journal on social work education and learning. Her paper pursues the nature of social work and global education from the perspective of open and distance learning and both physical and virtual learning environments. She draws

on the nature of the changes to social work education in the UK and the national Computers in Teaching Initiative experience to review the territory and draw out some of the cross-cultural themes.

Human services in the information society: the broader context

The two papers in this section by Joe Ravetz and On-Kwok Lai expand the themes of the last two papers in the previous section from the role of ICT within social work education and the information society to build theory and critique the information society and the role of both the citizen and social welfare.

In *Information communication technology: a barrier to citizenship?* Ravetz explores the impact of information technology on the meaning of citizenship and the state in a liberal democracy, the nature of rights within those definitions and their relation to transnational and global markets. His thesis is that "the centrality of information and technology is so important to the encouragement of citizenship that we need to add information rights to political, civil and social rights".

In a complementary paper Dr. On-Kwok Lai examines "the contradictions embedded in, and the prospects of, the information society, particularly on the project for better public health and social welfare. He does this through the perspective of capitalist welfare provision and using ICT to reinvent people's governance and participation.

Information and communication technology in teaching and learning social welfare

Using Internet databases in teaching "Discrimination and Society"

by Joseph Kwok and Hoi Wah Mak

Abstract

'Discrimination and Society' is an elective course offered by the authors to all students in the City University of Hong Kong. The aim of the course is to raise students' awareness and knowledge of discriminatory attitudes and behaviour towards disadvantaged groups in society, including women, older people, ethnic minorities and people with disabilities, as well as current measures in dealing with discrimination. Students are also given the opportunity to experience first-hand discrimination in society through role-play and other experiential and interactive activities. An interesting finding in the teaching of the course is that there is an abundant supply of information on the Web, offered by both governmental and non-governmental organizations, including advocacy groups. The databases have been found to be most stimulating to students. However, web-based databases are mainly generated in western and developed countries, and are still very much dominated by western perspectives and values. Students from Asia and the Pacific Region have to find a balance of information from other sources, mainly news reports and other media. Furthermore much effort is needed to improve students' skills in utilizing web-based databases, so as to give due attention to the world's growing concern for discriminatory attitudes and behaviors. This paper will discuss the challenges and issues in using web-based databases in teaching and learning about discrimination in society.

Introduction

The vision of tertiary education in Hong Kong is to "nurture leaders who have social conscience, a sense of social responsibility and a global outlook". One of the aims is to educate undergraduates to "display the ability to live and work in a diverse society and cross-cultural environment"(Education Commission, 1999, p.19). As a strategic measure to work towards the vision and to achieve the stated aims, the City University of Hong Kong has introduced a credit unit system since 1996. All students are given choice and flexibility in completing a certain number of credits outside their core programmes. The course, "Discrimination and Society", has been introduced by the authors for all students in the University, and it is the first of its kind in Hong Kong.

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The course has three contact hours per week and lasts for 14 weeks. The number of students enrolled in the course for 1998/99 was 57, and they came from the Faculties of Business, Humanities, Social Sciences, Science and Engineering.

Purpose of the course

The aim of the course is to raise students' awareness and knowledge of discriminatory attitudes, prejudices and behaviour towards disadvantaged groups in society, including women, older people, ethnic minorities and people with disabilities. Students also learn policy measures and practical skills in dealing with discriminatory practices.

The syllabus and organization of the course

The syllabus of the course focuses on the following major aspects of discrimination: age, disability, family status, racial and sex. These subject areas are discussed within the following framework:

(a) A history of human rights movements in the world with a focus on the Asia and Pacific Region;
(b) International perspectives on human rights and discrimination, with a focus on the United Nations' role and contribution;
(c) International and regional anti-discriminatory measures, including legislation, equal opportunities and / or human rights commissions, affirmative policies, self-help movements and advocacy, and public education;
(d) Practical knowledge and skills in dealing with discrimination at work and in the community in Hong Kong.

The teaching and learning of the course is through a dynamic mix of multi-media and multi-format approaches. The materials and formats used include Internet databases, documentary videos, movies, newspaper cuttings, library archives, field visits, role-play, and experiential learning.

Experiential learning, field visits and role-plays

Early in the course, it is arranged that students visit the office of the Hong Kong Equal Opportunities Commission so that they can have a first hand experience of how Hong Kong has come to recognize and deal with discrimination. Experiential learning is organized for all students by, for example, letting them go blindfolded with a walking stick, or in a wheelchair, along the street or through a housing estate or shopping mall. Students are later asked to reflect on their own feelings on the meaning of being disabled and handicapped by the social and physical environment, as well as to note the general reactions of the public. Such experiential learning has aroused deep feelings in the students towards discrimination, and reinforced their interests in pursing the objectives of the course.

At the end of the course, students are asked to give a presentation on a small group basis. Most groups choose to give a role-play presentation based on a selected discrimination situation, and how to deal with discriminatory behaviour. The role-plays are about controversial and challenging issues confronting Hong Kong society today, and they provide opportunities for students to demonstrate their ability to apply the knowledge gained from the course.

Web based teaching and Internet databases

WebCT[1] is used to facilitate and encourage interaction among students and between students and teachers. Reference materials, including newspaper cuttings, useful and interesting articles, recommended reading lists, as well as non-print reading lists are posted on the course home page, together with the Internet database links concerning discrimination. The posting of these materials are developed throughout the course by both teachers and students.

A newsgroup has also been set up to encourage students and teachers to exchange opinions and comments on issues they have identified from Internet web sites and assigned readings. The newsgroup has been very well utilized and a diverse range of opinions has been noted.

Issues in using Internet databases

Most reference materials used by the course come from Internet databases, which give up-to-date information and deal with current issues. Some databases also provide detailed policy and practical measures for dealing with discrimination. During a hands-on classroom exercise, students are asked to surf the Internet using the commonly available web site search engines and using any key words they deem appropriate. After about a one and half-hour search, students exchange their findings and comments on interesting web sites. It is not surprising that most web sites commented on by students are generated from the developed English speaking world. Web sites from other countries either contain little information or are not actively maintained. Attempts to use Chinese language browsers to navigate the WWW also do not return useful findings.

The following list gives a few examples of web sites on human rights and equal opportunities, age discrimination, disability discrimination, family status discrimination, racial discrimination and sex discrimination. These web sites are identified using popular and common search engines, and attempts are made to select from both developed and developing worlds.

Human rights and equal opportunities:

1. Asia Pacific National Human Rights Institutions:
   http://www.apf.hreoc.gov.au/links/index.html
2. Australia, with links to regional human rights non-government organisations
   http://arts.qut.edu.au/Humanrights/hrpage.htm
   http://arts.qut.edu.au/humanrights/hrpage7.htm
3. Canada: http://www.hri.ca/fortherecord1998/vol1/intro.htm
4. European Council: http://www.coe.fr/index.asp
5. Hong Kong: http://www.eoc.org.hk/
6. UN: http://www.unhchr.ch/
   http://www.usis.usemb.se/human/index.html
7. U.S.: http://www.gsa.gov/eeo/

Age discrimination

1. Australia:
   http://www.actag.canberra.edu.au/actag/Reports/Other/Rep4/Rep4ind.html

[1] WebCT (http://www.webct.com/) is a tool that facilitates the creation of World Wide Web-based educational environments by non-technical users.

2. Canada: http://www.grosman.com/dis4c.html
3. Hong Kong: http://www.eoc.org.hk/
4. Ireland: http://www.aging-world.com/news/age_ireland.htm
5. Netherlands: http://www.leeftijd.nl/
6. U.S.: http://www.eeoc.gov/laws/adea.html; http://www.nsclc.org/

Disability discrimination

1. Australia: www.ozemail.com.au/~disactn/transport.html
   www.oup.co.uk/jnls/list/indlaw/hdb/
2. Hong Kong: http://www.eoc.org.hk/
3. U.K.: http:// www.rnib.org.uk/wesupply/fctsheet/ddachild.htm
4. U.S.: http://www.usdoj.gov/crt/ada/adahom1.htm
   http://www.pcepd.gov; http://www.w3.org/WAI/References/Policy.html
   http://www.disability-council.gov.uk; www.bcodp.org.uk/issues/
   ddareviewletr.html; www.cae.org.uk/dda.html

Family status discrimination

1. Canada: www.lawreform.gov.bc.ca/pages/projects/rrsfs/contents.html
2. Hong Kong: http://www.eoc.org.hk/
3. U.S.: www.fairhousing.com/ohc/family~1.htm

Racial discrimination

1. Australia: http://www.caa.org.au/campaigns/urgent/cerd.html
2. Canada: http://www.gov.on.ca/mczcr/archives/english/
3. Denmark: www.global-cities.org/denmark.htm
4. Europe: European Council www.ecri.coe.fr
5. Europe: European Roma Rights Center http://errc.org/
6. Hong Kong: http://www.eoc.org.hk/
7. U.K.: http://www.cre.gov.uk/law/thelaw.html
   http://www.cre.gov.uk/about/aboutcre.html
8. UN: http://kypros.org/PIO/docs/un/discrimination/index.htm
9. U.S.: www.usc.edu/isd/archives/ethnicstudies/

Sex discrimination

1. Australia: www.employnet.com.au/enn89702.htm
2. Hong Kong: http://www.eoc.org.hk/; www.citizensparty.org/womenpp1.html
3. U.K.: www.eoc.org.uk
4. U.S.: http://www.baclaw.com/; http://www.startext.net/homes/rainbow/
   language.htm; http://ucs.orst.edu/~huj/512/main.html

All of these web sites use English as the medium, and some provide alternative language choices. Most give rich, well-organized information. While this is usually specific to their country of origin or their region, a few also offer an international and/ or comparative perspective. Most are user-friendly and easily accessible by students; and are laid out in attractive designs which sustain students' interest in learning. And, finally, the great majority of them are generated in the developed world, and we will return to the particular implications of this for our course.

In general, students have found surfing the WWW very stimulating. They have the opportunity to be exposed to some sites that advocate the inclusion of newly identified marginal groups (e.g. HIV carriers, gays and lesbians, and people with chronic illnesses) and those against certain anti-discrimination measures, e.g.

affirmative action in favour of the black people. There is also a tendency for students to become more dependent on information retrieved from Internet and to miss out other sources of information. Unfortunately, information given by the commonly found web sites are very much culture and society specific. As they are generated in western and developed countries, western perspectives and values are not surprisingly dominating in the presentation and interpretation of the materials. For example, there is a good source of Internet databases in the west giving information on legislative measures, and how various statutory commissions organize themselves, as well as their means of achieving or failing to achieve their stated objectives. These databases have given students an impression that various forms of discrimination have been clearly identified, anti-discrimination measures well advanced, and anti-discrimination institutions well positioned in dealing with all the issues. Actually many issues, such as adequacy and enforceability of legislative measures and the prevalence of prejudice among the general public, are as controversial and challenging as ever, and are hot public debate topics which are still unresolved.

Because they are attracted to web sites of the developed world, and have become dependent on them for information, students suffer from a lack of information and perspectives when discussing discrimination issues in the Asia and the Pacific Region, and other parts of the world. For example, students are aware of the consensus policy and value statements created by the United Nations, and also debate their application to individual countries. Students can easily find Internet information on arguments why certain countries fail to follow the United Nations conventions, but it is extremely difficult to find information on the other side of the debate.

Indeed, in the Asian Region, there are very few official Internet databases on human rights or any aspect of discrimination. There is, for example, much less about racial discrimination in Asia. Chinese is the largest race in Asia, and they are found in all Asian countries. Discriminatory practices against citizens of Chinese origin in a number of Asian countries are commonly witnessed. The most recent case was found during the recent riots in Indonesia in 1998. At the same time affirmative actions in favour of the majority race against the Chinese race in some countries are common phenomena. Information on how international politics affect the ways that governments in Asia deal with such practices is very difficulty to find on the Internet. Issues concerning Asian countries cannot be adequately understood and analyzed without knowledge of their societal and cultural contexts.

Discrimination between Chinese groups within China may also happen. For example in Hong Kong, issues of discrimination against minority ethnic groups, and migrants from China Mainland, have given rise to heated public debate. The issue has been made more complex by the Hong Kong government's handling of the landmark ruling of the Court of Final Appeal given on 29 January 1999 concerning the residency rights for mainland-born children (South China Morning Post, 1999). These kinds of complex issues have to be carefully analyzed from legal and constitutional, historical cultural and political developments. Because of the lack of useful Internet databases in these areas, it is rather difficult for students to develop an Asian perspective so as to bring about an informed debate on issues of racial discrimination. Similarly Internet databases on other forms of discrimination such as sex discrimination and disability discrimination in Asia are very few in number. Of those few databases that exist, their information is either scanty or not properly maintained.

To further illustrate that a bias of perspective may occur when Internet databases cover mainly the developed world's emphasis on human rights perspective and on pursuing anti-discrimination based on civil and political rights. Some Asian countries over the past decades have set national solidarity and economic sufficiency as their national targets. These countries are more concerned with economic, social and cultural rights, and consider national interests and collective rights more important than individual rights. Therefore, these countries have not actively pursued

anti-discrimination measures from the perspective of civil and political rights. These debates are not as evident on the Internet as in newspaper coverage.

The Internet databases give student an impression that the developed world has an advanced system of legislation and institutions to enforce the law concerning anti-discrimination. However, as J. F. Mathews, former Attorney General of Hong Kong said in the conference 'Advancing the Human Rights of Women' in 1996, "The development and protection of rights rests, ultimately not on laws, declarations or treaties, important though they are, but on the unremitting efforts by us all to put these laws, declarations and treaties into practice." (Byrnes, et al. 1997, p.12) In some Asian countries, there are a growing number of non-governmental organizations, including self-help organizations and advocacy groups working towards the elimination of discrimination and promotion of inclusion and equality in the society. A process of empowerment whereby disadvantaged groups are gaining greater control over their lives has actually occurred (Thompson, 1998, p.211). How do these NGOs develop and function in their culture and political systems? How do they work in partnership with governmental organizations and professional bodies? These are some of the important questions to help students understand the subject of discrimination. However, data contributing to an informed debate on these and other similar questions is unlikely to be found on the Internet.

The differences in terms of quantity and quality of the Internet databases between the North and South, or the developed and developing worlds, could be explained by: (a) Asia's relatively limited experience for dealing with discrimination and human rights issues; (b) its lack of resources applying modern information technology; (c) its lack of experience in building user-friendly Internet databases; and (d) the uncommon use of English language which is still the common language in Internet search engines.

Students are therefore advised not to become dependent on attractive and user-friendly Internet databases, but to search for a balance of information from other sources, mainly library materials and news reports. In fact, teachers have taken extra efforts to share with students current newspaper cuttings and articles to highlight the historical, political and social issues shaping discrimination or anti-discrimination measures in Asia.

Training students to use web serving skills

Given the shortcomings of Internet databases, it has become necessary to improve students' skills in utilizing the World Wide Web. In the initial stage of web surfing, students need to learn not only the strengths and weaknesses of various search engines, they also need guidance on organizing and finding inter-relationships among web sites. Students have found that the frameworks and paradigms provided by teachers are useful tools for utilizing web information to help them understand the causes, nature, development, and tactics of dealing with discrimination.

Conclusion

The course "Discrimination and Society" has been well received by students because of its multi-media and multi-format in teaching. Among the teaching and learning tools, Internet databases have enormous capacity and potential, though their limitations have to be noted. These limitations would be greatly reduced if more Internet databases were to be created by both governmental and non-governmental organizations in Asian countries. As modern information technology becomes more affordable, and as more Asian people become more acquainted with the World Wide Web, it will not be too long before we find that teaching and learning through the Internet have become popular and constructive for nurturing our leaders of tomorrow.

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Taking an HIV/AIDS education course to the 'Net'

by Adele Weiner

Abstract

This paper discusses the development of an HIV/AIDS course from a traditional classroom curriculum to an interactional, international, Internet-based educational experience. The project provided graduating social work students with access to the latest information, created additional support for those working in stressful field placements, and permitted participation to those who could not take part in a traditional class.

Introduction

Most, if not all, social workers will have to work with people who are HIV affected. As part of the graduate social work curriculum, a specialized elective was developed for advanced students in field placements working with HIV/AIDS affected people. In this rapidly changing field, it is important for students to have access to the most up-to-date information and dialogue with professionals and others.

Medical education has already recognized the advantages of using the Internet to supplement traditional course materials (Savitt & Steele, 1997; Davis, et al., 1997; Westberg & Whitman, 1997). The use of the Internet is thought to enhance student enthusiasm by employing multimedia materials and creating opportunities for interactive learning (Davis, et al., 1997). Kerka (1996) suggests that "the Internet and the Web help overcome the barriers of time and space in teaching and learning" (p.1). Wulf (1996) describes several methods for using the Internet in courses: the delivery of materials by electronic means, asynchronous participant discussions using bulletin boards or mail lists, real-time, interactive conferencing, and informatics - the use of online databases, libraries and websites to gather information. Kerka (1996) suggests there are many advantages to using the Internet for education including flexible scheduling for learning, the ability to reach a larger audience, compatibility of computer equipment, quick development time for class materials and ease in updating materials. Web pages are now rather easy to develop, publish to the web and revise quickly. Aside from online conferencing sessions, most participants can participate at their leisure. Many of these issues became obvious advantages when moving the course on the "Social Dimension of AIDS" to the Internet. This paper will present an overview of the various Internet technologies relevant to this course and a discussion of the advantages and risks in using them in social work education.

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The HIV/AIDS course project

This project was developed as a means of providing graduating social work students with access to the newest information, creating additional support for those working in stressful field placements and allowing participation to those who could not take part in a traditional class. Thus this class became a hybrid of a traditional class held in a classroom and a distance learning class held in cyberspace.

Participation in the course required that the student was in the second year of their field placement, that a part of their field placement involved working with people living with AIDS/HIV (PWLA's) and/or their significant others or a policy/ programming assignment to provide services to PWLA's, permission of the instructor, and Internet access. Participants who wanted to take the course were either working in agencies specifically designed to provide services to PLWA's or were able to work with their field instructor to develop this as part of their assignment. Students in this class represented the wide variety of settings that provide social work services - schools, hospitals, nursing homes, child welfare and special AIDS service organizations. The prerequisite of field placement and permission of the instructor were utilized as this course was not simply 'about' HIV/AIDS, but rather designed for supporting advanced students who were dealing with the very difficult issues in providing services to clients. Individuals who simply had an interest in the topic and wanted to learn basic information were directed to other resources.

Students were from two different academic programs within the same graduate social work school who would normally have very little opportunity to interact. Some participants were from the summer block program who take classes on campus during the summer and return to their home communities throughout the United States, Israel and Canada for their field placements. These students are required to take one 'directed studies' course during the fall semester of their second year of field placement. Historically, these courses have been structured as independent study electives with a focus on field practice. The other members of the course were traditional students who had registered for the class during the semester and had expected to meet on a weekly basis.

Other participants included faculty and students from other schools, professionals working in the field of HIV/AIDS and some HIV positive individuals. These were recruited through personal relationships, an e-mail invitation to a general social work mailing list and responses to individuals who expressed interest in the guest book on the course's web page. As the course develops, it is hoped that graduates will remain active on the mailing list and in conferencing sessions. The mixture of participants gave the class an added perspective that might not otherwise be available to the students. Individuals working in urban settings were able to talk with others who were in rural settings. Professionals who might not be able to travel to speak with a class were able to answer questions on the mailing list or participate in conferencing sessions.

The "Social Dimensions of HIV/AIDS" course had been offered for several years. In the past, the faculty used the Internet to secure up-to-date information and materials for the course. Many of these were included on the syllabus, duplicated and distributed to the class or placed on library reserve. Since most students are now Internet capable (Plotnick, 1995), the course resources were expanded to include five Internet components:

1) a closed mailing list,
2) an interactive syllabus with specific web pages included as readings on the course syllabus and an online book ordering option,
3) a web page specifically developed for the course,
4) subscriptions to the National Institutes of Health Centers for Disease Control (CDC) *AIDS Daily Summaries*, and

5) office hours and real-time conferencing at an educational MOO (Multi-user Object Oriented, text-based, virtual environment). Access to these components can be found on the course's web page at http://www.geocities.com/CollegePark/7113. This multi-modal approach encompasses many of the components discussed by Wulf (1996) as elements of education using the Internet.

The students in the summer program met as a group with the faculty prior to leaving campus. The traditional students met as a class at the beginning of the semester. Both groups received a copy of the syllabus. Discussion focused on the course requirements and expectations for participation. The same 'in-class' rules for participation in the traditional course, regarding confidentiality, respect and tolerance for difference, were expected in the Internet course. Prior to each assignment the faculty member solicited questions. Student responses and questions had to be posted to the mailing list, and were encouraged under the philosophy that there are no stupid questions and if one person is unclear so is someone else. Thus, any general discussion of assignments had to take place in 'public', while private e-mail was saved for the equivalent of individual student 'meetings' with the faculty or other participants.

It was relatively easy to create the interactive course syllabus which was prepared as it had always been using Wordperfect and simply copied and pasted into a Netscape Composer window. Since the links for readings had previously appeared on citations, it was a simple matter to copy them, and using the link tool, to make them actual links. Now rather than having to type in links and locate them themselves on the web, students simply had to go to the syllabus web page and click on the one they wanted. This prevented the frustration of typing in long universal resource locators (URL's) and possibly making a mistake. In addition, on a regular basis it is easy to check whether the links are still active using a web inspection utility such as that provided by Linkexchange (http://www.siteowner.com/) and add new links as they become available. Thus, with a web-based syllabus it is easy to provide students with updated readings without additional paper duplication.

The web based subscription to the CDC *Daily Summaries* provides students with a review of the most important events happening in the field. It is available at no cost and is e-mailed on a daily basis. Students were expected to use relevant citations in their written assignments.

While students were provided with many professional resources on the Internet, they were also required to locate materials to use for their own projects. E-mail discussion focused on using search engines and databases. Students also discussed the reliability of some of the materials they found on the Internet and learned to be educated consumers in evaluating resources found on the World Wide Web.

The online book ordering of texts allows students flexibility in ordering required books as they need them or recommended books which are unique to their own projects. This was particularly valuable for students who do not have access to a campus bookstore. The bookstore used, Amazon.com, also provides book reviews and allows searches for similar titles.

The mailing list was open to members of the course, graduates of the course who were working in the field of HIV/AIDS, People Living with AIDS (PLWA's), social work students and professionals from around the world. Students were required to participate in the mailing list and, on a weekly basis, the faculty member posed a question based on the readings or an article in the *CDC Daily Summaries*. Some students were more active than others, but even shy students participated. The opportunity to read the messages at their own speed, think about and edit their responses, allowed some students who might not otherwise have spoken up in class to participate. The publicly recorded nature of e-mail also made people think carefully

about their responses. The comments were less thoughtless than some of the things often said spontaneously in class.

The final assignment was adjusted to accommodate the new design of the course. This exercise involves the development of an HIV/AIDS prevention project, which is to be implemented in the student's field placement or community. In the past students had to discuss their proposal in class and make a brief presentation upon completion. Time had always been set aside in class for several weeks for this. Students were now required to e-mail the mailing list with their proposals and final reports, which were discussed. Because of the 'documenting' nature of e-mail, students were preparing proposals which appeared to be more organized than their verbal discussions in the past. It was also harder for a student to not participate than it had been in the classroom, since participation was documented and visible to all. Other members of the class made very good comments and suggestions, which were in written form so they could be easily saved and remembered.

As with traditional classes, the class content may shift in response to current events. During the Fall 1997 semester, the case of NuShawn Williams was discussed in the *Daily Summaries* and the news. This was a young HIV+ man, who infected a large number of young women in the Buffalo, New York area. He was later discovered to be mentally ill. At first the discussion was very punitive and value laden. In order to shift the students' perceptions, the faculty member asked them to imagine that they were this man's social worker. This allowed the students to discuss a whole variety of issues, including their ethical obligations as a social worker. They also gained a better understanding of the client and the need for comprehensive HIV/AIDS prevention education and empowerment among young women. This discussion would not have been possible in the past for participants in the traditional 'independent studies' courses, who only had contact with the course instructor and not each other.

One of the issues often brought up about traditional distance learning courses is that the student is 'lonely' and missing the interaction of the classroom environment. Using the mailing list, conferencing and private e-mails, students built a community and were able to help and support each other. Many of the e-mails to the mailing list involved difficult situations with which the students were coping and the responses were those one would expect from social work students in a classroom setting. Sometimes the lack of non-verbal cues or poorly written communications created confusion, but these were often remedied with follow-up.

Several sessions were held at the educational MOO where the students explored a variety of AIDS education 'objects', visited the virtual AIDS Quilt and talked with a biologist. Students also visited the MOO outside of class sessions to review materials. The faculty member kept regular 'office hours' on the MOO so students could drop by and visit as they might in real-life.

Students reported that the added interaction provided by the Internet was valuable to their learning. More than 250 messages were sent to list participants and many discussed current issues as they appeared in the *Daily Summaries*, course assignments and projects, or provided assistance in dealing with field situations. Since not all of the professionals were social workers, students were exposed to differing views and expertise not necessarily held by the faculty. In addition, some of the professional participants and PLWA's would not have been readily available to the students because of the nature of their positions and their geographic locations.

The Internet can be a valuable resource in augmenting a course in HIV/AIDS. Not only can up-to-date information be accessed by students, but a variety of professionals and PLWA's can be included in discussions on mailing lists and MOOs. This provides added dimensions not otherwise available in a traditional classroom setting. In addition to learning the course content, students acquire the skills necessary to navigate, search, and communicate on the Internet.

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Person in environment classification system: adding CD-ROM options to the social work learning menu

by Richard Ramsay and Jim Karls

Abstract

This presentation showcases a CD-ROM program that integrates the core concepts of a holistic model of social work internationally field tested PIE Classification System. Designed as a stand-alone training module (6 hour equivalent) or as modular unit in social work courses. The presentation will demonstrate its main features and illustrate the multimedia technologies used to develop the program.

Context

In 1997, the University of Calgary, Faculty of Social Work embarked on a technology mediated instruction project. This was made possible with Year 1 funds from a $30 million Learning Enhancement Envelope (LEE) provided to higher education institutions in the province of Alberta over a three year period. The objective was to design, develop and test technology supported learning modules for social work students and professionals.

This paper describes the development of one of the learning modules: a CD-ROM prototype, which integrates the conceptual components of a holistic model of social work (Ramsay, 1994) with the PIE Classification System (Karls and Wandrei, 1994a,1994b). The PIE System has been internationally field tested and is currently evaluated by many as becoming the profession's universal standard for assessing social functioning.

The prototype provides a computer-assisted, self-instruction method to acquire knowledge of core content and a practice section with case material to aid the learner in the development of assessment and database entry skills. It was developed to serve as a stand-alone continuing education program (equivalent to a 6 hour workshop) or as a substitute for an equivalent number of student contact hours in community college, undergraduate or graduate level social work courses.

The main menu features of the program are described, along with a brief overview of the multimedia technologies that were used to develop the self-learning format of the program. The CD-ROM project was headed by a social work content specialist and project leader. In addition, a team of multimedia specialists was required, which included instructional designers, video

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production directors, producers, camera and sound technicians, computer programmers, and graphic designers.The *Macromedia Director* authoring system was used to provide a multimedia development shell for the program. The prototype is a cross platform production with built-in software which makes it easy to operate in a PC or Macintosh environment. No additional software is required to operate the CD-ROM program.

Program description

Main Menu

The main menu for the module was generated with the help of participant feedback from several field tests of a 1-day PIE System training workshop with social workers (in Canada and the U.S.), community college social work students and staff of field education agencies affiliated with from Faculty of Social Work. The menu topics are as follows: Welcome, Introduction, Holistic Model, PIE System, Mini PIE, Practice Options, Interventions, and Cases.

Welcome

The program opens with a title screen, background music and a brief welcome message from the project leader. Users are informed that the CD-ROM will:

- introduce them to a holistic model of social work and the PIE classification system,
- give them an opportunity to use a Self Study test,
- provide them with text and video cases to practice using the PIE System, and
- give them practice in using a computer-assisted client information database.

A brief on-screen instruction directs users to an easy-to-use triangular button system that can also be used to access other main menu topics, get Help or Quit the program. A similar button system allows users to page forward and backward throughout the program.

Introduction

This section has a page scrolling button installed to provide the user with easy access to background information on the history and development of the PIE Classification System. Although the CD-ROM provides sufficient information and supporting materials for users to adequately learn the PIE System, students are expected to have their own copy of the PIE Manual. They are encouraged, but not expected to have a copy or access to a copy of the Person-in-Environment System book.

The PIE System

The PIE System is described as a holistic, four factor classification system which social workers can use to describe and code social functioning problems with common descriptors. It was developed to be used independently or to complement information from diagnostic systems used by other disciplines like medicine and psychiatry.

The four factors address problems and strengths under the following headings:

- social roles in relationship to others
- social environment
- mental health
- physical health

The PIE System has two main features:

- users learn a holistic way of making a social functioning assessment, and
- they obtain a clear sense of what the next practical next step should be in providing social work help.

This section provides a brief history of the development of the PIE System. Although social work emerged at the beginning of the 20th century, it has taken longer than other human service professions to develop its own classification system. Physicians have the International Classification of Diseases (ICD-10) system. Psychiatrists and psychologists have the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV), which is also used by many clinical social workers.

A small group of dedicated volunteers in California, led by Dr. Jim Karls and Dr. Karin Wandrei pioneered the development of the PIE System. Their efforts were precipitated by the publication of the DSM III in 1980. They could see that if social work did not develop its own classification system it would inevitably have to use the language of another discipline to describe its work. In 1981, NASW provided a small grant to develop a prototype system and a task force of prominent practitioners and academics, led by Karls and Wandrei, was commissioned to develop a system for classifying social functioning problems experienced by clients of social workers.

Early development work focused on the 'person-in-environment' construct. Background information on this construct is connected to the work of Harriet Bartlett, in the 1950s and 1960s. Bartlett was critical of those who used the construct to describe social work as a dual purpose profession , which divided practising social workers into person-centered or environment-centered competitors. Bartlett (1970), as did earlier social work pioneers, acknowledged 'person' and 'environment' as anchors to the profession's domain. She added a third factor pointing out the importance of 'interaction' between person and environment as the central focus of social work practice. She was among the first to clearly articulate the domain of social work as Person-Interaction-Environment, now shortened to the familiar person-in-environment (PIE) construct.

Holistic Social Work

The holistic model section was designed to provide:

- background understanding of why the PIE System is holistic,
- a holistic representation of the profession of social work, and
- an overview of how the PIE System integrates with the holistic model of social work.

This section provided the multimedia specialists with their greatest challenge. The holistic model described is a conceptual model based on fairly abstract representation of the principles of holism, augmented with the use of 2-dimensional diagrams and a 3-dimensional physical artifact. The programmers and graphics specialists were asked to design animated graphics to illustrate the unfolding complexity of a holistic four component model of social work practice. *Adobe Photoshop* and *Adobe Illustrator* programs were used to develop screen graphics. Meta Creations *Bryce* was used for 3-D graphics and movie renditions of these graphics were formatted in *Quick Time 3*. The scroll through text pages of this section are extensively illustrated with animated graphics to facilitate the integration of abstract conceptual models with practical case situations.

Holism

Holism derived from the Greek word 'holos' meaning 'everything' is defined in the program as a process way of thinking as well as a network-like perception of how all things are interconnected. Learners are introduced to the view that whole-to-part (wholistic) thinking leads to an understanding that the behavior of a whole system can never be fully predicted from an understanding of the behavior of one or all of its parts, commonly depicted as the "whole is more than the sum of its parts." Conversely, the more common practice part-to-whole thinking incorrectly implies that a careful analysis of the behavior of the parts of a system can lead to a full understanding and predictable explanation of the behavior of the whole system. This reflects the reductionist assumption that a "whole is [simply] the sum of its parts." The holistic model is premised on the principle of whole-to-part thinking.

Social workers who are familiar with general systems perspectives know that systems consist of 'sets of interacting parts.' Those who work from an ecosystem perspective, which is perhaps more familiar to social workers, know that it can be used to understand social networks and is generally described as sets of interacting parts between living organisms and their environment. Ecosystem diagrams typically show hub type connections between a person-centered core and surrounding environment elements. This type of diagram does not illustrate that all parts of the ecosystem are interconnected, as one might expect.

Whole systems are described in the program as systems that can be depicted with all parts interconnected to each other. A minimum whole is shown to be a system that consists of 4 components (faces) interconnected by 6 interactive relationships. Diagrams or physical artifacts of a geometric tetrahedron are used to model the structure of minimum whole system. Whole system models can be unfolded and multiplied to display the complexity of ever-increasing patterns of interconnected parts. Using the faces of a minimum whole system as a model for social work, four core components, of the profession are described and displayed in diagram form as a set of interacting parts.

- domain of practice (DOP)
- domain of the practitioner (DOPt)
- paradigm of the profession (POP)
- method of practice (MOP)

Each of the four components can be unfolded to display an additional level of four part interconnectivity. The four components are briefly described below:

*Domain of Practice:*This component depicts the traditional person-in-environment area where the helping methods of social work are used to serve and advocate for the social welfare of others. Coupled with the profession's dedication to Person-centered social well being and adequate Environment-centered contexts enabling humans to live together free of poverty and social injustices, the domain depicts the Interaction element as the primary or central focus of social work practice.

*Domain of Practitioner:*This component is used to acknowledge that social workers, like the people they work with, have their own person-in-environment network, personally and professionally. The relationship dynamics of this network affect how they perceive the domain of their clients and how they apply their methods of intervention.

*Paradigm of the Profession:*This component addresses the need for an enduring group of colleagues to organize around a particular view of a defined domain of practice.

The group needs to have generally agreed upon modes of professional activity related to values, ethics, research and practice questions, methods of inquiry and practice interventions. The activities that meet these requirements are often defined as 'paradigms'. Social work, like other disciplines, needs a core component of this kind to minimize disagreements among those who learn the basics of social work in different cultural contexts. Key elements of this component can be used by social workers to select practice options appropriately matched to their PIE System assessments.

*Method(s) of practice:*This component represents the need to have a part that depicts the helping process phases and intervention methods used by social workers to put their knowledge, values and skills into helpful actions. The assessment phase of social work's general problem-solving process represents the point at which the PIE System instrument can be utilized. Once the person-in-environment assessment is completed and practice option(s) selected, social workers use the method component to select an appropriately matched intervention approach.

Core components

To minimize the need to grasp the holistic complexity all at once, learners are encouraged to view the entire model, then to explore each component separately at the next level of four part interconnectivity before returning to a view of the entire model to show how the PIE System is used in the context of a holistic model of social work. The holistic nature of each component is depicted by a minimum of four interconnected elements:

1. *Domain of practice*

The holistic depiction of this component identifies one 'person' element interconnected with three environmental 'otherness' elements. Describing environment elements as 'otherness' acknowledges the contextual and relationship nature of social functioning. These environment elements are described as: personal otherness, resource otherness and validator otherness.

*Person (P):*This element identifies a person (individual) or grouping of persons (couple, family, community, and so on) in different size and kinds of social arrangements. Three of the four factors of the PIE System (social role, mental and physical health) provide person description information.

*Personal Otherness (PO):*This element represents personal social supports, usually defined as intimately close or 'significant other' to an individual or family, but also to a group, community or even a nation. A personal other can be an individual (friend, relative, etc.) or a grouping of persons (family, friends, groups, community, etc.).

*Resource Otherness (RO):*This element consists of all the other opportunities, resources, goods and services of a political, social, spiritual, geographical or economic kind that can sustain, enhance or impede the social role functioning of a person in relationship with others in their life. These typically include the social institutional resources in a given society - health, welfare, education, employment, transportation, judicial, etc.

*Validator Otherness (VO):*This element identifies proper and relative norms - expressed as values, beliefs, ideals, customs, traditions, laws, policies, sometimes collectively defined as culture - used by individuals and other societal groupings to govern their interconnective relationships with others. These validators serve as culture-specific

guides and/or constraints to regulate, control, socialize or otherwise affect the qualitative nature of particular person-in-environment relationships. Validator norms are present in all person-in-environment systems and directly affect the nature and quality of interconnective relationships between all other elements in the system.

2. *Domain of practitioner*

The elements of this component are identical to the domain of practice elements. Social workers experience the same person-in-environment elements in their personal and professional lives that people they work with experience.

3. *Paradigm of profession*

The interconnected elements of this component identifies four possible practice options available to a social worker, either in the form of their own expertise or through the expertise of colleagues, within or external to the discipline. Social work includes both generalist and specialist practitioners. Social workers, generally speaking, divide their practice activities into micro (including clinical and other forms of direct client work) and macro (including various forms of community development work and other forms of working on behalf of groups/categories of people).

*Client system:*This option reflects a decision to work directly with people who request or are willing to be in a client role to address a social functioning need. The service could be in the form of individual, couple or family counseling; crisis intervention; social support services, and so on. Or, it could be in the form of community development services requested by a community group.

*Target system:*This option identifies the decision to work with part of the person-in-environment domain that needs to be influenced or persuaded to be helpful toward a client system or in some cases to help a potential client system decide to assume a client role. The practice actions could be in the form of influencing individuals in social institutions to make their services more accessible, responsive or available to a client system. It could be in the form of persuading community citizens, for example, to become foster parents for children without parents. Or, it could be in the form of influencing policy makers to correct systemic barriers which are contributing to discriminatory practices and other acts of social exclusion experienced by clients and/ or categories of people like them.

*Action system:*This option identifies the decision to work with part of the person-in-environment domain that has already agreed to be cooperative or serve as an ally to those who are providing client system work or carrying out target system activities. The practice actions could be in the form of practitioners calling upon colleagues to act on prearranged agreements to accept referrals without hesitation. It could be in the form of providing parenting support services to foster parents who are direct providers of a supportive family system to children in need of substitute care. Or, it could be in the form of a staff development team providing skill training and other forms of support to social workers engaged in client service and/or target activity work.

*Change agent system:*This option identifies the employer or self-employment systems used by social workers. This system is guided by mission and function constraints that generally define the type of services to be provided. In some circumstances, the change agent system can be the subject of one of the other three practice options by one of its own social workers. It could agree to be a client of one its social workers in order to develop a new service. It could be targeted by a social worker employee to

change a policy that is discriminatory to agency clients. It could be engaged as an action system to help other agencies provide a needed service.

4. *Method(s) of practice*

The holistic depiction of this component is presented in the form of the systematic phases described in the problem-solving process of helping. Four commonly recognized helping process phases are: engagement, assessment, intervention, termination. Use of the PIE System instrument takes place in the assessment phase and leads to the selection of appropriate practice options and intervention methods to be implemented in the intervention phase.

Summary

The unfolded interconnectiveness of the holistic model depicts the complex network of inter-element relationships that must occupy the relationship-centered focus of social work practitioners. It also provides a bigger picture understanding of the social work profession and offers a conceptual context for a social worker to use the PIE System.

The PIE Classification System

The PIE System is designed to help social workers prepare a holistic description of social role, social environment, mental health and physical health dimensions that contribute to the social functioning of a person. The primary emphasis of the PIE System is to help social workers construct a descriptive classification of factors that will lead to practical next steps of helping, and an easily communicated explanation of why particular helping methods or approaches were selected. Although a numerical coding system is included, the narrative classification descriptions always take priority. Developmental testing has shown that it can be used in any field of social work practice. It can be used by social workers with a variety of theoretical orientations and approaches to their methods of helping. Although it requires social workers who use it to construct their own professional assessments (not the client's for example), it is not restricted to any particular style of social work practice, allowing social workers to use it independently or collaboratively with their clients and others they serve.

The structure of the PIE System factors is defined by its four factors and their relationship to each other:

Factor I - social roles, relationship types, severity, duration, coping
Factor II - social environment institutions and resources, severity, duration
Factor III - mental health, DSM-IV information or other mental health information
Factor IV - physical health, ICD-10 information

Factors I and II are often cited as the core social work descriptions. While this is correct, any downplaying of the interconnective nature of all four factors will remove the holistic structure of the PIE System and diminish the ability of a social worker to gather a comprehensive picture of a client's person-in-environment social functioning.

This section of the CD-ROM program uses page scrolling buttons, cartoon illustrations, an interactive Self Study quiz, and roll over buttons to facilitate user learning. Pop-up descriptions and definitions of key concepts in the four factor system are featured throughout the section. *Adobe Illustrator* was used to develop cartoon illustrations that depict the four social role areas in Factor I and the six subsystem items of environmental problems in Factor II.

Factor I: Social Role Functioning

Social role difficulties are often what brings people to a social worker for assistance. There are two features of Factor I:

1. the social roles that one fulfills or is described by according to recognized and often regulated positions in society, and
2. the type of interactive relationship that exist with others in similar or different roles.

Social Role

The social role elements of Factor I fall under four headings. A listing of the Factor I roles and corresponding code numbers is provided.

Problem	**Code**
Familial	1000.xxx
Parent	1100.xxx
Spouse	1200.xxx
Child (Adult)	1300.xxx
Sibling	1400.xxx
Other family	1500.xxx
Significant other	1600.xxx
Other Interpersonal	
Lover	2000.xxx
Friend	2100.xxx
Neighbour	2200.xxx
Member	2300.xxx
Member	2400.xxx
Other (specify)	2500.xxx
Occupational	3000.xxx
Worker (paid)	3100.xxx
Worker (home)	3200.xxx
Worker (voluntary)	3300.xxx
Student	3400.xxx
Other (specify)	3500.xxx
Special Life Situation	4000.xxx
Consumer	4100.xxx
Inpatient/client	4200.xxx
Outpatient/client	4300.xxx
Probationer/parolee	4400.xxx
Prisoner	4500.xxx
Immigrant (legal)	4600.xxx
Immigrant (undoc.)	4700.xxx
Immigrant (refugee)	4800.xxx
Other (specify)	4900.xxx

Types of social role problems

'Types' is used in the PIE system to describe the kind of interpersonal relationship dynamics that are occurring or have occurred between someone in a particular social role and another person. It is generally assumed that the nature of this relationship is

now strained, disrupted or broken. As social work is a relationship-centered profession, the social worker must describe social role problems in a relationship context to facilitate the determination of recommended interventions. Nine problem types have been identified and coded. They are:

Ambivalence Type: A state of internal tension involving contradictory feelings about a person or thing.

Responsibility Type: The expectation by self or others to fulfill certain role requirements in relationship to others.

Dependency Type: When a person feels or is made to feel the need to be influenced, controlled or supported by another person.

Loss Type: Permanent separation from a person, role or thing to which a person is emotionally and/or interpersonally attached.

Isolation Type: The state of being or feeling apart from others, to be alone.

Victimization Type: Being subjected to intimidating and/or abusive power, giving in to the fear of anticipated or repeated harm.

Mixed Type: When no one relationship dynamic associated with role performance is predominant.

Other Type: No other type adequately fits the situation.

*Severity Index:*The Severity Index is used to indicate whether a change in a client's social functioning or environment is extensive, rapid and problem-producing or not problematic.

No Problem (Non-disruptive; no intervention needed)
Low Severity (Perceived as non-disruptive; intervention may not be necessary)
Moderate Severity (Disruptive to social functioning; intervention would be helpful)
High Severity (Client in state of distress; early intervention indicated)
Very High Severity (Severe state of distress; immediate intervention probably necessary)
Catastrophic (Sudden negative changes; immediate intervention indicated)

Duration Index: The Duration Index indicates the length or recency of the Social Role or Environmental problem. It helps to alert the practitioner to the degree of urgency of the problem.

more than five years
one to five years
six months to one year
one to six months
two to four weeks
two weeks or less

Coping Index: The Coping Index is used only for Factor I. This measures the client's ability to manage a problem with his or her own internal resources.

Outstanding coping skills
Above-average coping skills
Adequate coping skills
Somewhat inadequate coping skills
Inadequate coping skills
No coping skills

Factor II: Environment Problems

Factor II is used to describe the social institution and social systems problems that impinge on the social functioning abilities of people in their environmental contexts. The focus is on identifying problems that are systemic or discriminatory in nature,

affecting not only individuals, families and communities, but entire groups of people with similar characteristics or circumstances. Six subsystems and corresponding codes are identified.

Environment problems	**Code**
Economic/Basic needs system	5000.xx
Addresses production, distribution and consumption.	
e.g. Food/nutrition	5100.xx
Lack of food supply on a regular basis	5101.xx
Shelter	5200.xx
Absence of shelter	5101.xx
Inadequate or substandard housing	5202.xx
Discrimination	5600.xx
Sexual orientation	5605.xx
Education and training system	6000.xx
Addresses barriers in education and training	
e.g. Education and training	6100.xx
Lack of age-relevant training	6102.xx
Discrimination	6200.xx
Age discrimination	6201.xx
Judicial system	7000.xx
Addresses social control problems	
e.g. Judicial and legal aid	7100.xx
Lack of confidence in police services	7103.xx
Discrimination	7200.xx
Religious discrimination	7203.xx
Health, safety, and social services system	8000.xx
Addresses the existence and availability of services	
e.g. Safety	8200.xx
Violence or crime in neighborhood	8201.xx
Discrimination	8400.xx
Ethnicity, color or language	8402.xx
Voluntary association system	9000.xx
Addresses issues of social participation	
e.g. Community groups	9200.xx
Lack of community acceptance	9202.xx
Discrimination	9300.xx
Non-citizen discrimination	9307.xx
Affectional support system	10000.xx
Addresses issues in social networks	
e.g. Affectional support	10100.xx
Support system is inadequate	10102.xx
Discrimination	10200.xx
Disability discrimination	10210.xx

Factor III: mental health

Factor III allows the social worker to indicate mental, personality, or developmental disorders that are relevant to a holistic understanding of the client's social functioning

circumstances. The terminology and codes for these conditions are listed in the Axes I and II sections of the *Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition* (DSM-IV) (American Psychiatric Association, 1994).

Factor IV: physical health

Factor IV allows the social worker to report medically determined physical disorders that are relevant to a holistic understanding of the client's social functioning circumstances.

Factor III and IV have been designed to accommodate active Internet links to relevant websites on pertinent mental health and physical health problems. Access to these links will be channeled through the Faculty of Social Work website which will guarantee on-going monitoring and updating of Internet links.

Mini pie

This section contains the prototype of a computerized database to provide electronic recording assistance to the practitioner, and to give agency administrations and researchers an effective information management system to assist in policy and service delivery decisions. The database has a client information and case summary notes section. The main feature of the database gives the practitioner easy to use pop-up menu choices under each of the four factors. Additional provisions will allow agency cases to be classified as Active or Inactive. Progress assessments can be made at pre-treatment, mid-treatment and post-treatment time periods. Practice options can be recorded. Specific intervention recommendations can be recorded and referral information can be specified. A Client Report feature provides a screen or printed summary of the PIE assessment codes and descriptions integrated with basic client information, intake notes, practice option decisions and recommended interventions.

The prototype version is on a *Filemaker Pro* platform which makes it a cross-platform database available to Macintosh and PC users. The database will be further developed and produced as an independent program available to agency administrators at a reasonable cost.

Practice options

Practice option information described under the holistic model section is repeated in this section to reinforce the importance of selecting an appropriate practice option after a PIE assessment is made and before intervention determinations are made. This is an added feature to the original PIE System if users want to incorporate it into their practice repertoire.

Interventions

The PIE Manual provides a list of social work interventions that can be used to develop and implement a intervention plan once a PIE assessment is completed. The interventions are arbitrarily divided into three groups: interventions for interpersonal, environmental and intrapersonal/intrapsychic problems. Interventions that support client system approaches are largely found in the interpersonal and intrapersonal/ intrapsychic groups. Interventions for target system approaches fall under the environmental group. A small selection of interventions that support action system approaches are found in all three groups. This list is not exhaustive. Specific definitions can be found in the *The Social Work Dictionary* (Barker, 1998).

The CD-ROM provides roll over buttons on an intervention map to let the user search for specific intervention definitions under each group. Each intervention has a pop-up definition.

Cases

This section is designed to provide skill development case situations in the CD-ROM program. Two specific cases are provided for this purpose. One is a text case to help the user begin the process of using the Mini Pie sheets or the computer database system. The other is a custom-made video showing a segment of the helping process between a social worker and a single parent woman. It was developed to facilitate a complete PIE System assessment. The video includes a social worker commentary section which provides an on screen review by the social worker explaining his PIE assessment choices with supporting information charts. The video case has an innovative 'Annotated Box' feature that allow the viewer to see segments of the case that influenced the social worker in making his assessment decisions. This feature can be activated or deactivated with an 'on/off' button next to the dialogue box to accommodate different learning styles or instructional approaches. The button also has a list of the video annotations allowing the viewer to easily select and review one of interest.

Additional case situations from the PIE Manual with corresponding assessment information are provided in the Text case section. The data from these cases has been put into the database enabling the user to see a Client Report summary of the PIE assessment.

The screen for this section of the CD-ROM simulates an office desktop with file folders, a video window and click-on buttons to take the user to the Mini Pie section.

The video was based on an updated script from one of the reliability test videos used by Karls and Wandrei, originally produced in the 1970s by Ramsay (1977). Professional actors were auditioned and selected. The new footage was shot with a Beta Cam system. Editing and digitizing the video was done in the Video Media 100 Suite at the University of Calgary. The entire production was under the direction and supervision of the University's Advanced Media Learning department.

Conclusion

When Karls and Wandrei published the PIE Classification System in 1994, they described it as an early model of a vehicle to describe social functioning problems. The first version quickly became a NASW's best seller, however, there is little evidence that the PIE System is being widely used or institutionalized as part of agency information systems. This problem is speculated by some to be the consequence of a system that is practical in nature and easy to learn, but time consuming to apply with its current paper and pencil assessment forms.

The CD-ROM prototype was designed to test the easy-to-learn content of the PIE System in a technology assisted, self-learning environment to supplement the test-based and workshop format environments currently available to learners. As well, the database section was developed to test the potential of a time-saving, easy to install electronic information system that would be attractive to agency administrators, researchers and policy makers. The prototype is being field tested. The next step is to develop it to marketing standards. NASW and the developers are in the preliminary stages of negotiating a marketing license to accomplish the next stage of development.

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European modules: how to disseminate teaching materials via the Internet?

by Jack Hampson, John Washington, Joachim Döbler, Viggo Jonasen and Morten Lindström

Abstract

Social Policy and Social Work teachers in six European countries have formed a network and received Socrates funding to develop teaching materials that can be used directly in the courses with the theme of European Social Policy and Social Work. The partners are:

- University of Central Lancashire, UK
- University of Joensuu, Finland
- Instituto Superior de Serviço Social do Porto, Portugal
- Technological Educational Institution of Athens, Greece
- University of Applied Scieneces, Fachhochschule Braunschweig – Wolfenbuettel, Germany
- School of Social Work, Aarhus, Denmark.

Eight themes will be presented on the project home web page, but in the first place expectations are that partners should develop teaching experience in Social Policy and Social Work with the use of European Module papers. As the project continues, partners will upload their own papers. In addition, new partners will be invited to use the site and upload other relevant papers as well.

Summary of the project

The purpose of the project is to develop common modules in two areas - 'Social Work in Europe' and 'Social Policy in Europe' - so that they can be delivered in all the partner institutions. In terms of methodology, the modules will feature distance learning packages to enhance effectiveness, and the development of methods to make the best use of an Internet website for public and educational use. The organisation of the project involves a series of meetings for representatives of the six institutions with preparation of papers and regular consultations with colleagues. The intended outcomes will be the creation of the two modules and consequent benefits for the curricula of the partner institutions.

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Partner institutions

The partners are presented on the web:

Figure 1: A co-operation between six educational institutions in Europe.

Purpose and objectives

The rationale of the project relates to the advantages of greater harmonisation in the curriculum of the partner institutions so that more opportunities can be developed for students and staff. In terms of background, four of the partners have been involved under ERASMUS in existing Student and Staff Mobility Programmes; from this experience, it is intended to develop further in a curricular project. Two additional partners have been added to the group from previous contacts.

The project is designed to enhance the curriculum of participating institutions by the adoption of common modules in social work and social policy. The intention is to develop teaching modules in two areas - 'Social Work in Europe' and 'Social Policy in Europe' - so that they can be delivered in all the partner institutions. The achievement of such modules will assist student mobility on exchange programmes by maintaining study in subjects for which they could be registered in their home institution. In addition, the common modules should aid the teaching staff assignments, which have been planned by all partners. If successful, the project might well stimulate other institutions to adopt similar modules.

Project outcome

The target audience of the project embraces all students and staff of the participating institutions. While previous mobility programmes under ERASMUS have clearly provided significant benefits for those students and staff who have been involved in exchanges, this project would widen the target audience considerably by improving the curriculum for all students and staff.

The intended outcomes of the project can be identified as follows: first, during 1997/98 academic session, the project created the common modules in social work and

social policy; second, the implementation has taken place in the session of 1998/99 with interim evaluation; third, the final review and evaluation follows in the session 1999/2000.

In relation to the number of direct participants and beneficiaries, the estimates depend upon how many students and staff are involved in the two common modules. Decisions on the possibilities of compulsory or optional modules will be taken by the partner institutions during the course of the project. Either way, the indirect benefits of a strong European dimension for the curriculum should be considerable for both students and staff.

Project approach

The project is very much related to the existing teaching programmes of the partner institutions. Experience over a period of six years has shown that comparative studies in both areas of social work and social policy are relatively under-developed in all the countries. While some attention is given to issues of international concern, these tend to be presented in terms of the impacts on domestic questions. Furthermore, the exchanges of views and knowledge by both staff and students over the same period has revealed a large number of variations; by integrating this kind of material into the systematic study of social work and social policy, many more people will be able to share the valuable comparisons which so far have been made by a minority within each institution. Common modules in these areas will complement the existing curriculum and give a specific European focus to comparative studies.

Eventually, it is likely teaching will be guided by a mixture of methods, including the sharing of packages created by the project. Hopefully, the quality of education will be enhanced by the sharing of such packages, which will have been produced by the teams of staff from the partner institutions. As a consequence of using this kind of ODL (Open And Distance Learning), it could well be the case that the curriculum is enriched and that the packages complement the local expertise within each institution. Within the terms of the Student Mobility programme of ERASMUS, some staff from the partner institutions already have experience in developing ODL materials; small packages have been assembled for the use of students in order to overcome both language difficulties and also shortages of adequate teaching materials in some situations.

Web resources

The project's web page has developed during the time of the project. From the beginning, discussions on web strategies had the support of all partners; in particular, the option of 'free' teaching materials accessible via our own WEB site was a favoured development. At the same time other writers should be given the possibility of making papers available on the project's page. This is why the page was designed with the flag of the participating countries as an entrance but also a 'European' gateway for others to use:

Progress of the project

The project has worked so far via four meeting sessions for co-ordination purposes: The first meeting in Preston, UK decided that the partner schools would prepare papers about each country. For both European Modules, several themes were agreed as summaries below:

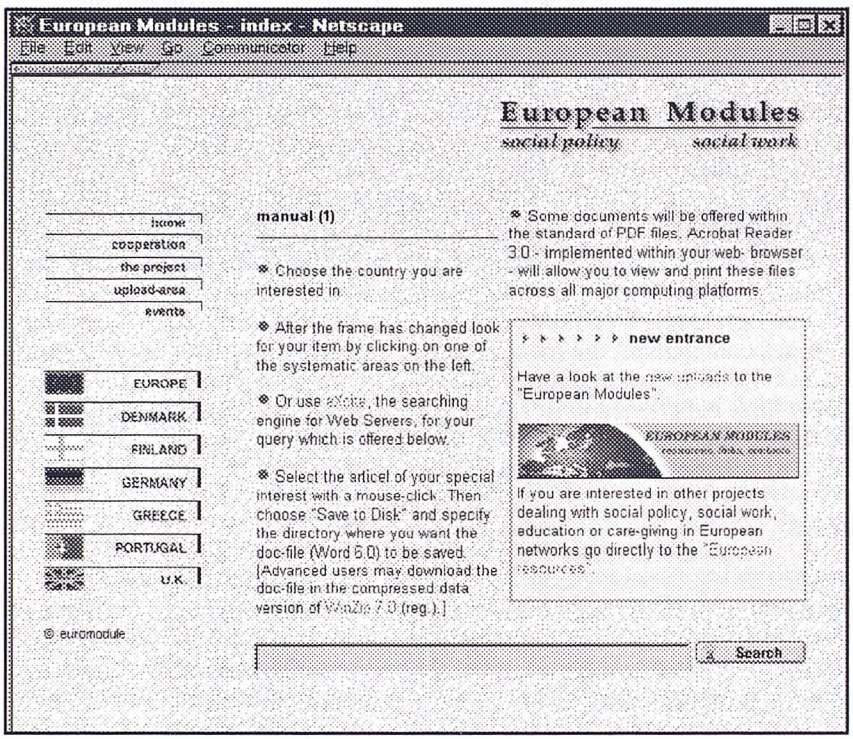
Social Work:

1) Definitions of social work practice in relation to the Welfare Mix and the Welfare Regimes

2) Social exclusion, Empowerment and Civil Society
3) Methodology of social work practice, including fields of practice

Social Policy:

1) The Welfare Mix, Welfare Triangle and relevant Models of Social Policy Regimes
2) Historical background, with origins of particular model and milestones of change.
3) Acting Bodies & Structures i.e. authorities and levels of competence, levels of government.
4) Social Rights and Social Exclusion - a core area on rights, citizenship, exclusion with illustrations to be selected from important and distinctive examples in each country
5) Recent trends and reforms in social policy



These eight themes not only include core papers but also additional ones to cover a wider range for each of the themes. It is possible to work your way into the subjects with the header of one country at a time. Finally, users can download the papers, which vary in length but most are in the range of six to eight pages per subject.
The second and third meetings in Porto, Portugal and Aarhus, Denmark discussed the core papers produced, made plans for the production of additional papers and also devoted considerable time to develop skills and knowledge of the Internet. The fourth meeting was held in Joensuu, Finland in June 1999 where more ambitious proposals for the development of the project were accepted. A new format for the website was outlined for introduction in September 1999 and it was proposed to apply for a one year extension under SOCRATES. New partners had also been proposed for 1999/2000 and beyond.

Teaching materials distribution and availability

In the beginning the project focused on the use of IT in making papers available on the Internet and also on the advantages of delivering such material without significant costs. It was agreed that when all participating institutions and their staff could manage the techniques of uploading and downloading papers, it gave a tremendous advantage to teachers and students to have access to such material. Opportunities for further comparative studies can follow from the initial base of six European countries.

Architecture of the website "European Modules"

From the outset of the project, it was intended that the educational modules should be presented in the form of a website, in order to make them available to a larger number of interested clients. Within the budget granted by the EU, there were no provisions made for the development of a net-supported information system. Since some of the colleagues participating in the project had more experience relating to the development of information technologies, the responsibility for the development of the Internet site was transferred to the University of Applied Sciences, Fachhochschule Braunschweig - Wolfenbüttel in Germany.

The aims of the technological parts of the project "European Modules" are to provide computer and Internet supported communication for the dissemination of educational modules. These will be supplemented by relevant links to institutions with a European scope and thematically relevant information on the organisation of the social sector. Thus the project will facilitate the mutual comprehension of the transnational dimension of social policy and the organisation of social services. In particular, the website aims at the following target groups:

(1) teaching staff of the institutions participating in the project, for whom the net will provide fast access and a rapid dissemination of the modules, in an up-to-date state.
(2) students of the institutions participating in the project, who will have easy access to up-to-date materials via the Internet; some of these students who are taking part in exchange programmes will have additional benefits for their comparative studies.
(3) teachers and students in general, for whom the "European Modules" will provide access to a unique compilation of introductory and secondary study papers.
(4) external authors who want to make their contributions to European social policy available to a broad public, outside of printed media.
(5) publishers who may wish to advertise recent publications and draw attention to selected contributions, book reviews, etc.

Beyond the immediate effects in the participating institutions, the Internet-based publication of the modules should encourage teaching or publications on issues related to European social systems. The European Modules utilise the Internet as an egalitarian medium. Materials, information, and interpretations are, against the trend of commercialization of knowledge and education, provided for free downloadable to interested individuals, teachers, students, and professionals.

The European Modules also utilise the Internet as a communication medium. It offers an information system that provides access to the network of European projects. For students who are part of the project network, it opens up possibilities for transnational cooperation. Furthermore, via interesting and innovative contributions, it supports the efforts funded under the SOCRATES programme to further the interest in other European languages.

Finally, the project makes a contribution to the enhanced utilisation of information technologies as a learning medium in the field of professional qualifications in social work, with the Internet site as a resource for the acquisition of information or self-presentation.

State of development:

After intense development work the web is available at: http://www.fh-wolfenbuettel.de/euromodule/

- with respect to design and architecture the website is in a state where educational modules can be visited via the Internet without any difficulties and in a user-friendly manner
- is visually characterized by a clear-cut corporate design
- for the web designer, it provides a staging and a means for regular site maintenance
- for colleagues (keyholders) and partner universities, it provides upload options
- can be extended and technically upgraded.

A prerequisite for these presentations is a sophisticated web design, which, at the interface of the technical limitations of HTML-programming, the transported contents and their technical/visual presentation, is connected with considerable strategic requirements. At its current state, the project comprises 178 data files, a fact which, however, is neither with respect to the programming and development efforts, nor with respect to the visual representation and functionality, very informative. According to the dimensions of quality as defined by David Siegel (Das Geheimnis erfolgreicher Web Sites. Projekt Managment im World Wide Web, Munich 1998), the European Modules show the following characteristic features:

(a) *Content value:* The published contents are largely predetermined by the educational modules and their structure. Furthermore, the site does not present conference papers or benchmark research results, but easy-to-read theses and study papers, which serve as supplementary reading for seminars. All texts are written in English language. The modules are supplemented by European Internet resources which are connected with interesting social sector projects via hyperlinks.

(b) *Production value:* The web site is programmed according to HTML 3.2 standards, while the employment of frames and Java Scripts should not cause any difficulties to 3rd generation browsers. All graphics are optimised. Furthermore, technically demanding applications, which could lead to problems for students in the private sector or to universities with poorly developed infrastructure, have been omitted.

(c) *Design value:* In the design, a simple scheme of colours and shapes was chosen, which combines the European blue with a clear shade of grey. These colour and shape elements of the logo (grey labyrinth with blue lettering) are employed on all pages in order to create a corporate identity. Commonly, for such tasks, qualified external support is contracted. Limited funds and the special character of the project, however, did not permit outside contracting of this work.

(d) *Utility value:* A good site architecture is characterised by a functional navigation system, which allows easy access to the contents and which permits to a variety of visitors easy navigation through a wealth of information. A particularly difficult part was the development of a suitable directory structure: A differentiation by countries was to be combined with a system based on key topics.

As one out of six pilot projects, the Modules became part of the ECSPRESS activities of the "European Consortium of Social Professions with Educational and Social Studies"; they were introduced at the annual conference in Ostrava, Czech Republic in August 1998.

Perspectives

The web site "European Modules" has been developed conceptually and visually as an attractive platform, which through further technological developments and the addition of more papers, especially from external authors, is to be developed to a leading Internet resource. In the long run this will not be possible on the basis of a zero-budget or single handedly. A successful and lasting development of the project will require the following steps:

(1) In order to meet the requirements of a project evaluation, a tracking system has to be installed. Supplementary to qualitative statements about the implementation of the "European Modules" into university curricula, a traffic protocol will allow evaluation of web site access according to their type, number, and duration.

(2) For increasing effectiveness the integration of the modules will require further technological developments and much more automated routines for the access to databanks, as well as a dynamic generation of HTML environments.

(3) The site is to be supplemented with country-specific Internet resources (at a European level, such an offer is already available)

(4) In the future, documents are also to be converted into the widespread PDF format.

(5) Graphically and conceptually, the web site is to be revised / newly established.

(6) Complementary to the actual modules, access to updated base data concerning the social sector is to be ascertained.

(7) At the provider level, it is necessary to evaluate if, or under which circumstances, it will be possible to mirror the web site on other servers.

(8) It is planned to establish a news group, which will facilitate an intense communication regarding issues of the European social system, announcements of conferences, as well as communication by student participants.

(9) The web site will, after publication in the multimedia brochure of Lower Saxony, be officially announced, i.e. flanked by a technical meeting and in the presence of the British co-ordinators.

(10) The project is to be interlinked with Europe-wide operating organisations/ associations while the site is also to be established via conference contributions, technical papers, and public relations activities.

(11) Further external authors are to be secured on the basis of freely accessible, functional and informative Internet libraries.

Discussion

Language

English was agreed on as the working and paper-production language but five out of six partners do not have English as their native or daily working language. Many students and some teachers are not fluent in English so this can create serious problems when courses are based on a foreign language. It has been suggested that core papers might be translated into the five languages but this is clearly beyond the scope of the project. On the other hand, it can be argued that English is becoming (or is) the main Internet language so there are expectations that students should be able to cope with the English language as a part of their education.

Internet and Email

While the use of the Internet is increasing rapidly, there are still differences among countries and also between partners in this project; thus this reflects the different possibilities for participants to meet the standards on the technical side. Even some of the Northern European partners had problems meeting the expectations of other partners on the technical side.

When the project started, very few partners used email but eventually during the project, email became the main source of communication. From the beginning it was a specific aim of the project to expand the use of information technology in its own development. This aim is almost fully realised. Everybody is "up and running" but the daily use of email and Internet still varies among partners as resources and skills are not equally shared. The usage also depended upon the frequency; while it is attractive to claim to be the first to use the latest technology, further use does depend on the number of opportunities.

The general use of Internet by students relates to the ease of access and hence the resources available in each institution. In some cases, more than half of the students have computer access at home; in other cases, this figure can be very small or it can exceed two-thirds of the student group. Some institutions can offer a wealth of opportunities and in others there may be just a single computer room for all students. This creates very different teaching situations and it is not always possible to use Internet access as the main source. Within a few years changes are certain to help but we cannot at this stage always view the Internet as the primary provider of information.

The demands on teachers rise

It is a challenge for teachers to be able to open attached files, to control students' use of the Internet as a source of information, instead of books recommended, and to support the students in seeking out the quality Internet sites. On the other hand, teachers and students can benefit considerably from using the Internet. The book is never out of the library, and you can access it from anywhere in the world, at any time of the day and even at home. These are well known facts to "Old Internetters", but these methods are still not integrated to any extent in education.

Concluding remarks

On the subject side, new possibilities occur. While the project does not aim directly to include cross-national studies, the creation of a set of papers for six European countries does open up real opportunities for such comparative analysis in the future. At this stage, readers of the papers should be able to observe differences and similarities among the countries. Students can benefit greatly from this since the main question will

often be "How is this working in my own country?" once they have read about experiences in other countries. The best way to understand yourself and your origin is to travel. Many authors wrote their main, country-orientated books, when travelling or living away from home. If we can make virtual travel within education, we will have achieved some progress and hopefully broaden the minds of students towards other ways of thinking in different countries. Personal engagement is the main source of education. We hope to contribute a little to that by putting some effort into development of international educational methods on the Internet.

Integration versus isolation? implementation strategies for ICT teaching in social work curricula

by Herman van Lieshout and Hans Schrijen

Abstract

The paper considers different strategies of curriculum implementation regarding ICT (Information and Communication Technology) education in schools of social work. It concentrates on ICT in its role as the *content* of social work education, not on educational technology. Theoretically, an integral approach of ICT teaching ('social informatics') is considered an adequate strategy for up to date social work education. In practice however, the institutes of vocational education have not arrived at a full integration of social informatics. Some conditions are discussed that support integration as an implementation strategy.

Introduction: 'social informatics' revisited

From the end of the eighties and the beginning of the nineties, most western countries were engaged in the implementation of ICT in social work education. However, not all countries involved showed the same developments and there are differences as to the effects on the curricula and contents of education.

At the Husita-3 conference in 1993, a research project was presented that focused on the degree to which social work courses in ten EC countries account for the increasing impact of technology on the day-to-day service practice in the fields of social work (see Grebel & Steyaert, 1995). This research was based on the concept of 'social informatics'. This concept keeps some distance from computer skills and focuses on *information*. Social informatics relates to the educational use of practice applications in schools of social work. In this concept, the relationship between ICT and the professional social worker is emphasised: the ability to gather and interpret data efficiently and effectively into functional information for professional acting in social work settings, and making effective use of IT applications. The basic principle is the thesis that ICT may be considered as a possible instrument for social work. Use of ICT aims at supporting and/or improving social work practice, both directed at the internal working process in a social work organisation, and at the external relations of the organisation with the surrounding social system. Using ICT makes it inevitable that social workers need to learn the elementary technical aspects of ICT. It will also be useful for workers to get acquainted with

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software applications. However, social informatics is not about technological aspects. Social informatics does not mean learning about computers, nor training in computer skills, or the use of word processors, spreadsheets or databases. Social informatics is about the need for, and the use of, information in social work practice (Van Lieshout, 1993).

The question addressed in this paper is whether there have been new developments in this area, and if so: what are the characteristics of these developments. Are schools of social work guided by the integral strategy of social informatics or do they prefer a strategy of the isolation of ICT education in order to strengthen its position in the curriculum? What has happened in social work education with respect to the qualification of social work students in vocational ICT usage? A brief review of the sections on 'Vocational Education and Training' in Steyaert et al (1996) suggests that the countries involved did not make very much progress in terms of curricula development in the last ten years. What lessons can be drawn from this?

In order to answer this question we will take the Dutch situation as a case. The concept of social informatics was developed in the Netherlands and got its first elaboration there. Although the Dutch development shows many specific traits, it also contains some general elements that might be interesting for other countries as well.

The Dutch case

In 1989 the Dutch national government funded a project to develop an advisory curriculum on ICT teaching in social work education (Roosenboom, 1993). This project aimed to support the schools of social work in qualifying their students on the professional demands regarding the use of ICT in social work practice (social informatics). The basic philosophy of the curriculum was elaborated in 1990, together with a content description of social informatics and advice for implementation. Summarising briefly, the main characteristics of the curriculum are:

- a firm *relationship to practice*, based on research regarding recent developments in social work agencies and the use of 'agency systems' (i.e. ICT applications developed primarily for a specific professional practice field);
- *integration in other disciplines* of the curriculum, focusing on 'information' in social work, not on computers and standard computer applications.

During the period 1992-1995 fifteen modules of learning materials were developed, based on this curriculum.

In 1997 we investigated how the Dutch schools of social work had adopted the results of this innovation policy. The empirical data for this evaluation are drawn both from interviews with actors in the schools involved and study of documentation. We also made use of observations during our activities as consultants in schools of social work. The main research question was formulated as follows: *How and in what degree did the Dutch schools of social work make use of these new ideas and new materials in their curriculum construction?* In answering this question we concentrated on the first stage of the implementation process and looked at two aspects of implementing ICT teaching in social work curricula:

1. *curriculum implementation*: what educational structure is given to ICT education in the social work curriculum?
2. *implementation policy:* how does the school management realise this curriculum implementation within the institute?

In order to classify the various curriculum strategies regarding the implementation of ICT education we constructed a typology. The curriculum implementation concept has

been operationalised using two dimensions: the *level of attention* and the *embedding in the curriculum* The combination of these dimensions results in a simple typology that can be used to give a concise description of the development of ICT teaching in social work education. An interpretation of this development is given with regard to the aspects of implementation policy of school departments and conclude with some recommendations. Every section starts with an explanation, followed by the outcomes of the Dutch research project (Van Lieshout et al, 1998).

Two dimensions of curriculum implementation

Level of attention

With regard to the level of ICT education we use the distinction between the *appreciation* level and the *application* level (Grebel & Steyaert, 1995). The level of appreciation means the student's ability to appreciate the possibilities of standard ICT applications; the level of application deals with the ability of social work students to integrate professional ICT applications into social work activities. Appreciation level ICT education can be characterised as a general introduction to the uses of electronic data processing in information provision (computer literacy). Its learning objective is to serve as the starting point for the application level ICT education (vocational use of electronically generated information in social work practice).

The Dutch case: During the academic year 1996/97 the schools of social work in the Netherlands had an average student workload of 34.6 hours for basic or introductory informatics courses and an average of 48.7 hours on the vocational use of ICT (measured by the average number of 'study burden units' in relation to the appreciation and application level ICT education). This means that the schools were paying almost 1.5 times more attention to application level ICT teaching. This is rather a remarkable figure because only five years earlier computer literacy took the major part of ICT teaching in schools of social work.

Embeddedness of ICT education in the curriculum

The dimension of 'embedding' concerns the manner in which elements, with respect to the content of ICT education, are brought into the social work curriculum. We discern two positions on this dimension:

1. ICT education gets an explicit place as a separate field of study in the curriculum (for example, a discipline on its own next to other disciplines);
2. the various topics, with respect to the content of ICT learning, function more or less explicitly as aspects of other disciplines in the curriculum (for example, as a specific instance of this position: thematical integration of ICT education).

The Dutch case: In the academic year 1995/96 vocational ICT education (application level, often called 'social informatics') occurred twice as much as a separate discipline than as part of another discipline in the Dutch social work curricula. There seems to be a slight shift towards integration. As to computer literacy basics and computer skills (appreciation level): these were presented mainly as separate disciplines. There are strong indications, however, that basic (introductory) ICT teaching as a separate discipline will disappear in the near future; appreciation level ICT training will be increasingly organised as a (remedial) part of the study skills courses.

A typology of curriculum implementation

The combination of the two dimensions results in a matrix that can be used to classify the curriculum elements of ICT education, placing them in one out of four quadrants (see *Figure 1*).

	Separate discipline	Aspect of other disciplines
Appreciation level	I	II
Application level	III	IV

Figure 1 : Types of curriculum implementation regarding ICT teaching in social work education

Quadrant I

This quadrant is the place for computer basics courses that are a separate discipline in the school curriculum. It concerns appreciation level education with a high emphasis on the impact of *information*. If this emphasis is lacking, we would rather place this course in quadrant II. For example, when a course that carries the title of computer literacy actually consists of training in a specific word processing application.
A course in quadrant I is usually supervised by a teacher who has a special assignment for this task. The students become acquainted with the elementary ways of thinking and the applications of electronic data processing and information provision. The significant characteristic is "getting acquainted with...".

Quadrant II

This quadrant concerns those instances of ICT teaching that regard some aspects of introductory level education without becoming explicitly embedded in a program of study. It concerns mostly forms of ICT teaching whereby ICT applications act as *learning tools*. For example, SPSS training in a research seminar, word-processing training in a study skills program, or hands-on training in basic computer skills.
The teachers of this type of ICT education vary with the competencies needed in relation to the applications concerned. The students mainly learn how to use the computer configuration and/or the application in question.

Quadrant III

In this quadrant we place the ICT courses with titles like 'vocational informatics', 'social informatics' and 'applied social work informatics'.They hold a separate place in the school curriculum and there is a special teacher assigned to the field of study. The learning contents have been arranged in a framework that focuses on professional questions regarding information provision in social work agencies. Mostly the teaching is organised in relation to the professional use of 'agency applications'. The students learn to evaluate the possibilities of these applications from a professional point of view.

Quadrant IV

The field of study in this quadrant agrees with that in quadrant III. The learning contents are, however, divided into 'modules' that might be built into other disciplines of the curriculum. That is why this quadrant contains those aspects of the field of vocational ICT education that are thematically integrated into other parts of the curriculum.The teachers concerned are the 'regular' teachers of these other disciplines. They have

'woven' the ICT aspects into their courses. The students learn how to use the relevant ICT concepts and applications as an integral part of a professional working method.

Of course this typology is a construction. In reality there are mixed types and transitions between types both regarding level of attention and embeddedness into the school curriculum. Furthermore there may be different types of ICT teaching in one school of social work at the same time, partly resulting from a difference in development between the various departments. Using this typology we can trace the history of curricula development regarding ICT education in Dutch schools of social work.

The 'dynamics of the curricula' in Dutch ICT education

Roughly speaking two movements in the development of these types of curriculum implementation can be distinguished:

The *first phase* (from 1985) started with the relatively uncontrolled introduction of various teaching activities that we would classify in quadrant II. Meanwhile one could observe the gradual development of a systematic conception and filling-in of an appreciation level course (quadrant I). This computer literacy education reached a completely elaborated form in the end of this phase (1989), and there were first initiatives for the combination of computer literacy and vocational computer applications. The need to continue on this road was clearly recognised, leading to ...

The *second phase* (starting from 1989) when the Dutch national curriculum on *Social informatics* was developed. This curriculum contained both a concise description of a computer literacy course (quadrant I) and an elaborated description of an application level of ICT teaching (quadrant 4). In the beginning the basic philosophy of this curriculum did catch on in schools of social work, but the actual development went a different way from that envisaged by the developers of the Social Informatics modules. *Integration* of ICT teaching in other disciplines did not become part of the educational policy of schools of social work. The learning materials corresponding with this philosophy were mainly used for ICT teaching as a separate discipline (quadrant III). In the meantime computer basics gradually disappeared from the scene. Although the vocational ICT teaching was added to the appreciation level education, the total quantity of *sbu* (study burden units) for ICT teaching stayed the same in social work studies. This generated two kinds of effect:

- a shift towards ICT teaching according to quadrant II;
- the need for executive ICT teachers for learning materials that are at both the appreciation level and vocationally directed.

Why did the process develop in the indicated direction and not rather in another one? This question can only be answered in a satisfactory way if one considers the complexity of external and internal conditions. We concentrate on only one aspect: the *curriculum implementation policy* of a school of social work, i.e. the way in which the internal actors in a school contribute to the introduction of ICT teaching in the school curriculum. In relation to the typology in Figure 1, the Dutch national curriculum on *Social informatics* emphasises an integrated approach to the application level education (quadrant IV). Most schools do not arrive at such an integration in their curricula. We have to look for implementation conditions that support a strategy towards an integrated approach. Such a strategy is needed for an adequate and up-to-date professional education.

The curriculum implementation policy

To make the implementation of a curriculum a success, many factors have to work together in a unique combination. A restricted number of *general factors* go together with a variable number of *specific characteristics* of the local situation. Moonen & Kommers (1995) reviewed the international research on educational innovation. As the most important general factor it indicated that school managements should create favourable conditions for curriculum innovation (budget, staff capacity and time facilities must be adequate for innovation activities). The next factor is the availability of technological infrastructure (computer facilities, specially equipped classrooms, technical support). Another factor - too often underestimated in innovation policy - is the need of teachers with expertise on computers in learning processes. In this respect special attention should be given to contact between teachers of different schools; this is considered in the literature to be a major condition for success in innovation processes.

What factors, according to the respondents in the Dutch research project, played a dominant role in the decisions about curriculum policy regarding ICT education? After exploring their answers we arrived at two aspects that mainly account for the actual situation in the Netherlands : the curriculum implementation strategy followed, and the phase in the implementation process.

Implementation strategy

In implementing ICT teaching in the school curriculum different strategies are followed, varying from *participation* (bottom-up) to a *directive* (top-down) strategy.

In a top-down strategy the school management starts from a definite vision regarding the innovation concerned. Teachers are only involved in the second stage of the process; the design takes place at the managerial level. The top of the organisation makes a blueprint of the innovation process as a whole before introducing it in the school. This strategy has the advantage that changes can be implemented rapidly. Teachers are obliged to act according to the new way of working. The critical success factor in this strategy is the creation of support for change.

In a bottom-up strategy the first step towards change is taken at the lower levels of the organisation. The innovation is designed on a small scale. It has the advantage that the teachers themselves can build up the change gradually. The process takes a long time, however, and there is the risk that the supporters of innovation get isolated from their colleagues and become voices in the wilderness. The critical success factor in this strategy is getting the commitment of the school management.

In between these two extreme strategic positions lies the middle course. At first the management gives a rough sketch of the desired innovation. Next, there is room for experimenting with those broad ideas leading to the filling-in of a strategic framework. From there a broadening of the process takes place, starting with the introduction of the innovation in the school organisation. It is an ongoing interaction between policy-making and directing of the change process by the school management on the one hand, and the development and the application of the innovation by the teachers on the other hand. The critical success factor in this strategy is a well-directed process, with clear appointments with regard to time schedule and the products to be delivered.

The Dutch case

The three implementation strategies can all be discerned in the Dutch schools of social work. Although the strategies do not occur in an extreme form, the schools display a clear positioning towards one of them. Three-quarters of the institutions followed the third strategy in some way. In these cases a process of iteration often started with the enthusiasm of one teacher who initiated the move towards ICT education. Then the

school management more or less took over in directing other teachers on further development. This process strongly depended both on the motivation of the teachers concerned and the management.

Phases in the implementation process

In implementing ICT education in their curricula the schools of social work roughly pass through three phases: adoption, introduction, and incorporation. The introduction of ICT infrastructure itself is considered here as a material precondition.

The *adoption* phase is characterised by ICT education getting a place in the school curriculum. In this phase the change towards ICT is more and more accepted and the decision is taken to introduce ICT teaching. All Dutch schools of social work have gone through the adoption phase. On the individual level, however, not every teacher of social work is convinced of its necessity.

During the *introduction* phase there is active implementation of the change towards ICT education. About three-quarter of the Dutch schools are still working on this implementation process. More and more teachers are going to use ICT in their teaching activities and ICT is gradually getting a permanent place in the school curriculum.

The phase of *incorporation* is entered when ICT education stays on the curriculum irrespective of the personal efforts of individual teachers. Some schools of social work in the Netherlands are showing the first signs of this institutionalisation; at the same time however, they still have to cope with problems in the sphere of introduction. In many Dutch schools the appreciation level education (computer basics) has been institutionalised substantially, but most of the application level education (vocational use of ICT) depends of the motivation of individual teachers and is not explicitly a part of the school's curriculum policy.

Conclusion

In educating and training social workers the schools of social work are increasingly paying attention to ICT. This article was intended to offer some insights in how ICT teaching in Dutch social work education got its present form. We investigated ICT education in social work curricula on two dimensions: 1. level of attention; 2. embeddedness in the school curriculum. In relation to these dimensions, the Dutch national curriculum on *Social informatics* can be characterised as emphasising an integrated approach for application level education.

Looking back we may conclude that this approach of ICT education in schools of social work – at least in the Netherlands – fills a need of the actors in educational institutions and is appreciated by them accordingly. This appears from, among other things, the scale and the diversity of the implementation of ICT education in the social work curricula. At the same time we must conclude that the desired integration approach of social informatics did not take root in the curriculum philosophy of schools of social work. In our experience, ICT in social work education is mostly identified with educational technology as such (teaching and learning with courseware, basic computer skills, and the use of standard applications). Relatively little attention is paid to the use of specific social work applications. In our opinion the 'agency systems' should be the core learning objective of ICT teaching in professional education.

Summarising, we conclude that a strategy towards an integrated approach to social informatics is necessary for an adequate and up to date professional education. A successful implementation of this approach is more feasible when the following conditions are fulfilled.

- The management of schools should be convinced about the importance of professional demands regarding the use of ICT in practice situations for qualifying social work students, and must create an organisational environment that facilitates innovation in the educational program.
- A training program should be developed to teach the teachers who will be responsible for the integration of social informatics in their own discipline. (Social informatics should be implemented in those parts of the curriculum that treat the core competencies of social work practice.)
- There must be suitable teaching/learning materials, and these materials must be flexible: teachers and students should have enough possibilities to influence the materials.

The first condition is one that cannot be fulfilled through the availability of good technical infrastructure and/or the expertise of trained staff. It is an intrinsic factor of a school organisation and of school management. Trained staff and good infrastructure are *necessary* conditions for curriculum innovation. But they are not *sufficient*. During the process, permanent attention should be given to the attitudinal conditions: *management commitment* and *teacher motivation*. These cultural-psychological aspects might form the decisive factor in a successful integration of ICT teaching in a curriculum.

Today the situation in schools of social work is favourable to stimulating ICT education in this direction. This is partly because teachers increasingly have a positive attitude towards ICT as an educational *tool*. However, considering ICT mainly as an instrument that has only a minor relationship to the contents of social work, takes the risk of creating a gap between the education of future social workers and the requirements of today's profession. Closing this gap between education and practice regarding vocational use of ICT asks for an educational approach that combines two elements:

a) ICT teaching with realistic cases by teachers of social work, and
b) The integration of ICT teaching in the core disciplines of the social work curricula.

Integration as a curriculum strategy for social informatics will be no sinecure, demanding much effort from both school management and staff. But it will make a major contribution to the professional qualification of social work students. It also gives the schools the opportunity to develop and give further education for the practice workers already engaged in the social work field.

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'LaSWoP' - law and social work practice multimedia project

by Stuart Evans and Phillip Swain

Abstract

This paper presents an overview of the development and rationale for 'LSWoP' and interactive multimedia program for social work students. The program utilises computer and Internet technologies to support student learning of interpersonal assessments skills, and legal skills and interventions, using a series of modules reflective of practice variety.

Introduction

This paper and presentation outlines the history of the development of the LaSWoP project, an interactive teaching tool developed during 1998-99 at the Social Work Department, University of Melbourne. The paper discusses the events leading to the concept development of the project, and the issues and considerations that arose in translating that conception into practice within a resource-limited academic setting. Issues for the further development of the LaSWoP and similar technological innovations are discussed.

Background

Social work can be conceptualised as a set of processes, methods and roles performed in various fields, influenced by various themes, issues and interacting contextual factors. The practice of social work is informed by a knowledge base of theory, by practice wisdom, and by a set of prescribed values and ethical principles (O'Connor, Wilson, & Setterlund, 1995, 9-11; Hugman, 1998, 5-6). The need for multimedia developments within social work education is being increasingly recognised by social work educators, and the profession as a whole, both within the Social Work Department at Melbourne University and throughout Australia in Schools of Social Work.[1]

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[1] Multimedia developments have occurred at several schools of social work, for use by both on-campus and off-campus students. See for example Pauline Meemeduma "CD Rom - It's More than Rock Music: The Utilisation of Multimedia Technology as a Teaching-Learning Resource in Social Work and Welfare education" *Advances in Social Work and Welfare Education* (1999) Vol 2(2), 90-98; see also papers by Dr Tom Puckett of La Trobe University (Australia) to the 1997 and 1998 Conferences of the Australian Association of Social Work and Welfare Educators.

This is in recognition of:

- the increasing complexity of the contexts within which social work is practiced;
- a growing heterogeneity of the student body in terms of age, experience, previous degrees and disciplines of study, and learning styles;
- a growing emphasis on and expectation that user-driven adult-learning techniques will be utilised in social work education;
- the need to rationalise staff allocations to teaching areas of greatest need; and
- the desirability of students being able to pace their own learning, repeat difficult sections at will, make tangential content shifts when engaged by matters presented to them, and preference for the use of group interaction for in formed discourse rather than as a didactic adjunct.

History of the development of the LaSWoP project

The LaSWoP project began in 1997 when the University of Melbourne invited proposals for funding grants to develop and implement multimedia teaching resources for tertiary use. The authors, after considerable discussion, developed and costed a proposal to trial development of a resource which would bridge the teaching areas within the Social Work degree of direct practice and legal context, which was duly funded by the University.[2] The initial grant proved itself to be problematic; no funding allowance was permissible within funding guidelines for teaching relief or for research assistance, hence the development of the project in essence took place (and continues to take place) within the constraints of existing teaching, research, publication, supervision and administrative responsibilities. This has, very directly, contributed to the slower development of the project than was initially envisaged: when funded in early 1998 it was planned to develop the project over that calendar year prior to its introduction to students in Semester 1 of 1999. In fact, it will now be trialed with students in Semester 1, 2000.

The time demands inherent in such developments raise important considerations for academic staff and departments seeking to develop alternative or supplementary teaching resources. Whilst it is politically attractive to be seen to be in the forefront of technological development, and there are, at university administrative level, some perceptions of economies which may flow from adoption of multimedia teaching tools, there needs also to be a recognition of the significant costs in the development of the necessary expertise, in time (and, hence, in finance) terms, of such developments as LaSWoP. Whilst, in the instant case, the authors were technically proficient in the use of multimedia products, the Internet, and computer-based tools to assist teaching and educational presentation, the project required considerable expertise in areas outside the scope of the Social Work Department, including -

- audio and video image capture and manipulation
- web page authoring and development
- development and maintenance of interactive web-based tools

These skills were purchased using funds provided to the project. Again, however, in costing the initial proposal it was difficult, even with advice from those who had undertaken similar projects in the past, to be certain of detailed costings. The cost was not readily apparent until the tasks were undertaken, although having now completed the first interactive scenario in the project it is hoped that this will be able to be used as a 'template' for further development, with consequential potential savings.

[2] The initial grant was A$27,000 for a 12 month period.

In time terms, too, multimedia development can be expensive. This project has largely been taken outside of teaching times, as the absence of teaching relief funding (or, conversely, of research assistance funding) meant that its development could only occur when pressures of other commitments were reduced. In a direct sense this meant that what the University envisaged as a 12-month seeding grant had to be extended over two years. Having working through these teething difficulties future grant applications, expected for 1999-2000, will build in the necessary costing to allow time for further development, and will locate that development into a more realistic, multi-year programme. Part of the responsibility for delays in projects such as LaSWoP rests, however, with the unrealistic expectations of university administrators.[3] The relatively high priorities of university administrators toward multimedia development needs to be matched with concomitant support for the academic staff developing such technological resources.

Educational principles

The LaSWoP project recognises the importance of harnessing appropriate technology to support and extend student learning. In this regard the project is a natural extension of the development within the Social Work Department in earlier years of audio and video teaching tools.

It is important that students be attracted to the process of learning, and that the tools used within that process are seen to be up-to-date. Student enthusiasm and attention need to be harnessed and held. Nevertheless, the key function of learning within social work educational settings is to produce skilled, competent and ethical practitioners. Sounds, lights, interactive video and snappy presentations will fail in responsibility to the client community if they do no more that mesmerise the student facing the computer screen.

Hence this project, whilst committed to harnessing the latest in relevant technology, was also premised upon the adoption of teaching principles relevant to social work practice. The good teaching of social work was the bottom line; the use of technological innovations were means to an end, to supplement existing teaching approaches, rather than ends in themselves. This is, the authors would strongly argue, as it ought to be. The principles adopted in this project included:

- the drawing together the teaching of social work practice with the teaching of legal issues (the latter being one key context within which practice occurs)
- the notion of layered assessments - that is, the expectation that social work practice will (or is very likely to) involve the simultaneous assessment of information from a variety of individual, familial and contextual sources for a variety of purposes (individual/familial assessment, evidentiary purposes, recommendations for legal outcomes etc.)
- the replication in a multimedia context of the realities of practice, including the variety of information sources; the limitations of time and available information on which decisions have to be made; the pressures presented by community, agency and service system; and the conflict often presented by the competition between individual/family rights and the community/ethical obligations of the practitioner.
- the promotion of Internet sources as relevant to research, and as a reality of social work practice in the next millennium.

[3] At one stage in this project, the University withdrew the approved funds as they had not been expended within 12 months of the initial grant. There was no way, given funding expectations and workloads that they could have been. The funding was subsequently restored.

A brief summary of the LaSWoP project

This project involved development of multimedia and CD-ROM teaching materials for use in instruction to social work students. In particular, the teaching of the components of the Melbourne Bachelor of Social Work degree was and continues to be developed to incorporate an increased multimedia component, including the incorporation of web and CD-ROM technology to enhance student learning and awareness of available learning resources.

The project focussed on two specific teaching areas within the Melbourne social work degree, namely Theory and Practice components of the degree and the Law components.

Theory and practice components of the social work degree

The Melbourne Department of Social Work has an established reputation of innovation through development of a range of video-based teaching materials, and lengthy teaching experience using associated small group, video-feedback and simulated learning.[4] This project enabled these innovations in teaching to move forward into multimedia, interactive, web-based and CD-ROM technology.

Across the Theory and Practice components of the Social Work degree, the project encompassed the following developments:

- representation in interactional multi-media format of a number of local case scenarios which move through the stages of social work intervention using as principal organisers the notions of process - that is, a sequentially related set of practice tasks (engagement, exploration, assessment, goal settings etc.) (O'Connor et al, 1995, chapters 3-5).
- the scenarios developed (and to be developed, as the project continues) are intended to be representative of the contemporary thematic issues presented to social work practitioners, such as family type/size (including dual and single parent families; gay and lesbian families; couples and extended families); issues of ethnicity, aboriginality and immigrant intergenerationality;
- at each stage of the process the sub-tasks that serve to operationalise the principal task have been identified in relation to the case concerned.. The various roles utilised by the practitioner are defined with accompanying theoretical and explanatory inputs to make clear other intervention options. The application of several relevant methods (such as direct practice, group and community work interventions, administrative and management concerns, programmatic issues, policy implications etc.) are also represented. This allows the developed scenarios to be used across the different components of the Social Work degree. For example, a case scenario regarding a child protec tion concern (in fact, the first scenario developed under the LaSWoP project - see the scenario summary in Appendix 1) could be used for the development of interpersonal or legal practice skills, but equally could be re-utilised to consider issues of the organisational influences upon practice, or as a basis upon which analysis of programme design needs could occur.
- each case scenario developed is be presented within an agency/organisational context that would typically form the service network appropriate to the social problems presented. Here issues such as eligibility for service, service provision and limitations, and agency accountability, can be incorporated.

[4] The Department has used video teaching, particularly in the development of individual interviewing/ counselling skills, since the early 1980s.

Law and social work practice components of the social work degree

In 1995 the law components of the Melbourne Social Work degree were substantially re-designed and the subject has since then been delivered incorporating wide use of media, including video and audio material for class teaching, and case specific video materials (both commercial and discipline-specific) for small group and individual student use. The teaching makes extensive use of computer presentation of course materials, including encouragement of student use of the search and information resources through the Internet. This subject has been enthusiastically received by students, as reflected in student course evaluations.

The LaSWoP project built on this course re-development by further development of multimedia and technology use including:

- the incorporation of course materials, outlines and reading guides, assignment requirements, and other course information, into a course-specific home page on the web. This home page incorporates web links to other relevant web sites applicable to areas covered in the LaSWoP Project and the Social Work course as a whole, and the page is regularly updated throughout the year. This, too, has a considerable time (and so, indirectly, cost) implication for the project as it continues;
- the incorporation of teaching materials (lecture materials and handouts, seminar and small-group teaching materials etc., into the web page) to allow remote student access to course materials;
- the incorporation into subject teaching of familiarisation with web technology, including the use of the web as an aid to research and to development of knowledge in such areas as law, social policy, overseas and interstate practice developments, and the like. It was envisaged that such a component of the course would not only be of benefit to students undertaking the legal components of the Social Work degree, but would be of value more generally in their research, and would encourage greater familiarity with current technologies - increasingly a requirement of social work practice and practitioners;
- the development of assessment options based on use of technology - including, for example, research using the resources of the web, and development of tools to allow submission and return of assessment tasks via the web;
- the development of interactive Multi-media resources to supplement teaching in the Law component of the Social Work course. In particular, the project has developed interactive CD-ROM resources and/or web resources to encourage development of student practical skills in relation to the law-social work interface in such areas as child protection, children's courts, domestic violence, social security, family law, and work with tribunals and alternative dispute resolution forums generally. This aspect of the project has incorporated some programming, video/animation production, graphic design, and further re-development of instructional components to incorporate multimedia and more traditional small-group teaching, and is continuing (the project still being in its infancy).

The components of the project

It was envisaged that the LaSWoP project would be developed around a number of 'modules', each of which would involve an interactive case scenario requiring completion of practice assessment tasks and legal intervention tasks. Each module would require the student to draw upon:

- a bank of web-based resources (including legislative and policy sources, texts and text extracts, and assessment tools),
- system generated data sources (such as reports of interviews with clients, assessments by colleagues of like and other disciplines, case notes by admission or other staff, and the like), and
- input via e-mail of assistance from the project 'legal advisor' and 'senior social worker' (in reality, the authors).

The components developed were as follows:

- child protection (the first module developed under LaSWoP)
- juvenile justice (the second module to be developed in 1999-2000)

The modules were to simulate the practice environment, with access to:

- library of legislation, case text/journal material, process documents (eg. court documents), further resources/source suggestions
- support/advice to 'senior staff of agency' and 'legal advisor' (in both cases, via e-mail access to teaching staff)
- system prompts to simulate real practice events e.g. access to home visit data only available once a home visit is completed, or not available unless student has obtained approval to do the visit from senior social worker
- built in 'FAQ' access for both routine questions/issues (prompting a system response) and other issues (responded to by teaching staff via e-mail)
- subject-specific web page development - as one of the resources available to assist student assessment tasks, providing links to practice, policy, and legislative sources.
- a series of assessment tasks to meet both direct practice course requirements and law course requirements; these tasks to be undertaken by computer authoring and submitted and, in turn, graded by e-mail.

Future developments and conclusions

The LaSWoP project has been an important one for the Social Work Department at Melbourne University as its seeks to embrace multimedia innovations in teaching. The development and implementation of the project has highlighted several pitfalls, noted earlier, which have contributed to (indirect) cost and time extensions. For the future, a number of further developments are planned:

- extension of the project by development of further modules in 2000 is planned ie. different case scenarios utilising different legal issues, courts and remedies. This development will entail application for further research funding.
- as noted above, it was hoped that the development of second and further case 'modules' would be simpler and more cost-effective by use of the 'template' developed through module 1 (the child protection example). The extension of the application of the Project to other teaching areas within the social work curriculum (eg. programme development; social work research etc.) is also a possibility, dependent upon time and funding resources.

The project has highlighted the direct and indirect costs and the time frames involved in the development, maintenance and administration of multimedia teaching resources, especially if these are to be (and to be perceived by students to be) up-to-date, user-friendly and interactive. A program that invites students to correspond with their 'legal advisor' or 'social work supervisor', but does not have the resources to allow a

prompt response will quickly lead to student disaffection and disillusion. Cost, time and expertise are critical issues which, at least in Australia, university administrations are yet to seriously face. The perception of considerable cost savings associated with multimedia development, and the reality of the considerable development and ongoing costs of such projects, needs careful examination and evaluation.

Finally, the place of multimedia innovations alongside and in support of other teaching modes, especially in a course such as social work where teaching incorporates the opportunity to explore and challenge ideas, values and approaches to intervention, needs critical consideration. Can the development of professional skills and ethical practice be done in reality by the student interacting not with colleagues and peers but with computer and modem? Do such developments as LaSWoP need to sit alongside (rather than in the place of) more traditional teaching where attitudes and values can be challenged by those alongside whom social workers will practice?

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Appendix 1 - A diagrammatic presentation of Module 1 - legal issues in child protection

Module 1 is represented as in the following table, which indicates critical points in decision-making to be incorporated into the LaSWoP project, and also the links across teaching areas and knowledge bases which the Module encompasses.

The module commences with a case scenario involving the notification to the authorised Protective Services of concerns regarding (for example) the care of a young child, recently admitted to the casualty department at a local Hospital, with what appear to be non-accidental injuries.

It was envisaged that the module, once developed, tested and implemented, could provide a series of interactive pathways through the scenario. So that, for example, the same core elements could to be used as a basis for examination of legal issues and considerations, but could also be of value to the student interested in assessment skills, development of policy in this practice area, or issues of inter-agency collaboration and negotiation. At a series of critical points in the scenario, students would be able to 'branch' in various directions to consider these and other issues. The end product would, by this approach, be of value to students and teaching staff from a variety of approaches.

Steps in case notification process		Legal issues to be canvassed	Other practice issues (interactive links)
a	the decision to notify	the obligations to notify under the relevant legislation mandatory reporting requirements and protections	ethical issues eg confidentiality, duty of care policy issues/development in children's services
b	whom to notify	the relative roles of police & protective services relative implications (relevant court, burdens of proof, evidence requirements, court processes) of police involvement	philosophies of practice
c	the initial contact with Protective Services	confidentiality protections under legislation	
d	investigation by Protective Services	the legislative grounds under Children & Young Persons Act statutory interpretation working with legal advisors	assessment skills interviewing/interpersonal skills human behaviour/social development
e	the decision to initiate court Proceedings in the Children's Court	the jurisdiction of the Children's Court the legislative grounds for intervention the procedural/notice requirements	assessment/decision-making coping with anger/grief etc
f	the placement of the Child in 'safe custody'	definitions of safe custody rights of parents to notification/ involvement placement principles and Aboriginal placement principles	culture/race and practice
g	the assessment of options for the future care arrangements for the child	options permissible within the legislation principles underpinning the legislation	inter-agency negotiation small group dynamics/group work/collaboration ethics - dealing with resource inadequacies community development & research - galvanising support to meet local needs, lobbying etc
h	the presentation of the 'case' to the Court	functions of courts the court hierarchy record-keeping and use of casenotes/FOI implications evidence and cross-examination briefing legal advisors	the skills of planning drawing upon multidisciplinary approaches inter-agency & network negotiation
i	legislative options to be recommended for the child	requirement of legislation in planning for the child	
j	appeal rights	appeals options/the court hierarchy administrative challenges to decisions/administrative law natural justice considerations & effects	social change/policy development functions of lobby/interest groups in policy development
k	case planning and discharge of the Court order	principles of case planning under the legislation, time limits for Court orders' procedural and evidence requirements for extension of orders	ethics issues - duty of care, who is the client, competing rights etc

Table 1: Diagramatic presentation of Module 1

The 'virtual' social work course: promises and pitfalls

by David L. Burton and Brett A. Seabury

Abstract

This paper uses practical examples of developing and delivering two social work courses using web and Internet technologies to illustrate a model for virtual social work education. The discussion is then widened to consider a range of issues and controversies which emerge.

Introduction

This paper looks at the impact the Internet and web technology is having on social work education. Higher education and schools of social work have embraced the world wide web. There are virtual colleges e.g. Michigan Virtual Automotive College http://www.mvac.org, virtual, for profit universities e.g. University of Phoenix http://www.uophx.edu/, and virtual consortiums composed of many universities e.g. Western Governors' University http://www.wgu.edu. There is even a virtual professor, http://www.virtualprof.com/ on the Internet. Not only are courses available on the Internet, but it is even possible to obtain Bachelors and Masters degrees over the Internet (Lucas, 1998). At the University of Michigan, School of Social Work there have been 25 classes http://www.ssw.umich.edu/classes/ with Internet access. Two of these courses have been taught as 'virtual' courses which allow students to complete them totally in cyberspace and not be present in the classroom as is common in traditional courses.

In this paper we propose a comprehensive model of the virtual social work course and describe how we have operationalized this model in two different courses. One course (i.e. SW 707: Interpersonal Practice for Issues of Concern for Gay, Lesbian, Bisexual, and Transgendered People) is a Masters in Social Work (MSW) methods course, and the other course (i.e. SW 849: Issues in Social Work and Higher Education) is a doctoral seminar. Both courses had students who completed the course in the classroom and also had students who completed the course totally in cyberspace. In SW 707 there were 20 in class students and 5 cyberspace students, and in SW 849 there were 5 students in class and 5 cyberspace students. As these classes were implemented it sometimes happened that in class students migrated to cyberspace for some of the class sessions that they missed, and several of the course activities required both in class and cyberspace students

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to use elements of the cyberspace technology - i.e. conferencing and 'chat' features of the course. Our comprehensive model of a virtual social work course includes:

1. an on-line web site for the course which is accessible with a standard web browser (e.g. Netscape or Internet Explorer);
2. overhead/slide presentations and audio lectures for each class;
3. a conferencing system that connects instructor and all students asynchronously;
4. a 'chat system' that connects instructor, students, and guest presenters synchronously at scheduled points during the semester;
5. links to electronic databases of resources, literature, on-line articles and texts;
6. audio/video practice simulations that can be streamed over the Internet.

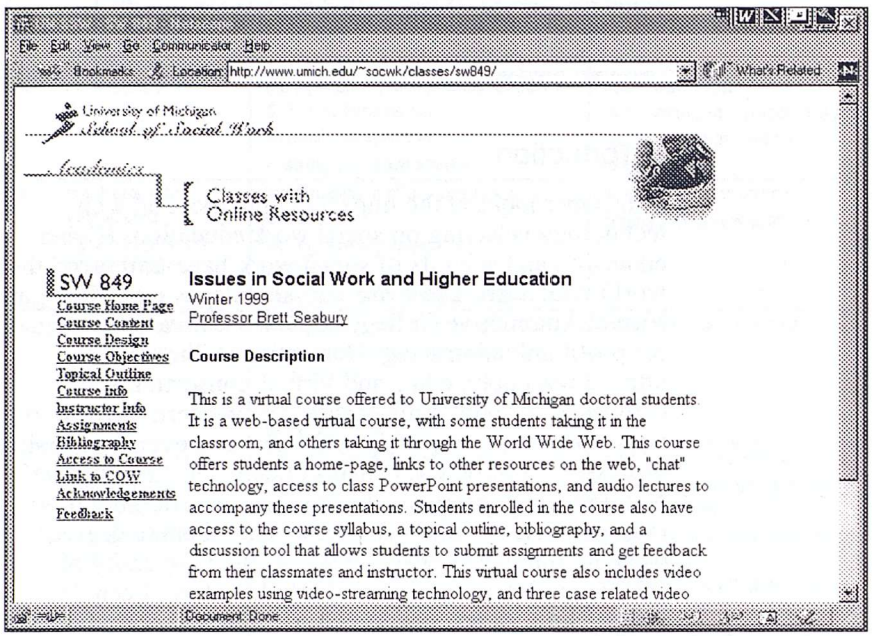

Figure 1: Home page for SW 849

On-line web site:

The entry point to a cyber course is a course web page. The web page acts as an address (URL - universal resource locator) for the course in cyberspace and also represents the organizational structure or home page for various elements that are developed at the site. Our course web pages were supported, and the technical assistance necessary to operationalize such a course, were sponsored by the University of Michigan, but it is also possible that many other institutions (such as businesses, non-profit organizations, governmental bodies, etc.) can sponsor such course sites through other web based resources. For example Blackboard.com http://www.blackboard.com/ offers free space to anyone (even with very limited knowledge of web pages) a resource to create on-line courses. The web page also acts as a gate-keeping mechanism to screen entry to those who are legitimately enrolled in the course and to exclude those who do not have legitimate access. This allows sponsors of these courses to decide who should be able to take the course and to collect fees when students enroll. Some institutions may want to have prerequisites or reserve courses for particular populations of potential consumers. For example universities may want to reserve 75% of the slots in an on-line course for their own students and open up the other 25% to other students in other geographical locations. For both of our courses, anyone is cyberspace can visit our course home page but only enrolled students were allowed access into the basic structures of the course.

This access was controlled by a unique name/password system at the University of Michigan.

The home page of the cybercourse course acts as the 'Table of Contents' for all of the various elements of the course and will provide links (connections) to all of the sub-parts of the course. The metaphor of 'web' in world wide web describes the many directions and links that the home page provides for students to the many parts of the course. For example the home page for SW 849 (see Figure 1) has links to summary information about the course, course objectives and design, topical outline, instructor information, information about grading assignments, course bibliography, and access to secured elements of the course.

Audio and overhead/slide presentations of class sessions:

From the home page of the course, a student can access the course instructor's classroom presentations. Though there are a number of presentation technologies that exist in the market place, many faculty find *PowerPoint* to be a useful presentation technology that can be easily incorporated into web sites. *PowerPoint* in *MicroSoft Office 97* allows faculty to create overhead/slide presentations on the computer which include organized outlines, graphics, images, sound and even video clips. Each overhead/slide of the instructor's classroom presentation can be accessed and run by the student from the course home page. The instructor's lecture that accompanies the PowerPoint presentation can be digitally recorded and made available along with the presentation. This allows students in cyberspace at great geographical distances (and even those just skipping class) to access the content of each class session.

The *PowerPoint* program allows faculty to generate various kinds of class handouts that may accompany the overhead presentation. These too may be available to students in the on-line course. Even if the faculty member does not use a computer mediated presentation program, it is possible for the faculty member's notes and lecture outline to be inserted into the on-line course. For example in the course home page there may be a link to class sessions that lists the dates and topics of each classroom sessions. This may be a rolling list that is developed by the instructor as the course unfolds or it may organized in advance so that students can see the topical outline of the entire course.

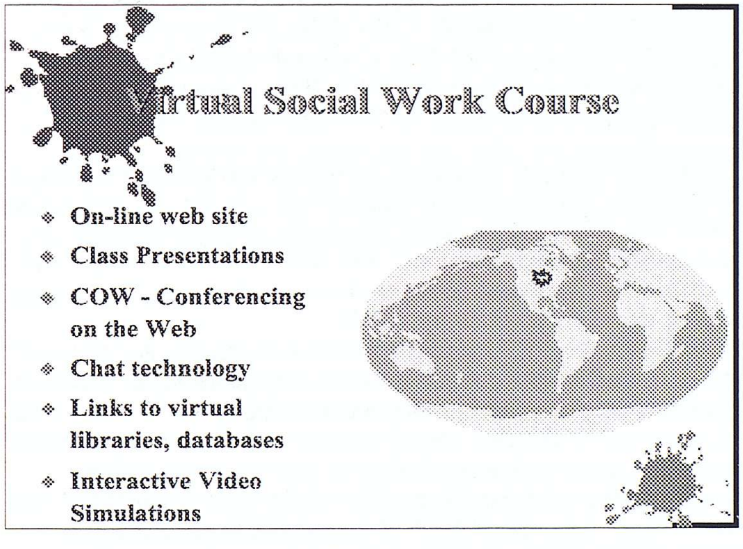

Figure 2: example of a *PowerPoint* overhead

In both of our cyber courses, *PowerPoint* was used as the presentation technology in the classroom and our presentations were audio recorded, digitized, compressed and made available to students in the class. Our *PowerPoint* presentations were converted into HyperText Markup Language (HTML) and placed on a local server along with the audio that accompanied each presentation. Students had the option of downloading the audio parts of the presentation to their local computer and playing it with RealPlayer (http://www.real.com/) or 'streaming' it from the server and playing the streamed audio with RealPlayer G2 while watching the accompanying overheads. Students in cyperspace were also able to hear the questions and comments of in-class students and the instructors responses that emerged as the presentation unfolded.

Conferencing system: "COW - conferencing on the web"

Conferencing over computer networks has been possible for over twenty years. (Zinn, 1977). It has been used by academic, scientific, governmental, and business communities to connect individuals who are geographically dispersed. (Anderson, 1996; Dobos, 1996; Feenberg, 1987; Hiltz, 1982, 1992; Lea, 1992; Schnase & Cunnius, 1995; Velayo, 1994; Koehler, 1994; Reynolds, 1994; Ferguson, 1977; Spelt, 1977). Conferences are organized asynchronously so that individuals can go on-line whenever they choose and see what other members of the group have posted since the last time they were on. Members of conferences can post their own messages as well as respond to the postings of other members. COW (http://calypso.rs.umich.edu/COW/) is similar to these older e-mail type conferences, however, it is on the world wide web and therefore accessible from anywhere with a web browser. It is also much more user friendly than earlier conferencing systems. Older conferencing systems were word/character based and an individual had to remember the specific words and commands to move around inside the conference (e.g. "**e**nter, **r**espond, **n**ew item, **p**ost, **q**uit," etc.). COW is icon based and allows users to click on various icons and highlighted text in order to move around within the conferencing system. (See Figure 3- Example of Cow Hot List).

COW can be used in courses to generate connections between students and faculty outside the classroom. COW has three levels: topics, conversations, and responses. The topical level is controlled by the faculty member or conference organizer. Topics may be organized around units of the course, class assignments, controversies that arise in class or any other subject matter. Within each topic a student can respond to the topic by submitting a *conversation*. These conversations can include text, graphics, images, and even sound and video that can be converted into HTML. Each conversation that is started under a topic is organized chronologically so that everyone can move through the list and select those conversations that they want to read and respond to.

The third level of COW is *responses*. Everyone in the conference can respond to each of the conversations that have been generated under a topic, as well as respond to other responses. When COW is used in a class of 25 students it may contain over a dozen topics, with over a hundred conversations, and with several hundred responses. This kind of interaction outside the classroom between class members can have a very positive effect on the learning experience. (Seabury, 1999)

We both employed COW as the conferencing system in the course and to promote student to student and student to faculty interaction outside of class. COW can be used by an instructor in many ways to enhance the learning environment of the course. In SW 707 COW was used to develop several asynchronous chats regarding course topics that the students wanted to discuss further or that were difficult to discuss in person (the coming out process for some of the students, the realization and development of a bisexual community in the School of Social Work). There was a section for more detailed discussion of the reading assignments.

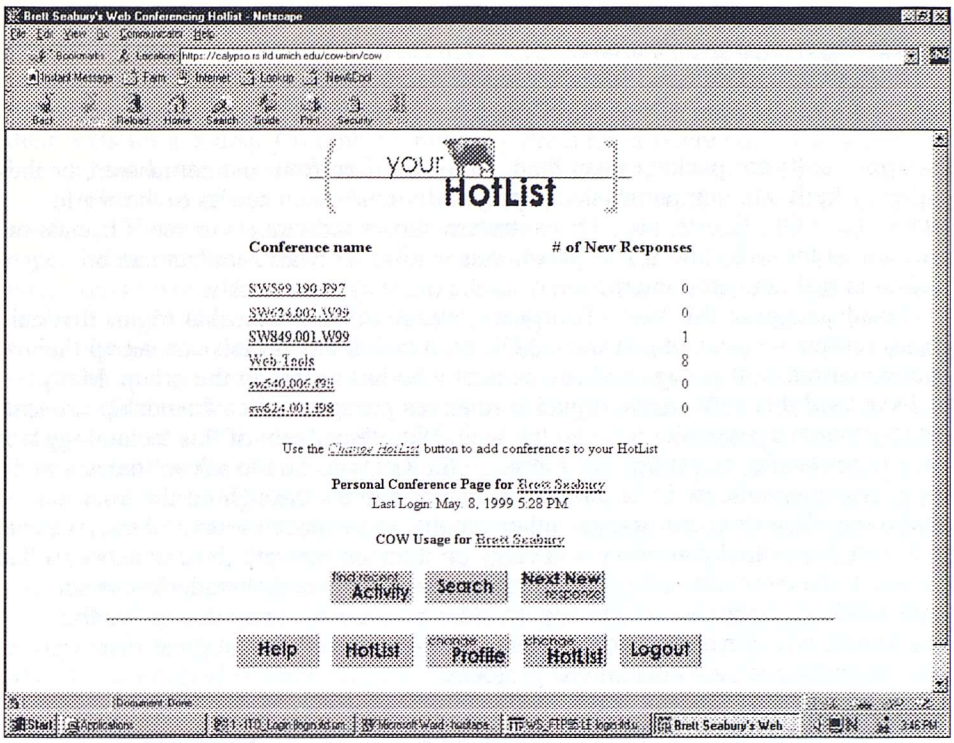

Figure 3: example of COW hotlist.

In SW 849, COW was organized so that students could comment on each class session and each written assignment had its own topical item. Students submitted all of their written assignments into COW as a 'conversation' for all other students in the class to see and comment on ('respond'). In most traditional courses the instructor or teaching assistant is the exclusive reader of student work, however, with COW every student can read and respond to every other student's work.

The impact of having students see each other's work is startling. Because students realize that these short assignments are public, the quality of these written pieces is enhanced. The other more valuable result is that students begin to have discussions with each other (through the responses) about their own work and others. Sometimes a given student assignment might generate over 20 responses which are back and forth interactions between students and faculty. These kinds of 'multi-logues' are going on outside the classroom and truly enhance the educational experience of the course. These conversations also bring the students in cyberspace into interaction with both the instructor and the in class students and also create a learning environment in which students are learning from each other.

The Chat Room

Recently a number of companies have launched synchronous (i.e. everyone on line at the same time) messaging software that will allow individuals to set up their own chat rooms or affinity groups without having to use large institutional servers. See for example:

- ICQ - pronounced "I seek you" from Mirabillis at http://www.icq.com
- AOL Instant Messenger at http://www.aol.com
- Personal Access List - PAL from Excite at http://www.excite.com

- Yahoo Pager at www.yahoo.com
- Chat Pager at www.ichat.com
- Ding! from Activision at http://www.activision.com
- PeopleLink at http://www.peoplink.com

These various software packages can be downloaded free from the companies, or they come already built into companies that supply individuals with access to the world wide web (i.e. AOL, Excite, etc.) This software allows individuals to see if friends or relatives are on the web, and if that person has similar software, contact can be established in real time, and interaction can take place synchronously.

The advantage of this kind of software over existing public chat rooms that exist on various on-line services (e.g. Yahoo, AOL etc.) is that individuals can set up their *own* individualized chat groups and can control who has access to the group. Many groups have used this software to organize relatives groups or even friendship groups that get together at a particular time on the web. With the advent of this technology it is very simple for faculty to set up chat rooms in their classes and to allow students and outside guests to participate in discussions at various times throughout the semester. The chat room allows experts such as other faculty, experienced practitioners, or even clients to visit the virtual classroom and carry on interactions with the students enrolled in the class. Even more educationally exciting is the prospect that students can set up their own working groups to collaborate on class projects by using this technology. This is a simple way for commuting students or students that live at great distances who want to collaborate on educational projects.

In both of our courses, a 'chat' feature was used to bring in outside speakers into the classroom. Though there are ' audio and video' based chat systems in cyberspace, the ones employed in this course require interactants to type messages into the chat system. The guest speakers could be present in the cyberspace of the class and students who were participating in the chat could ask the speaker questions and comment on the speakers presentation. Both *iChat Pager* and *Yahoo Pager* were used in these courses. In SW 707 there were four chats that involved 'guest' speakers from California, Texas and Seattle. In one case there was a pair of family members as guests; one was in New York and one was in Michigan. In SW 849 *Yahoo Pager* was also used by the instructor to communicate with several of the cyberspace students in real time who had downloaded this software onto their home computers. Whenever a student or faculty member goes on line, *Yahoo Pager* alerts any other member on your friends list that they are on line at that particular time. Over twelve times during the course, one of the authors had contact (serendipitously) with cyberspace students who happened to be on line when the author was also on line.

Online resources:

One of the most spectacular changes in the world wide web, has been the exponential growth of on-line information resources and databases. From the web, individuals can access government documents at all levels - federal, state, and local, as well as libraries, news services and newspapers, stock market prices, information from non-profit organizations and for-profit companies, etc. In Michigan, for example, a First Search database can be accessed from throughout the state from all K-20 schools and all public libraries. This database lists 65 electronic resources that can be accessed through First Search which is paid for by the State of Michigan. These databases cover every conceivable profession, field of study, and topical area that exists in a large university library. First Search even includes databases to library holdings around the world, on-line articles, and on-line texts.

Social work also has its own specialized electronic databases such as Professor Gary Holden's database for social workers http://pages.nyu.edu/~gh5gh-w3-f.htm

This database lists over 3000 electronic resources and is updated regularly. The 'virtual' library is a reality today, and students may never have to go into an 'actual' library to do research on a paper and topic. In fact as more and more texts go on-line (http:// www.connectext.com), students may not even have to go to the bookstore to acquire their texts for a course. Columbia University Press has already put social work texts on-line and made them available to students in the School of Social Work at Columbia.

The point of this discussion is that a virtual social work course can have links to a variety of electronic databases that students can access through the course home page. These databases provide an extensive list of resources that students might use in their course work. These databases can also access research based data sets that students might use in completing research projects within the course, or even to do some of their own secondary analysis on topics of their choosing. A virtual course can set up an archive from prior classes so that students might have access to elements of those earlier classes. For example, an archive might contain the 'chat session' with an outside expert who visited a prior class through the chat technology. The implication from this is that the course could also be held several times per year with only the interactive elements being changed, whereas the lecture or other materials may be archived and available. Courses of the future may therefore not follow our current semester packaging, but instead students may be able to complete courses in a self-paced rather than institutionally determined pattern.

Both cyber courses had extensive bibliographies in their content areas, but they also provided links to web based resources that students could access. For example SW 707 connected students to over 50 sites of relevance to the course topics such as Gay history, political advocacy for clients, research on Lesbian violence, Transgender sites and some temporary student sites that oriented interested social workers to the GLBT services in San Francisco and Los Angeles. SW 849 connected students to over 14 sites relevant to pedagogy and social work education such as:

- Carnegie Foundation for the Advancement of Teaching http://www.carnegiefoundation.org/,
- American Association of Higher Education http://www.aahe.org/,
- Council on Social Work Education http://www.cswe.org/,
- Center for Research on Learning and Teaching (University of Michigan) http://www.umich.edu/~crltmich/index.html,
- and several sites concerned with affirmative action and multicultural issues in higher education.

Audio-video practice applications

With the development of Internet II (sometimes called NGI - Next Generation Internet), it will be possible to 'stream' high quality audio-video signals across the Internet. Our present Internet capacity cannot send high quality sound or video without significantly decreasing the resolution and fidelity (i.e. video looks jerky and the image quality looks unfocused). With this increased channel capacity, it will be possible for students to watch high quality digitized videos, films, or even lectures. Interactive video programs designed to teach practice skills (Maple, 1994; Seabury, 1994) could be streamed across the internet to students in the course. This would not require students to have compatible computers and software, disc players, or to go to special classrooms in the university in order to run these interactive programs.

This section of our cyber courses was the 'wannabe' part of the course that has yet to be implemented. Hopefully in the near future Internet II will be operational and video simulations will be streamed across this new, high capacity communication channel. Both in academia and in business, there is movement away from delivering

interactive video programs on CD-ROMs, and instead to use the Internet as the medium to deliver these skill based programs.

Issues and controversies

One of the biggest issues facing faculty and universities about virtual courses is who 'owns' these courses. Can a university take a course and use it independently of the professor(s) who created the course? Can the university or professor sell the virtual course to companies in the private sector which are now trying to market these courses? (Guernsey & Young, 1998)

An important issue for schools of social work is whether universities will choose to *compete* or to *cooperate* with each other in the development and launching of virtual social work courses. In the competitive scenario, because a virtual course can be taken from anywhere in the world, will schools of social work entice students from other schools to take their courses on line instead of in the classroom? Schools with nationally recognized faculty who are expert in a particular area, may advertise on-line courses and draw students out of courses on their enrolled campuses. Will students be able to transfer in these on-line courses into their degrees at their home institution as they do now when they are away from their school on summer break?

In the cooperative scenario, however, the ability to transcend geography offers the student and the profession a much more positive outcome. Faculty at different schools can be involved in collaboratively developing and teaching on-line courses. Students would then have the opportunity to take courses from a number of social work faculty who were teaching at several schools of social work. Students could receive a very rich educational experience by taking a course from several faculty with different perspectives on a given subject. Smaller schools of social work that do not have the resources and faculty of larger schools would be able to expand their curriculum by using on-line courses developed in larger schools.

This kind of sharing the wealth might be possible in schools of social work in spite of these mercenary, capitalist times of inequality. Is it not possible that the new social work program in Ghana might get curricular support through on-line courses from some of the richer resource schools in the USA like Michigan, Columbia, Berkeley and Washington. In the process this new program of social work in Ghana could teach some of these resource rich schools about the particulars of community development in Africa which could further faculty and student exchanges. It is difficult to predict how 'connectivity' over such vast geographical distance will play out in the future. Such cyberspace connections might even help the profession of social work remember it's traditional commitment to poor, oppressed, and disenfranchised populations. (Specht & Courtney, 1994).

Some faculty are concerned that these virtual courses will be used to replace faculty in higher education. At the University of Washington, 700 faculty protested the Governor's push to create more courses on line. (Monaghan, 1998) Some faculty are opposed to on-line courses because they feel they do not really educate students to be knowledgeable thinkers, but are more likely to be teaching students vocational skills. (Young, 1997) This is a very important issue that needs to be resolved because industry has long relied on Computer Based Training (CBT) to teach their workforce specific job related skills. Industrial trainers even disparage higher education as 'time in seat' education (i.e. credit hours) and not competency based education tied to particular skills. This is an important issue for social work education which combines theoretical, attitudinal, and knowledge based content, as well as practice skills. It may well be that some course content and objectives (such as practice skills) would be more effectively delivered through on-line course, while other course content (such as attitudinal and value content) and course goals (such as socialization to the profession) would be more effectively delivered in a traditional course structure.

A great challenge for social work instructors is that of teaching skill based courses. Can the Internet or Internet II be used to teach social work practice effectively? Currently in cyberspace courses we use role plays in the chat rooms, live meetings of students who live next to each other, and the telephone to teach clinical skills and offer feedback to students developing new skills. Will the streamed interactive video simulations be enough to replace the classroom exercises and role plays that we now employ to teach clinical skills? It is an interesting note that in our cyberspace classes because all of the communication is narrative or text based and none of it allows for non-verbal communication, students become much more aware of the meanings and information that 'words' communicate. Without face to face communication and with the absence of non-verbal cues, reading between the lines of the text becomes a much more important skill.

In the future it would be desirable to test the efficacy of virtual courses, but first these courses must be developed in order for them to be compared to the more traditional classroom course. There have been preliminary attempts to study the efficacy of the virtual classroom (http://www.csun.edu/sociology/virexp.htm.). Though these results were encouraging of the virtual classroom, these efforts have been severely criticized (Neal, 1998). This kind of research cannot take place until there are good working examples of virtual courses on-line. In the future, research and not ideology will need to sort out what kinds of education may best be delivered by virtual courses, and what kinds of education may be best delivered in a more traditional classroom setting. The economic, political, and efficacy issues of virtual courses, as well as, the resistance of faculty to these changes in academia, are very real issues that must be sorted out as we enter the next Millenium.

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Rethinking the debate: social work education on the Internet

by Steven Hick

Abstract

Whether we like it or not technology has always impacted on how social service education takes place worldwide. Throughout history the introduction of new technology has shaped and been shaped by educational processes and structures. To be able to act and struggle with technology in our society we need a theoretical framework to guide our actions and analysis. How we approach the introduction of new technology in human service education depends largely on how we view the relationship between science and technology in society.

Introduction

The presentation begins by examining extreme positions that exist concerning new technology in education, namely absolute resistance (technophobia) and resolute advocacy (technophilia). For example, Noble (1998) believes that 'technology' will commodify education automating it to the point where teachers will no longer be required, except to develop content which multinational corporations will own and sell. Others such as Stoll (1995) believe that computer-mediated communication does not benefit anyone, as face-to-face interaction or text based books are better. On the technophilia side people such as Gates (1995) believe that the computer and the Internet are the panacea for all the problems being faced by educational institutions enabling more cost-effective and timely instruction.

The presentation then discusses the merits of a middle position and explores the theoretical landscape and the data from an evaluation study of an online social work course to support such a position.

The evaluation of an online social work course found that the students surveyed enjoy and want Internet-mediated learning whether for a distance education course or not, and believe that it improves their learning. A clear majority (64%) would take a social work course offered entirely over the Internet, and even more would recommend it to others (88%). Even for a non-distance education course learners prefer an online component (80%) to classroom only learning. This study should signal to social educators and opponents to online educational technology that a large number of learners not only support such initiatives for distance education, but also prefer enhanced web usage for campus-based courses.

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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 the way they learn, in virtually every aspect of life. Education, and in particular social work education, is not an exception (Morgan, 1996). But do students want it? Do students want to use the Internet to learn, or to even complement their learning, or would they prefer the status quo - with primarily classroom learning? Do they want it only for distance education? Does the Internet have anything to add to a campus-based course - from a student's perspective? Does the use of the Internet improve education or benefit learners? Will it change education into just another market driven product delivered via machines rather than teachers? Will it replace orality which stresses group learning, co-operation, and a sense of social responsibility with isolation and egocentrism? Will it destroy the vital sources of our humanity or will it bring new communities of people together? These are a few of the questions being debated in social work schools around the world.

The answers are not straightforward, but there are indications that students may prefer courses that use the Internet and that dire opponents are over-reacting by believing that technology will somehow determine our social world. At the same time, vehement champions are overlooking possible elements antagonistic to quality education. It is therefore important to examine both sides of the story, to understand both the pitfalls and opportunities new technology presents for social work education. The above questions are both theoretical and practical, requiring both theorizing about the nature of technology in society and education, and practical research which examines student perceptions and preferences for learning, and impacts and effects on education in general.

This paper will attempt to do both - by examining extreme positions concerning technology in education, namely complete resistance and unbending advocacy, and urging for a middle position. The middle position is grounded in research, and attempts to examine both the benefits and pitfalls of new technology. It aims to determine how learning technologies impact the learning of social workers, as well as their satisfaction and preferences for online learning.The task is ambitious, but by endeavoring to answer the key questions being debated by social work teachers and learners, the crux of the puzzle may emerge.

To begin to address these questions, a formative evaluation (Sciven, 1967) of an online social work course was completed. This type of evaluation is generally undertaken when introducing a new course. 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 online course can be viewed on the Internet at http://ia1.carleton.ca/52100. As it stands, it contains all the elements for a totally Internet delivered course.

An online questionnaire was used, which contained eight open-ended questions, six demographic questions, three closed-ended questions and thirty-one Likert scale questions. 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. The sample size for the study was 51 learners[1]. Thirty-two were registered in Carleton University's introductory social work course, and the other 19 were from other social work programs.

Technology and social work education

The introduction of new technology has always had important impacts on education, and frequently even revolutionized methods and pedagogy. For example, the introduction of the book was brought about by the introduction of printing press

technology, which for the first time allowed the mass production of text at a low cost. Before that, books were hand written and for the privileged few. Many educators at the time resisted this large change. Some, such as Socrates, believed that writing everything in books would mean the end of human memory, as people would no longer need to remember facts. In fact, even the classroom lecture was brought about by new technology - the theater. The introduction of technologies such as the book and lecture allowed people to learn new things without being face-to-face with a single person. They enabled both mass education and distance education. And they by no means caused the end of face-to-face communication. In fact, the ability to read an article or chapter before a face-to-face meeting has enabled seminar style discussion groups to advance topics.

As with the printing press and the lecture, computer technology in the form of Internet based communication and information dissemination, as well as multimedia software, is shaping and being shaped by education. Profound changes are occurring in the way education takes place. Combine this with demographic changes and the pace of the development of new knowledge and it may be safe to say that education is being transformed. Historical analysis illustrates that each time new technologies are introduced into education, which drastically changes the status quo, there is strong resistance and resolute advocacy.

Whether we like it or not, technology has always impacted how human service education takes place worldwide. Throughout history the introduction of new technology has shaped and been shaped by educational processes and structures. To be able to act and struggle with technology in our education we need a theoretical framework to guide our actions and analysis. How we approach the introduction of new technology in social work or human service education depends largely on how we view the relationship between technology and people in society. This theoretical framework should be based on empirical research which demonstrates the relations premised in the theory. Too much of the debate on technology and social work education is based on sentiment and passion which is for or against technology. In many cases it is based on a technological determinist framework, which sees technology as determining the social world, and hence education. The technological determinist view of social change sees technology as 'the prime mover' in history. David Chandler (1995) defines technological determinists as viewing any particular technical developments, communications technologies or media, or, most broadly, technology in general as the sole or prime antecedent causes of changes in society, and technology is seen as the fundamental condition underlying the pattern of social organization.

The technophobia/technophilia debate

An historical analysis reveals that each time a new device or technique is introduced, which is truly revolutionary in the way in which it changes current ways of doing things, there is strong resistance and resolute advocacy. This type of extreme reaction

[1] Thirty-two of the students 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.

tends to occur at the outset as understanding and knowledge of the new device or technique and how it can be used is emerging. There also tends to be immutable debate between the die-hard positions, with little common ground in the middle. Santana (1997) refers to this as the technophobia/technophilia debate. Santana (1997, p.1) finds that:

> *studies dealing with the relationship between technology and society tend to fall into two extreme positions: technophilia or technophobia. The latter sees technology as an evil element which is taking society to a process of dehumanization, not recognizing any benefit that it might bring to human life. The former takes the opposite position, placing on technological advances the solution and the means to improve performance in different kinds of activities.*

This type of dualistic analysis is common when resistance to the introduction of new technologies threatens the status quo. Gates (1995), Margolis (1998), Stoll (1995), Noble (1998) and Postman (1993) represent the extreme positions that can develop. I believe that a middle position is required by educators. We should view computers and the Internet as bringing controversies and at the same time opening doors for new possibilities. As Santana (1997, p.9) puts it:

> *Educational practices don't need to choose being for or against technology. Rather they will have to learn how to benefit from it, making a clear and critical analysis of what it takes to make them useful tools, and how to best use information technology to enhance the educational process and democratization.*

The technophobia and technophilia positions are common in the literature. For example, Noble (1998) believes that 'technology' will commodify education whereby teachers are replaced by computers, except to develop content which multinational corporations will own and sell. He argues that it is university administrators and corporations propelling new technology into education. Further, he argues that students and faculty are largely against the introduction of online courses. Others such as Stoll (1995) believe that there are no gains in using computer-mediated communication, because face-to-face contact or text-based books are superior. On the technophilia side people such as Gates (1995) and Margolis (1998) believe that the computer and the Internet are the panacea for all the problems being faced by educational institutions enabling more cost-effective and timely instruction.

A middle position[2] can also be advanced which demands that we think critically about the role that technology plays in education, and in human evolution and everyday life for that matter. It requires that we go beyond polarized thinking and excited tales of either high-tech doom or cyber-elation. The goal here is to systematically examine and research the technological transformation of education. Neither to champion nor dismiss technology, but rather to research it, understand it and apply it in a manner consistent with our educational and human values. This perspective examines what educators and learners can do to ensure that we influence the emergence of an educational system that includes new technologies but also includes pedagogical possibilities that have results of human value and quality education.

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[2] The perspective advanced seems to be similar to the technorealism perspective, although little has been written to advance the perspective, except in magazines (i.e. Wired) and newspapers. For more information see (http://technorealism.org/). Here the principles of technorealism are outlined: technologies are not neutral; the Internet is revolutionary, but not Utopian; government has an important role to play on the electronic frontier; information is not knowledge; wiring the schools will not save them; information wants to be protected; the public owns the airwaves; the public should benefit from their use; and, understanding technology should be an essential component of global citizenship. With regard to education the technorealist perspective believes that "the art of teaching cannot be replicated by computers, the Net, or by distance learning." These tools can, of course, augment an already high-quality educational experience. But to rely on them as any sort of panacea would be a costly mistake"

The technophobia perspective

Many educators are fearful of what the future holds for them given the changes underway. The criticisms of online learning tend to emphasize two main points: first that students do not want it, but instead are being pushed into it by multinational corporations and university administrators; and second, that spending time behind a computer rather than interacting with other people will push learners further away from group learning and co-operation into isolation and introspection. The data from this study and others like it, suggest that learners do want online learning, and that they don't fear that the mere existence of technology will separate them and shove them away from group learning.

Some technophobes believe that multinational corporations will use 'technology' to commodify education, automating it to the point where teachers will no longer be required, against the wishes of students and faculty. David Noble (1998 p.9) perhaps best summarizes this perspective.

> *Automation - the distribution of digitized course material online, without the participation of professors who develop such material - is often justified as an inevitable part of the new 'knowledge-based' society. It is assumed to improve learning and increase wider access. In practice, however, such automation is often coercive in nature - being forced upon professors as well as students - with commercial interests in mind.*

Others believe that computer-mediated communication does not benefit anyone, as face-to-face interaction or text-based books are better. Stoll (1995, p.124) is an advocate of this position. He stresses the danger of being carried away from reality, spending valuable time relating to a machine instead of socializing directly with people. He has doomsday conclusions about the destiny of schools if technology 'invades' classrooms:

> *Suppose that I accept that students should spend a lot of time behind computers. What's the limit? If computers, online networks, and interactive video are so important to modern classrooms, why not eliminate the classroom entirely? Students of all levels could sit behind their computers at home, and receive quality instruction from the finest teachers. Electronic correspondence courses.*

In short, he does not see any benefit in the use of technology (read computers, but not books or lectures) in education. Instead it (computer) is seen as an evil device which brings with it inevitable bad consequences.

Postman's (1993) infamous book *Technopoly: The Surrender of Culture to Technology* sees the computer as pushing learners further away from group learning and cooperation into isolation and introspection. He (1993, p.17) states:

> *In introducing the personal computer to the classroom, we shall be breaking a four-hundred year-old truce between the gregariousness and openness fostered by orality and the introspection and isolation fostered by the printed word. Orality stresses group learning, cooperation, and a sense of social responsibility.... Print stresses individualized learning, competition, and personal autonomy. Over four centuries, teachers, while emphasizing print, have allowed orality its place in the classroom, and have therefore achieved a kind of pedagogical peace between these two forms of learning, so that what is valuable in each can be maximized. Now comes the computer, carrying anew the banner of private learning and individual problem-solving. Will the widespread use of computers in the classroom defeat once and for all the claims of communal speech? Will the computer raise egocentrism to the status of a virtue?*

Postman not only sees negative consequences for education, he believes that the uncontrolled growth of technology destroys the vital sources of our humanity. A 'Technopoly' (a word Postman capitalizes throughout the book) is a society that believes that "the primary, if not the only, goal of human labor and thought is

efficiency, that technical calculation is in all respects superior to human judgment ... and that the affairs of citizens are best guided and conducted by experts."

Research data tends to contradict the views of the technophobes. The formative evaluation study found that students see an important role for the Internet in their education. The student's answer to the question "I would recommend that others take a course that is delivered via the Internet" is an important measure of social work learners' preferences for online learning. This question had 88% agreeing and 12% disagreeing. When questioned concerning the appropriateness of the computer for learning about social work 66% agreed and 33% disagreed. Overall, 88% of respondents viewed taking courses on the Internet favourably, while 66% thought that it was appropriate for a social work course. This difference may be due to those learners (33%) believing that while Internet-mediated learning may not be appropriate for them, or for a social work course, 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. This shows that although online learning is not unanimously desired by students, it finds many seeing it as appropriate and recommended, even for a social work course.

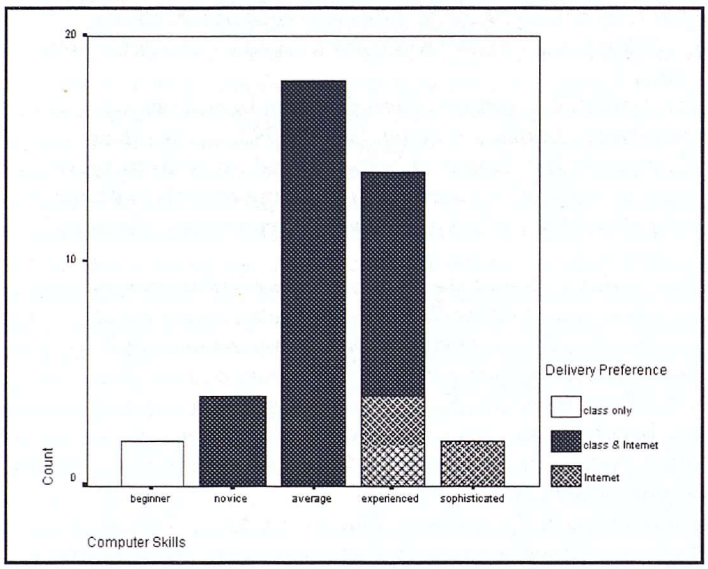

Chart 1: Use of the Internet for non-distance learning courses

Chart 1 indicates that for non-distant education courses students prefer the use of the Internet as a compliment to face-to-face learning. 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[3]. The Pearson Chi-square test shows that the relationship between computer

[3] 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.

skills and delivery preferences for non-distance education course is significant (chi-square = 70.112; CV = 32.909 at .1% level of significance). Overall 15% preferred Internet only delivery, 5% preferred classroom only delivery and a large majority (80%) preferred a mix.

This would tend to contradict the techophobe perspective which believes that students do not want online learning. The data illustrates that 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 prefer to 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.

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

The technophobe perspective is repudiated even more strongly by students when 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, six or 21% preferred ITV to Internet delivery. Seventy-nine (79%) percent preferred Internet-based delivery over ITV. A large majority (79%) of social work learners who have taken a course via ITV would prefer taking their courses using the Internet. It appears then, that the Internet has a useful role to play in providing distant education.

The technophilia perspective

The technophiles take an uncritical view of online learning. They see it bringing people together in new communities with no downside for group learning. They tend to believe that the computer and the Internet are the panacea for all the problems being faced by educational institutions, enabling more cost-effective and timely instruction. Gates, (1995) the owner of Microsoft Corporation, is probably the foremost proponent of this view. He argues that the personal computer and the Internet will benefit education in a variety of ways - from distant education, increased information availability on the Internet, an increased and diverse range of choices for an individual to carry out his/her learning activity, connecting students from different schools, enlarging the chances of socialization as well as of learning from other cultures, and cost efficiency. Margolis (1998) holds a similar view, believing that new technology will enable the elimination of classrooms and academic tenure thereby allowing the marketing of higher educational training as a commodity. This is turn, according to Margolis (1998), "presents an opportunity to reform the costly practices that hamper the international competitiveness of Amercian universities". Gates (1995) and Margolis (1998) hold an extremely optimistic and uncritical opinion of the use of computers and the Internet in education, never examining any critical issues.

Again research data contradicts the technophile perspective, suggesting that the Internet is not perfect as a learning environment. The data shows that a portion (33%) want a face-to-face element, and fear that without it they would be isolated, and it

would hamper the learning of interpersonal skills. In this formative evaluation study, learners were asked 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 33% 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. Some also had concerns about getting help from the instructor when they had questions or required explanations.

Not surprisingly learners had very similar responses to a question which asked them if they thought they could learn an entire course using the Internet tools. Again 66% said they could learn an entire course using the Internet while 33% said no they could not. Of those who could not learn this way, all except one stated that attending a class is necessary. The qualitative data confirmed this with one student believing 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". Even learners who clearly desired online learning had concerns about learning too many courses in this way. Social work educators have expressed similar concerns maintaining that learning social work practice courses totally over the Internet would be inappropriate and ineffective.

Others have expressed concerns about the commercialization of higher education affecting quality. While corporations such as the Microsoft Institute, The University of Phoenix[4], and The Western Governors University (WGU)[5] may lower the cost of higher education by using new technology, many question the quality of the education provided. Taylor (1998), for example, argues that there is a struggle between the drive of capital and the values and institutions of higher education with online education becoming the primary instrument in corporate incursion into the production of higher education itself. He (1998 p.4) has no doubt that "the threat of the new technologies is that profit seeking firms will use them to bring us something that is called higher education but is in reality training toward very narrow goals".

The middle ground perspective

In many ways taking a middle position requires that we continually examine and analyze the impacts and satisfaction with the introduction of new technology into social work learning. The research data tends to support a middle position whereby educators and learners make use of the Internet to maximize the positive elements, but are alert to the potential negative elements. The evaluation study 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. But it also raises the importance of having a face-to-face component within the learning environment. Concerns were also raised about the desirability and viability of so-called virtual universities,[6] where ones' entire curriculum is Internet based.

Overall, the statistical analysis and the findings in the open-ended qualitative data confirmed the appropriateness of a middle theoretical position. Respondents were immensely positive toward the use of the Internet for learning, but at the same time they expressed concerns about taking too many courses in this way, and losing the face-to-face component of learning.

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[4] The University of Phoenix has established a for-profit subsidiary of the Apollo Group with over 42,000 enrolled students. It has no tenured faculty and has over 6,000 students registered in online courses.

[5] WGU is a virtual university established by the governors of 15 states.

[6] A virtual university generally refers to a university without classrooms where all courses are taken online. This may not always be the case, however, as some maintain some meetings of participants.

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[7] and found the wealth of links to information on the Internet useful and informative[8]. 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 courses.

Opponents to online educational technologies, such as David Noble (1998), argue that it is commercial interests in association with university administrators forcing online education on resistant 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)[9] show that students not only support such initiatives for distance education, but also prefer enhanced web usage for campus-based courses. As well, authors such as Rafferty (1998 pp.10-12) believe that social work educators must integrate learning technology into their teaching methods in new ways and not only into traditional teaching methods. She maintains that if educators do not move forward to realize the enhanced pedagogical possibilities of new technology, then they are in danger of losing students. 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 (1998) 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.

Conclusion

Internet-mediated education is clearly not the cure-all for improving education. Online 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 remote communities may derive expanded benefits from Internet delivery, but these should be examined in relation to the danger of student isolation. 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. As educators we need to continually obtain feedback from our students on the impacts of using new technology, and we must continually examine the broader effects of emerging technologies on the university sector. While it is true that it is market capitalism, and not the Internet, that is the force behind developing virtual universities, society must guard against the destructive transmogrification of higher learning.

[7] 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

[8] 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. *Active Learning*, Vol. 8. Available online at http://www.cti.ac.uk/publ/actlea/al8.html#contents

[9] Their study found that students are more willing and more able to embrace the use of learning technologies in the learning process than are academic staff. See Sosabowski, M.H., Herson, K., & Lloyd, A.W. (1998)

Should Disney, Hollywood, and large software companies define education or should knowledge institutions, such as universities, museums, libraries and research centres? Who is in a position to influence the emergence of a new educational system? What emerging pedagogical possibilities have results of human value? What courses of action do we as educators take, and with whom do we take it? These are a few of the questions that we should struggle with. We do, however have power and can influence the direction of change. The holdings of the world's knowledge institutions are vast compared to the holdings of Hollywood. Given that the knowledge economy requires the knowledge of intellectual institutions, educators and researchers have new power to shape the world.

New technologies provide powerful, under-utilized tools for pursuing the ideals of universal education as the right of all to engage as equals in a common pursuit of life and dignity. Critics who complain that technologies are not culturally neutral are correct. These tools are powerful, but we should not shrink from them, as these critics imply. We need to look beyond the topic of computers in education to the question of what we can and should accomplish making full use of these technologies. We should use technology to pursue historically challenging goals of basic human rights and justice. Such progress is neither automatic nor pre-determined. It is neither impossible nor easy. It is a work achieved through intelligent effort and active struggle.

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Environments for social work learning in the learning age

by Ann Wilkinson

Abstract

The focus of much research into teaching and learning is on how learners learn and how teachers teach but an additional factor is the teaching and learning environment. In the UK a framework for learning in the next century is being developed and in Europe agreements on co-operation are being forged. These will be examined alongside the growth of the use of communications and information technology in higher education institutions. The technology promises possibilities of global social work education but how realistic is this in a world where even countries with a shared language have different social systems, diverse education and practice settings and differing views of the social work profession?

We are all responsible for our own learning, the teacher is responsible for creating an effective learning environment. (Holzer, 1994)

Learning environment - real or virtual?

Learning environment, since this paper was conceived, has become a heavily used phrase and is being used in a number of different but overlapping contexts. The initial triggers for exploring the environment of learning were very much based in the physical corporeal world of UK universities where information and communication technologies (ICT) are changing teacher/student relationships. ICT is also influencing the development of open and distance learning (ODL). Additionally new forms of virtual environments for learning are being introduced and it is necessary to be clear how these impact on the learning process. In the context of social work education the Centre for Human Service Technology (CHST) has for some years been looking at individual universities and the learning environments in which staff and students are working and it has become clear that the nature of the the learning environment is an important factor in innovation and change.The expansion of workplace routes to social work education opens other views of the learning environment - it may now be the office, the home or a designated learning centre, as well as the host institution. The diversity of location will introduce additional and more complex issues that need to be recognised by the educator.

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More recently significant focus has turned to the host of software based learning environments which have been created to capitalise on the potential for web based learning materials. Technically they offer a completely flexible vehicle for delivering courses but they bring their own set of complexities and used without an appreciation of pedagogical frameworks will offer little advantage over traditional distance learning activities.

Thus from what began as a an observation of limitations in local university infrastructure has expanded to consider how a discipline such as social work which has such a strong relationship to practice (and frequently practice located in the region) can manage the change of dimension that globalisation engenders. Historically social work has developed in response to relatively localised social and political structures. Social workers are often working in a very particular cultural and socio-economic context. How then do we construct a curriculum for pan European let alone a world wide social work education?

Reviewing the territory

One of the benefits of working in the Computers in Teaching Initiative (CTI)[1] has been the experience of travelling over the past six or seven years to meet social work teachers in UK universities, and correspondence, and conversations with overseas contacts. These combined with web journeys and membership of some thirty educational forums have raised perhaps more questions than have been answered about the directions of tertiary education in the next century. One factor to be addressed is the tensions that exist between the various stakeholders in social work education.

In the UK, as other health related professions, such as nursing, are being transferred from a practice based setting into higher education there has been an investigation into the location of education for social work. This has taken place as part of the five year review of the quasi governmental body the Central Council for Education and Training in Social Work (CCETSW) which has been commissioned by the Department of Health (DOH), the UK government department responsible for overseeing social care provision. Although this has now been completed (but not published at the time of writing) it highlighted a number of issues which, if magnified globally, leave a great deal of work to be done in developing a curriculum for social work education which could be used in an international context. The most critical for the purposes of this discussion is the perception that "differing strands in the historical development of social work are not fully integrated leading to a range of views as to what social workers are and the way they operate" and further that the "responsibilities and tasks differ between the countries [England, Wales, Scotland and Northern Ireland] and employers have differing expectations of what newly qualified social workers are able to do." (J M Consulting December 1998) If within the UK there is this diversity of view it will certainly be much greater when extrapolated across a global context. Social work education is inevitably impacted by the changes to the educational environment. Universities are struggling to identify and maintain their place in a newly evolving and more diverse learning environment. In Europe there is likely to be no expansion of funding for education but an expectation that Universities provide opportunities for students to learn in a more flexible way. Instead of competing in regional arenas universities may be competing with an 'open' university on another continent, universities of industry or employers' in-house training. The students are also more diverse in their prior learning experience, age and culture and will behave increasingly

[1] CTI is a national development and information dissemination project supporting the use of ICT for learning and teaching in UK higher education social work courses. CTI is one of the projects of the Centre for Human Service Technology, University of Southampton, UK

as consumers rather than apprentices/pupils. One of the reasons these changes are possible is the growth in information and communications technologies. ICT offers opportunities for developing and innovating in a variety of settings. Currently there are many technical discussions of the technologies themselves but what is gradually building is an appreciation by the discipline that new learning environments offer opportunities to make fresh approaches to teaching and learning. Barlow (1997) writing in Australia about the growth of community networks in rural areas underlines the tensions between network and ICT professionals and those involved in social and community developments and further highlights the dangers of excluding sectors of the population from access to the information society. In universities there are similar tensions between learning technologists and educators. The change of approach from face to face to computer mediated learning is explored in the discussion of an experimental course using the Internet for collaboration/collaborative learning by Timms (1999)

Even within the initial papers prepared during the DOH review questions were raised about the qualification of UK social workers relative to norms elsewhere. While it was recognised that social workers themselves might seek parity of qualification the review seemed to be concluding that a successful educational outcome should be a new social worker who is able to practice without causing risk to users of services. Following a period of basic practice the social worker then returns for post qualifying or specialist education and gains accreditation to fit agency requirements. This is a model for other areas of professional education but it may militate against cross border education initiatives if "an organized sequence of social work education incorporating ethical standards of practice and a body of knowledge compatible with the social work principles" (IFSW, 1999) is not delivered. It is also one which social work educators may find difficult to reconcile with the goal of developing "reflective practitioners, able to use critical, analytical conceptual skills backed by shared underpinning knowledge and values" (Department of Social Work Studies, 1999)

CHST is currently involved in developing the computer assisted learning (CAL) version of materials for an international child welfare course for a consortium of European and Canadian universities. The reason for developing these materials is "to enable students and practitioners to work sensitively across cultures, both in other countries and their own." (EU Canada web page http://www.hsd.uvic.ca/SW/coop/eucan/aims.htm) A part of the project involves developing a method of accrediting social work learning opportunities taken in other countries and assigning a credit accumulation and transfer (CAT) value to the module. Within the UK although some social work modules are CATs rated these ratings are not always recognised between institutions which creates a level of confusion for students. Shipway (1998) also draws attention to the fact that there is "no uniform system of credit transfer that is European wide." A new development in the UK is the introduction of course benchmarking by the Quality Assurance Agency[2] (QAA). This is an initiative where the QAA in partnership with subject associations and professional bodies will establish common standards for qualification in a cognate subject area across the UK. These are intended to help individual institutions to provide clear learning outcomes for their courses. The expectation is that students and employers will have a better appreciation of 'graduateness' including both the knowledge base and key skills.

[2] The QAA is an independent body 'established in 1997 to provide an integrated quality assurance service for higher education institutions throughout the UK.' The QAA is currently working under contract to the higher education funding councils for England and Wales and is funded by subscriptions from universities and colleges in those countries.

Traditional learning environments facing change

Within the campus based university a range of teaching and learning methods may be used. In health and social care these range from one to many transfer of knowledge (lectures) to group work activities including, collaborative learning, action and enquiry learning and case based reasoning. Throughout these disciplines there is also a high level of practice based learning. The use of ICT is expanding but there is little evidence that the increased use of ICT has radically changed the interactions between staff and students in campus based universities. Email is used widely but an analysis of the interactions might demonstrate a preponderance of peer to peer activity. Thus lecturers network widely with colleagues and research collaborators within and without the institution and students use email to contact friends and family, again across wider networks. Internal discussion lists are provided for some courses but unless the list owner/learning facilitator sets well defined limits on the topics, boundaries of discussion and level of contribution required they are used by a minority of staff/ students. There is growing evidence to suggest that task centred lists encourage wider participation on a course (Owston, 1997; Finn, 1995; Folaron, 1995). All of these writers discuss the benefits of closed discussion lists as a learning experience especially in giving a voice to those students who would not participate in traditional teaching sessions. "To empower students to learn from their own experiences and the experiences of others it is necessary to structure the learning environment so that all voices can be heard" Folaron (op cit). There was also evidence from these small studies that the discussion among peers encouraged the conceptualisation of knowledge, group cohesion, reflection, shared responsibility for learning and challenging of individual values. Despite a number of problems with the learning environment the benefits were considered to outweigh the negatives. In less structured courses students are frequently encouraged to find and join external topic based discussion lists without adequate preparation for the etiquette of list membership which may result in negative experiences. Observations of social work lists lead to the reflection that the community of learning does not often extend to advising students from institutions elsewhere especially if they are asking questions which indicate that they are working from an assignment which has been set to provide an experience of joining a list.

In many universities the web has provided an inexpensive method of distributing the basic learning materials for courses - handbooks, reading lists, course outlines, lecture summaries, papers authored locally and links to recommended resources. While very useful for students especially those who need electronic versions of materials these remain a method of basic one to many transfer of information and do not do a great deal to expand the learning activities of the students. Use of word processing, the web and email are useful key skills for employability but are peripheral to developing "well-educated, analytical and reflective practitioners who can assess needs, manage care, and evaluate service delivery as well as intervening directly with clients and working confidently in a multi-disciplinary and multi-agency environment."' (J M Consulting op cit).

Despite increasing investment in network infrastructure in universities social work as a discipline has not always benefited. It may be easier for a student in Hong Kong to contact a lecturer via email in the UK than a student on the same campus. If the student is to have a positive experience of learning at a campus based university in the future a number of disincentives will need to be addressed:

- Built environment that makes the addition of cabling for networks difficult and expensive. UK social work teaching departments are sometimes not on the main campus of more distributed universities;

- Poorly planned workstation distribution on the campus – concentrations in areas away from the social work department, the space is not owned by the students;
- Badly lit, poorly ventilated and noisy workstation space which deters students;
- Lack of networked seminar space in departments. Also described as an electronic classroom or enhanced seminar room (Conway, 1994);
- Lack of networked resource room within the social work department;
- Tradition of low budget for equipment purchase – social work is funded as a part-laboratory subject in the UK;
- Staff/student culture which is wary of the use of technology;
- Inadequate induction and training for staff/students;
- Absence or shortage of technician support;
- Absence or shortage of learning support staff who are based in the school or faculty;
- Lack of collaboration on ICT based learning resources with library or resource centre;
- Local social work agencies without external networks which is a disincentive to both staff and students to network on-line as there is no access to/from placement settings;
- Time pressures – many conflicting demands for staff energies.

While no institution experiences all of these factors the existence of a number can create barriers to teaching and learning and a restricted learning environment for students. Toohey (1999) demonstrates how beliefs about knowledge and the nature of learning are reflected in the design of the teaching environment. Conway (op cit.) similarly suggests that "The design of a teaching/learning environment suggests assumptions about the teaching and learning process."

The pressures to change are coming from both internally and externally, nationally and internationally. The current UK Government brought an agenda for continuous lifelong learning. This includes a less declared message that students, of all ages, will not only be responsible for planning their learning to develop their knowledge and skills to suit the changing workplace but will also be responsible for funding their education. Students are now consumers and will expect to be provided with a high quality learning environment. This has created a small but significant shift within the UK universities and pressure is increasing from the funding bodies for the balance of teaching and research to be reviewed. The funding council for England has created a learning and teaching sub–committee and is funding a number of activities to promote the dissemination of good practice in learning and teaching throughout the sector. With the funding bodies for Wales, Scotland and Northern Ireland they are setting up a discipline based Learning and Teaching Support Network (LTSN) which will replace and expand on the concept of the previous discipline based network of Computers in Teaching (CTI) Centres from January 2000. These centres will be responsible for supporting UK university teachers to incorporate good practice from other disciplines, innovate, exchange ideas and research in learning and teaching. There is a parallel but separate Economic and Social Science Research Council (ESRC) initiative to develop research into teaching and learning.

The open and distance learning environment

Open and distance learning (ODL) are well established for social work education but courses do continue to be offered largely in print, audio and video cassette and TV formats. Social work and social care courses do make less use than health related courses of ICT for learning. The Open University in the UK enrolls students worldwide

but their recent developments in employer based to routes to social work education appear to be based on the traditional open learning structures.

There are reports of a number of modules where ICT has been used as a delivery mechanism but most of these have been short-term projects frequently at post qualifying level. In the UK examples include a cross-disciplinary course 'Facilitating the survivors of domestic violence and sexual assault' developed with European and JISC[3] funding for a range of health and social care staff. (Shipway, 1998). Shipway highlighted in her report the difficulties experienced by non-UK students particularly in relation to language of texts and references. Hicks, (1999) has recently described the development and evaluation of an 'Introduction to Social Work and Social Welfare' delivered as on-line distance learning course via the Internet from Canada. An important finding is that learners were not resistant to on-line learning but they did seek much greater interaction with the facilitator of learning either with classroom sessions or on-line. The course was designed for individual learning and therefore collaborative issues were not explored in the evaluation. Ballantyne (in press) has developed an on-line module 'Family and Lifespan Development' which is designed to be used by students from a consortia of universities in Scotland. The development of the module was a collaborative exercise and the materials are designed, using the pedagogical framework of problem based learning, to be used by collaborating groups of students who work with case material and apply theoretical frameworks to develop case plans. The learning is supported by on-line discussion and face-to-face seminars. Discussion and evaluation of this new course has not yet been published but the author is aware from discussions with Ballantyne that developing course materials collaboratively demands careful leadership, is undertaken as an addition to an already pressured workload, and raises issues of sharing intellectual materials.

A European project *Schema* is currently investigating the use of Telematics in open and distance learning (Timms et al, 1998). The researchers are looking at current use of technologies and the pedagogical frameworks which underpin telematics based ODL. While they found a range of activity they concluded that:

> *Examination of existing uses of multimedia telematics for open and distance learning in health and welfare provides few examples of the sort of rich interactive environment envisaged in the social constructivist approach. Most of the interactions which are supported are one-way, either involving single students and a computer or, in broadcast mode, involving an instructor and a distributed set of learners. The learning networks which form are sparse and single stranded and are far from the dense multi-stranded forms of interaction implied by the notion of the learning community.*

These authors, like those writing of the use of email collaborative groups, mentioned earlier, are asking that ICT generates flexibility, opportunities for collaborative reflection and shared learning and not isolated independent study.

Developing materials for ICT supported ODL thus requires a fresh look at the intended outcomes of the learning process and the methods which will be used to achieve these. Participants in distance learning courses have emphasised the importance of summer schools and other face to face interactions with students and course tutors. ICT offers opportunities to provide closer contact between participants throughout the course. On-line work groups, study circles and collaborative group projects become possible. The danger is that the new tools will be used to deliver electronically the texts and exercises that were developed for a different learning

[3] JISC – Joint Information Systems Committee, Higher Education Funding Councils for England, Scotland, Wales and Northern Ireland fund the ICT infrastructure of UK universities and also fund a range of projects. (http://www.jisc.ac.uk)

environment. Indeed a European Memorandum of Understanding (MOU) has been prepared for higher education under the title *Promoteus* (Promoting Multimedia Access to Education and Training in European Society). The special interest group (SIG) 'higher education' is suggesting that a number of questions need to be addressed "before deciding to invest time, human resources and funds in IT-based learning and teaching models:

> *How and why introduce IT-based teaching in traditional universities?*
> *What is the place of traditional universities in the emergence of virtual campuses?*
> *How learning technologies can serve traditional university missions?*
> *Are we heading to a higher education paradigm shift? Who will drive the change?"*

The SIG has been set up to try and answer these questions and to make recommendations on future policy. [http://prometeus.org/sig/higher/Statement.html]

Weets (1997) in a report from the European Vth Framework Programme emphasizes the benefits of developing new ways of sharing knowledge.

> *One of the challenges of the Information Society and particularly the multimedia applications for education and training, is to take advantage of enhanced potential for communication and exchange of information to facilitate processes of international development and cultural understanding. As a corollary, countries in transition (CTs) and developing countries (DCs) represent new prospective markets for Western European countries, for which they will be competing with other industrial powers. Modern information and communication technologies for education will allow people to connect more easily to their roots and, at the same time, provide opportunities to European citizens to interact with cultures with different traditions and values, and to develop the training skills necessary to live in a global economy as well as enhanced international understanding and tolerance.*

A contrary view comes from Bird and Nicholson (1998) who critique the drive towards globalisation of education citing problems of power relationships, the diversity of expectation from the teacher learner relationships in different cultures and the problems of transferring knowledge that is not tailored to local settings.

Virtual environments for learning

Recently there has been a proliferation of articles, papers and reviews of what have been variously named Web-based Instructional (WBI) tools (Gray, 1998; Morris' 1997), Intensely Supportive Learning Environments (Sykes et al, 1993), Interactive Software Learning Environment (ISLE) (Warren, 1999), Rich Environments for Active Learning (REAL) (Grabinger, 1998). These vary from being conceptual approaches to learning supported by the use of a range of ICTs or web environments in which teachers can structure their materials to support learning. The majority take a constructivist approach to learning. Students may undertake collaborative or individual activities or a combination of both. The basic structure of the web environment allows the teacher/facilitator of learning to create a bulletin board for timetabling and administration, a course area with a range of texts and activities, a discussion forum with threaded archive and informal chat area and quizzes for formative assessment. It may also be possible for students to develop their own web presentations within the

environment, to share files and have subgroups to exchange mail. Student activity can be tracked and most offer security features to limit access and manage assessment.

In order to deliver a course in some of these environments, for example WebCT, it is necessary for the course developer to have some knowledge of basic HTML. These structured environments provide a template for the user to work within but have been criticised by Hick (1999) because they impose an instructional model. This would need to be balanced against the very considerable cost of developing a fresh delivery platform each time a school or department develops on-line learning. This is demonstrated well by Brahler (1999) who provides a summary of the research into the development time versus the complexity of the learning materials. She suggests a student staffed educational media system laboratory within the institution as a method of delivering affordable computer assisted instruction (CAI).

Virtual Learning demands fundamental changes in both the role of the teacher and the student. A number of writers are beginning to develop a new paradigm for those who wish to approach teaching and learning in this environment (Gray, op cit.; Timms op cit.; Wong 1999 and Brahler op cit.). Teachers will change from being didactic dispensers of knowledge to concentrate on facilitating or mediating learning. Both Timms and Wong experienced the problems of working more remotely from the students and in different ways identified the need to structure materials and activities and take a participative role in discussion forums. Wong and Timms also highlight the need to examine the culture and characteristics of the learners and attempted to develop strategies to work with this. Brahler drew attention to the new role of the educator in editing and revising materials used for on-line learning and using time not devoted to lectures to promote discursive and small group activity either face to face or on-line.

Lessons for cross cultural learning

Within the Human Services we are still at the experimental and developmental stage of developing ICT supported environments for learning beyond the traditional university. The early studies are beginning to show some common issues emerging in relation to developing materials that might be disseminated beyond the campus university. These resolve into three basic areas: infrastructure; course development and users.

Infrastructure

Recurring themes in the literature are technology access, training and support. ICT use is sophisticated in some universities particularly in rich North American and European states but it is not always available within the community. Thus, for example, email conferencing may be realistic in a wide range of settings but videoconferencing is likely to exclude the majority of on-line learners. Access to high-speed data transfer is still not widely available and this has implications for graphical web sites and high volume data transfer. Shipway (op cit) in her conclusions reflects that for subsequent delivery of the course technology requirements will need to be made far more explicit and pre-course ICT training materials will be necessary. Other authors have, for the present, rejected the use of advanced ICT such as videoconferencing for reasons of cost and accessibility. Weet (op cit.) suggested that; "New authoring tools should aim at producing open courseware that can be used in integrated learning environments and easily customised to fit the needs of particular groups of students."

Course development

All the literature surveyed emphasized that developing materials for ICT mediated learning, whether local or global, required new approaches. Jarvela (1998) writing about a different professional area (teacher training) drew on a range of research to suggest that "Learning depends crucially on the exact character of the activities that

learners engage in with a certain computer program or some other environment. New technology may provide interesting and powerful learning opportunities but these should not be taken for granted; teachers and learners need to know how to make good use of them." This has implications for allocation of staff time to learn new methods and to develop new materials using pedagogies appropriate to the new environment. This immediately introduces questions of how the course developer maintains control of the mode of learning if they select particular environments for delivering courses. Instead of offering a far freer and more informal student led approach to learning some of the ICTs place pressures on facilitators of learning to create tight structures within which the learner can move safely. There are dangers, especially in the case of WBI, that learners can become lost in cyberspace and overwhelmed by the sheer volume of information which they have not the knowledge or experience to sift and evaluate. This does not necessarily prevent flexibility of interaction between learner and teacher using a range of tools and learning methods but careful planning and course design will result in better outcomes.

Users

Careful induction processes are just as important on the virtual campus as on the traditional campus but require a different focus. Instead of visiting the library and resource centres on-line learners will need careful introduction to the use of ICT and use of the web. This is not just a mechanical exercise but training in communicating on-line, critiquing of materials and working independently. In many cases not enough time is built in for early social interaction, familiarisation and practice within the environment. Early assignments should focus on social integration of the class not substantive learning. Students may be more isolated and may need help to establish support networks inside and outside the virtual environment.

Teaching in the campus university involves an audience that is known and visible - within social work schools the teacher/learner relationship is relatively personal. On-line learning potentially creates distance between the learner and the teacher. If the lecture is reduced in importance and the facilitation role increases the relationship established between learners and the facilitator of learning has a different nature. Mapp (1997) suggests that staff and students behave differently in different places and extending virtual communities will result in unplanned consequences, for example the greater demands for staff to be available at any time for the flexible learner. This was experienced by Shipway (op cit.)

A number of authors have made reference to cultural issues that have emerged during courses. These include the need for the course leaders to discover references and learning materials in other languages especially where these have a local cultural context. The students from different regions may be encouraged to discover and introduce these materials as part of their course work especially where discussion may be about different legal structures or policies which impact on service delivery. One of the benefits of developing courses which are 'attended' by students from different cultures is that it offers opportunities to compare different value bases, ways of working and developing and managing services in the community and raise awareness of diversity. In a world where populations are becoming even more mobile awareness of cross-cultural issues becomes increasingly important. A number of authors also mentioned the value of local facilitators who can contextualise course materials for the local setting. These might be invited discussants who participate in a particular conference or who summarise and comment on student materials with reference to local themes. The language of the Internet is English (albeit American English) Wong drew attention to the fact that, although student's spoken English may be good, use of written communication in the English language may be weaker and need practice.

Collaborative activities will need to be sensitively designed to offer opportunities

for co-working across time zones and in different environments. Obviously tasks which allow students to compare a range of cultures and settings are likely to produce better learning. Lyons (1996) has described the value of a taught International Social Work course to ethnically diverse UK students who wish to work in cross-cultural settings.

Most of the experiments with changing modes of learning have not considered entry qualifications, level of study and final accreditation in great depth and many were post-qualifying units. Planning for professional qualifying education which is widely distributed will raise additional issues such as placement location, training of practice teachers and monitoring of students in the workplace. Within the ODL literature there are already explorations of the difficulties of students doing placements in their own workplace, in small rural communities and in other places where they may have a different role, the intricacies of managing this on-line without face-to–face contact should be considered.

Conclusion

Exploring both the descriptions of ICTs and their potential and the few case studies of social welfare education which have been written up suggest there is promise for further development. The initial survey of activity does demonstrate that teachers and developers of learning materials have a great deal to learn about establishing positive learning environments. It is important that each new project is carefully evaluated and described to help us develop new paradigms for learning. Although we may learn from the experience of other disciplines there are particular features of social work professional education which demand that the learning environment is carefully designed to enhance the learning experience and this requires the central input of social work educators.

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Human Services in the information society: the broader context

Information communication technology: a barrier to citizenship?

by Joe Ravetz

Abstract

Citizenship defines the relationship between the individual and the state in Liberal Democracies. The paper argues that technological progress is seen as a metaphor for cultural progress. Technological progress and neo-liberal philosophy have underpinned the movement towards global free markets. Information rich firms wishing to maximise market efficiency have weakened the links between the firm and the local citizenry, undermining both the rights of social citizenship and the strength of regional culture. The argument is made that citizenship can only be strengthened through a new relationship between the state and the citizenry, which promotes information rights.

The title reflects the current symbiotic relationship between technology and the market. The argument is that a new symbiotic relationship ought to be established between technology, information and citizenship rights to check and balance the current symbiotic relationship between technology, information and the market.

Technology in context

Citizenship, in the context of this paper, defines the relationship between the individual and the state in Liberal Democracies. The paper addresses the importance of information and technology in enabling citizenship in Liberal Democracies. It does not address information and technology issues in countries in which legitimate control cannot be exercised by a recognised authority, nor does it address information and technology issues in states that are generally accepted not to be Liberal Democracies.

The nation-state is a modern political entity that has two common features. The first is that the state can exercise effective and legitimate power within well-defined borders. The second is that the state must have knowledge of its subjects, the numbers, disposition, and wealth of the populace to maintain itself through the power to tax, police and defend its borders. Consequently, valid and reliable stored information, fit for the purpose, is a prerequisite to the founding of the modern state and its continuance. Surveillance describes the systematic activity of gathering the data and information and subjecting it to interrogation to arrive at knowledge techniques are as old as the state itself. The state identifies itself with a culture, a set of 'fit for

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purpose' by states. Reliable information gathering values that transcends the activity of every day life. (Webster, 1997)

In the period of the cold war, rapid technological development and particularly communications technology became identifiable with the security of the state and the expansion of its own culture. Technology became a metaphor for cultural progress and cultural value itself was and remains assessed on the basis of its contribution to technological development. In "Francis Fukuyama's notion of technological progress as future form of 'global culture' there is one fundamental message. Technological advances determine to a large degree who has power, how much and for how long". (Youngs, 1997) Paul Kennedy identifies the technology 'haves' and 'have nots'. The have cultures promote technological progress and benefit by it. The 'have not' cultures become the object of technological persuasion. (Youngs, 1997)

The Cold War ended with the collapse of the command economies. Fukuyama from an Americocentric view declared the 'end of history' and claimed that "democratic capitalism' constitutes the 'final form of human government' and its global reach 'the triumph of the western idea". John Gray suggests Fukuyama is presenting a view of the world 'unrecognisable to the majority of Asians and Europeans', a belief in a world of rational markets and modern institutions transcending cultural diversity. American culture becomes a paradigm for rational western culture and to an extent a paradigm for a world culture delivering peace and prosperity. (Gray, 1998a)

Western technology and information underpin the global delivery of democratic capitalism. Electronic networks are an essential tool, delivering not simply information, but a whole culture. We find a techno-rational definition of cultural progress presented. One simply has to look at the system of computer based trading, the computer modelled financial services and the growth of the market for world-wide on-line financial information, a growth rate of 30% per annum in the early 90's. Hepworth argues that over 80% of trans-border data flows are generated by intra-firm transactions and that de-regulation in conjunction with de-concentration of production and computer based trading considerably strengthens the power of large global employers and undermines local social markets in developed and non-developed states, no less in Europe than elsewhere. Gray emphasises the negative impact on social markets and culture of current trends. (Hepworth, 1992a; Gray, 1998b)

Citizenship in a Liberal context

The cultural core of democratic capitalism is to be found in Liberal philosophy. 'Liberalism is an ideology bound up with the social, economic and political changes associated with the development of modernity ... processes of rationalisation, bureaucratisation, industrialisation and urbanisation ... the gradual evolution of secularisation and rationalisation of legal and political thought.' (Faulks, 1998a)

> *"Common to all variants of the liberal tradition is a definite conception, distinctively modern, of man and society. What are the main elements of this conception? It is individualist, in that it asserts the moral primacy of the person against the claims of any social collectivity: egalitarian, in as much as it confers on all men the same moral status and denies the relevance to legal or political order of differences in moral worth among human beings; universalist, affirming the moral unity of the human species and according a secondary importance to specific historic associations and cultural forms; and meliorist in its affirmation of the corrigibility and improvability of all social institutions and political arrangements. It is this conception of man and society which gives iberalism a definite identity which transcends its vast internal variety and cocomplexity" (Gray in Faulks, 1998)*

Faulks adds 'two other crucial elements of liberal thought; that is the common commitment to private property and to the free market' which with Gray's summary forms a template for a liberal theory of citizenship.

T. H. Marshall extended the idea of citizenship taken from earlier writers who had a more exclusive view of citizenship limited to political and civil rights, to include social rights. Marshall remained within the liberal tradition but was concerned to reconcile citizenship with capitalism. For him citizenship meant 'full membership of the community' which required constraints to be put on the market to achieve that 'full membership.' Membership in the community in the modern parlance of 'stakeholder' means a belonging to the community reflected in membership of civic associations to exercise rights, secure employment or employment opportunities, security of retirement, and access to public local services; education, housing, and health. Public and private services and active civic associations are the context within which citizenship is acted out.

Marshall, a pluralist, believed that the state in its capacity as an arbiter between competing interests would as a matter of judgement uphold the value of citizenship, and that citizenship would be a force for 'social good'. However he never examined the context in which rights of the citizen would be balanced between the interests of the market and the state. The societal context is all-important and no one could have predicted at the time Marshal was writing, the extent of the technological and market changes referred to earlier that have now taken place. (Faulks, 1998b) It was firmly established before Marshall that citizenship meant having the right to influence national and local government and having the right of arbitration and protection of the courts in matters of market transactions and property rights. Marshall argued the case for the additional right to social benefits to civilise the market by ameliorating the effects of market outcomes.

The symbiosis between technology and the market

The rights of citizenship can only be guaranteed in a culture of rights supported by the populace, the state and the firms operating within the market. With regard to Europe, the transnational European Union extends citizen rights to the European level with the introduction of the legal entity European Citizen. Transnational rights may in the long term be an important means of offsetting the power of transnational corporations to shift activities from jurisdictions with a high level of citizen safeguards to those in which exploitation may be rife. (Hutton W, 1995; Held D, 1998)

These new 'advanced industrial age' data and information rich firms do not simply operate within a set of new global opportunities because of technological advancement, but because technological advance has become intertwined with the dominant neo-liberal thought of the late 20th century. The neo-liberal New Right has abandoned the social liberalism of the post-war period referred to above and has adapted an earlier liberal philosophy emphasising free market and property rights. With the elections of Margaret Thatcher in Britain in 1979 and Ronald Reagan in the United States in 1980, the neo-liberal New Right has become the dominant political ideology. With its emphasis on individual liberty and its contempt of the 'social'; social rights and social representation on public bodies are seen as a brake on the exercise of individual liberty and the efficient operation of market principles. Hayek argued that society was a vague concept and that the sovereignty of the individual required protection from the pressure to conform to the collective. (Farnham & Horton, 1996; Faulks, 1998)

Neo-liberal philosophy is reflected in transnational organisations like the World Trade Organisation subsuming regional interests to the enforcement of corporate market rights in deregulated markets. Or as Gray puts it 'In a global free market the movements of goods, services and capital are unfettered by political controls imposed by any sovereign state, and markets have been detached from their original societies

and cultures.' In the new neo-liberalism, cultures that oppose the market are non-rational. (Gray, 1998c)

A technological compression of time and space has weakened the link between the citizenry and the firm. Neo-liberal free market principles vindicate corporate policies that promote opportunities that arise from the weakening links. Firms that were embedded in towns or regions and in the local culture are dispersed globally. Active local citizens operating through local groups, in local and regional bodies and through government, find it less possible to realise policy aims that may conflict with the interests of firms. Strange argues that firms wish to obtain 'structural power' that is: 'control over security; control over production; control over credit; and control over knowledge, beliefs, and ideas' through the pursuit of global influence. (Strange in Talalay, 1997)

When an American buys a Pontiac le Mans from General Motors he or she unwittingly engages in an international transaction. Of the $20,000 paid to GM about $6,000 goes to South Korea for routine labour and assembly operations, $3,500 goes to Japan for advanced components, $1,500 to West Germany for styling and design engineering, $800 to Taiwan, Singapore and Japan for small components, $500 to Britain for Advertising, $100 to Ireland and Barbados for data processing.The rest $8,000 goes to strategists in Detroit, lawyers and bankers in New York, lobbyists in Washington, insurance and health care workers all over the country and General Motors' shareholders - most of whom live in the US but an increasing number are foreign nationals. (Robert Reich in Talalay et al, 1997)

While the above is a peculiarly American example which Margaret Sharp suggests is at the extreme end of transnational activity, she does see it as indicative of a trend in international business. (Sharp in Talalay et al, 1997). The confluence of activities would not be possible without huge flows of information across dispersed plant and specialised centres of activity.

The export and import of 'brain workers' now adds to the export and import of process workers' jobs. Services such as tele-banking operating as essentially virtual firms interfacing across telephone lines with telephone keys substituting for a computer keyboard, do not contribute to the local culture. Services have been externalised, or as it is called 'the redevelopment of information space'. An example is the Caribbean data entry industry which a growing number of US companies have established to take advantage of a cheap, non-unionised and largely English speaking workforce - 'Jamaica as a planned offshore production centre in the global information economy.' (Hepworth, 1992b)

The increased compactness, portability, reliability, and cheapness of the technology means that major infra-structure costs are avoided, precisely those costs that bed a firm into the local culture. The scale and scope of the enterprises means that local and regional interests can be dismissed. Information rich corporations subordinate developing nations, whose populace have minimal rights and lack sources of information, to their interests and remain only as long as their interests are served. (Bessant J in Finnegan R & et al, 1990) The policy of the agrochemical industry in pursuing their commercial interests in genetically modified food is an example of a technology based industry whose global interests are pursued ruthlessly. (Simms A, 1999)

Firms wish to maximise market efficiency by improving techniques through a controlled configuration of Information Communication Technology enhancement, standardisation of technological and worker-based processes and increased managerial control. But unless there are constraints centred on citizenship rights, culture and the local context of a society may be ignored. (Scarbrough H & Corbett J, 1992) Ellul argues that modern technology has a tendency to be 'autonomous with respect to traditional values, to be self-determining, and to be totalitarian'. (Simpson L, 1995)

States need to concern themselves with a technology that imposes conditions globally, not allowing for the local context and local meanings.

The symbiosis between the state and the citizen

The state remains the major actor in protecting and strengthening the role of citizens. There is a dynamic to the relationship between government and populace in a liberal democracy that is strengthened with a strong active citizenry. Transnational corporations work from and through national law. They do not transcend the jurisdiction of the state. Global markets require transnational regulation to assure corporate accountability to the local and regional populace.

Giddens (1998) argues that both socialism and neo-liberalism are failed state ideologies incapable of meeting the dual challenges of (a) welfare and social reform and (b) technological progress and global market economics. (Novak, 1998) Giddens, like T. H. Marshall before him, recognises the importance of the state in enabling active citizenship. In turn he understands the importance of active citizenship for the health of a Liberal Social Democracy.

The Blairite Third Way approach, for Giddens, provides a new set of principles for governing transnational free markets, strengthening the political and civil rights of citizens, and renewing social rights to support citizenship. Giddens describes Third Way philosophy in the chapter on 'State and Civil Society' in his book *The Third Way: The Renewal of Social Democracy* in the following words:

> *Reform of the state and government should be a basic orienting principle of third way politics - a process of the deepening and widening of democracy. Government can act in partnership with agencies in civil society to foster community renewal and development. The economic basis of such partnership is what I shall call the new mixed economy. ...Third way politics is one-nation politics. The cosmopolitan nation helps promote social inclusion but also has a key role in fostering transnational systems of governance.* (Giddens, 1998)

His reference to 'deepening and widening of democracy' 'agencies in civil society', 'social inclusion' and 'transnational systems of governance', if realised in institutional structures foster active citizenship.

The British State is beginning to see changes reflecting these themes. A Scottish Parliament and Welsh Assembly are now realities. In the 1980's, government reforms led to the 'contract state' in which services were contracted out and democratic oversight and citizen participation were reduced in line with the Conservative governments belief that delegation, privatisation and market testing would stem the growth in public spending. The present government's intention is to introduce new forms of 'governance' which reject the top-down approach or contract approach and build on alliances of agencies, regulatory bodies, voluntary groups, the private sector, local authorities and more. (Smith, 1999) The government is demonstrating a renewed concern for the marginal groups excluded from full citizenship.

Citizenship defines the relationship between the individual and the state in Liberal Democracies. Information Communication Technologies impinge on the relationship between the state and the citizenry. Just as the global firm is information rich, so the state is information rich. For an active citizenry to contribute, government must have a policy to manage the distribution of information, founded on the goal of maximising the range and quality of information available to individuals and civic associations. With information rich firms and information rich states, a paucity of quality information available to the populace undermines the proper functioning of central and devolved democratic institutions dependent on an active citizenry. Information rich civic associations, pressure groups, voluntary service groups and

individual citizens are the best defence against the usurpation of local and regional citizenship rights.

I started the last paragraph by writing that citizenship defines the relationship between the individual and the state in Liberal Democracies. Thus it is incumbent on the state to provide the tools and data so that citizens have access to rich information and the dynamic between citizens and government is maintained. The idea of an information rich citizenry does not always appeal to politicians whose inclination is understandably at times to be 'economical with the truth', to 'spin' the presentation, or hoard the information. Giddens', *The Third Way : the Renewal of Social Democracy* has chapters discussing the 'State and Civil Society', 'The Social Investment State' and the state 'Into the Global Age', but he does not discuss the central role of information and technology in supporting the active citizenry of 'Third Way' politics. Information, Communication and Technology do not appear in the index.

The Labour government has certainly increased the information available through the Government Information Service on the World Wide Web. However the publication of policy documents, Parliamentary Bills, and information on government services does not meet the requirement that position papers, primary data and the data modelling suppositions be available in an electronic format. The information is required by an active citizenry in order to judge the legitimacy, relevance and quality of the input data, modelling, and output information , with reference to a domain of interest. For example, the British government disseminates information (processed data) on school league tables and hospital performance, but what does it tell us? Quantitative performance indicators have a limited role in assessing achievement in domains of activity which are not easily described through an input-process-output model. (Ravetz, 1996) Yet the impact of the results from performance modelling on the corporate behaviour of the service and on the behaviour and policy responses of consumers and government can be profound. In some cases the release of performance indicators are simply for public consumption and have little or no impact on the goals the service set themselves.

Private firms too, release information on to the World Wide Web, but how much of it is intended to inform as opposed to persuade and advertise? Do we know the biases inherent in the electronically disseminated information? The privatisation of public bodies and the creation of quasi-independent non-governmental organisations (QUANGOs) in the past 20 years in Britain has led to the privatisation of previously public information, potentially undermining the scrutiny of corporate behaviour by citizens' groups. Private firms act to protect information on the basis of commercial interests. Where should the balance of access lie between the commercial right to secrecy and the citizens' right to know, when public choice is being effected? Privacy rights and price in the free market can inhibit access, despite the ease with which information can be disseminated.

The British 1998 Data Protection Act extends the rights to privacy and strengthens the individual's rights of access to information held about him/her but does not appreciably extend the citizens' 'right to know'. (Government Information Service Web Site) A problem remains. Much information held by private bodies on the grounds of commercial confidentiality ought to be in the public domain if active citizenship is to be realised. What electronic media access rights should the populace have to information and decisions that effect their communities? Why not have the budgets and minutes of local government and private and public bodies that effect community development available on the internet.

Third Way politics and European Social Democracy must address the requirement for citizenship information rights. Paul Frisson wishes to use electronic media to democratise decision-making. He envisages a new structure for public agencies, agencies linked through an electronic net with the populace and other agencies in a new form of 'governance'. His vision is only possible with a system of

information exchange that has at its core a policy of maximum quality information dispersal with clear rules for defining data and information that requires limited circulation. (Ravetz, 1998)

The centrality of information and technology

The centrality of information and technology is so important to the encouragement of active citizenship that we need to add information rights to Marshall's political, civil and social rights. Hence the role of the state must be to enable and promote active citizenship by strengthening information rights through the electronic tools now available.

In summary:

- The modern state requires large amounts of data in order to formulate, refine, implement and review policy. International firms too have become data and information rich.
- Data and models are inherently political, the state needs to foster openness of both public and private sector data and information, and make the modelling and suppositions transparent for rational debate. Data and data modelling to generate information are not neutral. With the speed of modern computer networks and sophisticated modelling and presentation software, it is all to easy for data to be re-modelled so that legitimacy becomes suspect unless the model is transparent and the information timely, relevant and appropriately detailed.
- The state is often the only body that has the capacity to generate the data and disseminate it to its citizenry, consequently it is important that the data sharing be encouraged.
- The state must foster a Telecommunications policy that is inclusive of regions and is not driven solely by immediate commercial considerations and the interests of private firms.
- Data Protection and Freedom of Information regulations must be fostered. We cannot stop, nor should we stop surveillance but we should make sure surveillance is subject to effective and transparent scrutiny.
- Transnational Data Flows - Internet and private data lines must be subject to regional, national and supra-national regulation.
- Encryption technology requires legislation.
- States and transnational organisations must provide strong regulatory frame works. Weak regulatory bodies do not have the expertise and technology to challenge the 'other side's experts.'
- The centrality of information and technology is so important to the encourage ment of active citizenship that we need to add information rights to Marshall's political, civil and social rights.

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Re-inventing the governance structure for better health and welfare: towards a teledemocracy enhanced participatory regime in the next millennium

by On-Kwok Lai

Abstract

This paper[1] examines contradictions embedded in, and the prospects of, the information society, particularly on the project for better public health and social welfare. Given the further demise of the welfare state under the pro-market reforms, our question is: enhanced by Information and Communication Technologies (ICT), how should the public governance structure be reinvented for better health and welfare? Highlighting the potential differential impacts of the tele-democracy on the key social agencies and the redistributive policy outcomes, this paper analyses the mainstream development of the production and supply-side bias ICT utilisation. It argues that for the health and welfare project, political and administrative institutions and actors, citizens at large should develop the communicative will for social learning in tele-democracy (integrated, multi-modal, on-line and real time ICT global/ local networking).

Part 1 addresses the problems reinforced by the last two decades of reform of the welfare states: social inequality and the inadequacy of public governance over health and welfare issues. Part 2 provides a detailed elaboration of the emerging public governance structure articulated in health and welfare reform: the supply-side/ bias ICT utilisation in the reform is examined . Part 3 provides a comparative perspective on the issues and prospects of this 'reinventing' project. The last part delineates an alternative reform agenda to facilitate the advocacy and social learning processes, juxtaposing the tele-democratic praxis, towards the better health and welfare in the 21st century.

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The non-participatory governance of the welfare state

In welfare capitalism, two types of welfare provision (namely, fiscal and social) are collectively produced by the state and consumed by its citizens (cf. Castells 1977; Titmuss 1956) and the alternative form of provision (occupational welfare) is always subject to market mechanisms: productivity versus costing. Welfare state benefits are, almost without exception, bound up with labor market status, say, unemployment allowance and social insurance, or at least to enhance individual's performance in the production sector. Yet, all these welfare provisions and more importantly, the decision-making on these, are mostly beyond the influence of citizens in general and the service recipients in particular. More specific, the non-participatory governance structure over the health sector (under medical professions' domination) is more than obvious. The crisis of the welfare state mirrors, and in actuality is, a direct reflection of, the non-participatory governance issue. Obviously, the socio-political constitution of welfare capitalism is quite contradictory. The success of welfare state governance has, paradoxically, undermined its legitimacy (crisis for itself) to rule, as the generation of new forms of lifestyles for individual self-realisation and spontaneity, supported by welfare provision in all aspects of life cycle of its citizens, exceeds the capacities of the medium of power - state politics. It follows that the 'crisis of the crisis management' and the 'ungovernability' are embedded in welfare state governance (Habermas 1989, Offe 1984). More problematic, the pooling of resources via the insured risk sharing mechanisms of the welfare state results in policies that are regressive rather than progress (Baldwin 1990).

The critics and reform on capitalist state welfare mechanism

The welfare state history to a large extent can show how the state attempted to promote collective security (Esping-Andersen 1990; Castles & Mitchell 1990). What is problematic is the 'dark-side' history of this form of polity that reveals, ironically, the failure of it as attacked by both the politically (New) Left and (New) Right. Welfare services provided in the public sphere in most cases were criticised on both sides:- from the Right about its lack of efficiency in generating wealth and the related creation of inefficient and ineffective (against market principle) bureaucracy and redundancy; from the Left, about the hegemonic state control on people's livelihood in the process of further capital accumulation and paradoxically, put the state in the waves of collective protest movements on the one hand, and the emerging fiscal crisis of the state on the other.

Retrospectively, the Bismarck prototype of insurance-come-welfare policy and the United Kingdom's Beveridge Report tend to support an economic pragmatic approach in ensuring (1) social development and (2) with wealth generation, as both of them were viewed by the capitalist state as having the function of keeping people's loyalty, but no sense of self-actualisation as a direct consequence of not having decision making power (cf. Mommsen ed. 1981).

This set of collective value orientations, indirectly coupled with the more directly created welfare state polity, has been challenged by critics with totally different world-views (cf. Taylor-Gooby 1991). Two major aspects structurally and historically associated with the welfare state are problematic:-

1) the welfare state has failed to achieve the repeatedly stated utopian goals and the once agreed objectives (upon which no social consensus was fully made, say, full employment) in terms of social equality, equity, justice, human and citizens rights;
2) the welfare state has, in different ways, created social undesirable and unjust conditions for society and people at large: minority groups, underclass, unemployed and women were discriminated against not just because of the given

social structure but also ironically reinforced by welfare state governance, and the hegemonic professionalism (Bryson 1992).

In response to global competitiveness, most of the welfare states changed to adopt some form of 'supply-side economics' policy measures, including lowering taxes on personal and corporate income, imposing labour discipline, lowering labour costs, and removing labour rigidities, and removing regulatory rigidities: reducing budgetary commitment on welfare issues, vis-a-vis considerations of entrepreneurial-come-consumption freedom (Falkner 1998; Hine & Kassim 1998; Pfaller, et al. 1991). In other words, the new global economic conditions have "diminished the effectiveness of the old welfare state arrangements even without any budget cuts or other restrictive measures ...." (Pfaller et.al. 1991: 280f), and the consequence is a common trend towards *Social Dualism*: wide spread poverty within affluent societies, in line with a set of deregulatory and privatisation policy initiatives.

Health care reform: the supply side ICT application?

Health cost containment, the shift of health services' pendulum from the hospital towards primary health and from acute illness treatment to chronic illnesses, and the commodification of health services via bringing the quasi-price mechanism to health care service provision, e.g. purchasing for health strategy (the Purchaser-Provider Split model, (PPS)), are becoming a global, if not dominant, health policy initiative in the last decade (OECD 1992; 1994). The new attempt for ensuring or enhancing global health conditions should be read against the context of a new high technological environment which requires higher (both labour and capital) costs for bio-medical and health research and services, and in turn also makes new discoveries of different types or variations of disease and epidemics: not least, if not paradoxically, the advancement of medical knowledge engenders the global aging population.

Confronting this, health cost containment is one of the main strategies for health reform initiatives, apart from not pumping more public funds into acute hospital settings and services, it is the shifting of priority to primary health with community care (OECD 1990; OECD 1994; Chernichovsky 1995). Yet, not many of the cost containment strategies, say, using cost-effectiveness approaches, in health care reforms actually achieve an optimal policy outcome. In many instances, pricing on health products and services is either wrongly targeted or promotes more inequitable re-distribution of public resources in public sector, or alternatively, market failures exist in health insurance system (Hammer & Berman 1995). For this sub-optimality of cost-benefit analysis approach to health reform, there are at least three sets of variables in the policy environment upon which the reform instrument has less, if not no way of, controlling, namely, they are: political constraints facing the government, the unavailability of appropriate policy instruments, and the market environment in which they operate. In short, politics does matter in shaping the agenda as well as influencing the outcome of any health care reform, which might not be prescribed nor being accounted for in the informational sciences and a micro-economic managerial approach for better health care provision (Miller 1990).

De-coupling from professional interests, and insulating from professionals' capture on the reform agenda, the actual reform instrument is information science par excellence. Back-up by ICT, information science in general and medical informatics in particular, as well as many informational-statistical modellings enable the establishment of some 'objective' criteria (the length of hospital stay and costing for specified treatment) and the 'rediscovery' of alternative (mostly value-for-money) health care service. Yet, the informational science and the ICT applications are in the hand of the privileged group (powerful elites and the state mechanism), and mostly for the supply-side, suppliers' benefits, rather than the one of the underprivileged and end-users.

The Asian NIEs' health and welfare reform

Regionally speaking, the East Asian Miracle (World Bank 1993) is exceptional if measured in terms of its health and welfare project, vis-a-vis welfare capitalism in the West. The distinctive features of the Asian NIEs' quasi-authoritarian state governance with almost no welfare provision, nor a proper health system comparable to the West (Pfaller, et al. 1995). Yet, this does not imply that all Asian NIEs have no public health issues nor health governance, they are different between themselves and beyond, and differentiated within each economy. Yet, it is very obvious that in these economies, they manage their health and welfare development in general and health care reform in particular with a strong emphasis on the supply side, i.e., much more ICT being put into the supply (and the reform of the supply-chain) side, rather than using ICT for the empowerment of the citizens (health and welfare service-users); the consequence is clearly distinguishable by the alienation process of the people (service end-users) from the policy decision making.

Under the global health reform 'prescription' for managerialism and the re-definition of basic medical and health services, there are four key features of health care reform in Asian NIEs (see Table 1):

(1) The cost-cutting and value-for-money approach of reform is backed by ICT based informational science.
(2) The shift from hospital-to-primary health care is the dominant trend, usually backed by the emergence of a new health monitoring regime of using different Diagnosis Related Group/Unit Cost categories to monitor the health treatment (Wiley 1994). Here, ICT provide the very basis for any analytically (contrast ing to medical profession per se) based health care reform.
(3) Moving towards some form of collective insurance - again, supported by informational (insurance, finance and actuarial) science and ICT.
(4) Bringing-in price mechanisms and creating a 'market' in the service-need management (like the PPS one), using the competitive bidding for example.

To recapitulate, the global strategies are: health cost containment, the shift of health services' pendulum from the hospital towards primary health and from acute illness treatment to chronic illnesses, and the commodification of health services via bringing the quasi- price mechanism in health care service provision are becoming the global, if not dominant, health policy initiative in the last decade. The Asian NIEs experiments on health care reform follow some, if not most, of the global (cost-containment and purchasing for) health policy initiatives backed mostly by a new regime of informational governance: the main instrument is clearly defined by the *Supply-Side ICT Application.*

The supply-side bias ICT application in the reform

The under-utilisation of ICT in the social welfare and health sector is because of a mix of following reasons:- the information services do not meet the needs of indigenous people, lack of governmental support, insufficient funds for high cost informational infrastructure, inadequate and inappropriate information technology, and more fundamentally, information and ICT are not recognized as important functional inputs into socio-economic development by the governments (Boon 1992). More specifically, the pattern of ICT penetration into different soci-economic arenas or the related trickling-down effect, in general, follows this order: economic (profit making) arena receives the most, followed by educational and health related ICT applications, and lastly, the so called unproductive sector - social welfare (Khosrowpour & Loch, 1993; Kraemer, et al.1992).

For the state governance in these NIEs, ICT are only considered as the mechanism for production (for wealth generation) rather than consumption (by the mass), economic growth rather than social development (particularly for the less privileged). To recapitulate, the impact of ICT is global and substantial, yet unequal and differential (Castells 1989). But what is clear is that there is much possibility for the integration ICT and health-come-welfare service end-users, in various socio-economic settings.

The alternative scenario: empowering the underprivileged

Given the knowledge of ICT and if, and when, the government can promote ICT on the demand side and for the empowerment of health and welfare services end-users, the alternative scenario for the Asian NIEs could be that the underprivileged/disabled people can be linking their social life from home-bound to global networking, achieving a higher and better quality of life.

First, the disabled and underprivileged are in most cases less mobile than their counterparts thus they merely have to anchor within the community in which they live or work. The home bound nature (and constraint) of these groups also limits their access to information and contacts with outside world. To remove the environmental barriers, ICT and the mediated information can enable them to live and work in their limited place (domestic setting) yet to have similar if not equal and equitable life chance.

Second, using 'touch' (screen, plate, or tablet) and (remote) 'sensing' technological set ups, ICT can and will enable the maximum level of communication for disabled people on the 'flow' of information - networking, yet this might produce important impacts on others and society at large. In other words, ICT and its products, if effectively used by and accessible to disabled people, will likely shift our world-view on their (strong and potential) performance and thus, they will be considered as beneficial to the community. For instance, many discussion lists and web-hyper links have been serving multi-functional and multi-dimensional activities: policy advocacy, informational exchanges and consultation, these have been changing the ways in which disabled people participate in socio-political life, locally, regionally and globally.

Tele-democracy in test: reinventing people's governance structure for participation

The creation of Cyberspace through maximum integration of ICT locally and globally has been extending the way, mode and form of communications and hence the constitution of new and distinct (cyber)culture, (virtual) community and (virtual) reality (Aronowitz, et al. 1996; Featherstone, et al. 1995), which is in turn shaping the social processes as well as the political culture (Rash 1997).

There is no doubt about ICT based flexible production regimes which generates more wealth and economic activities. Yet, far from developing an equal and equitable society, our ICT driven post-material society has produced more social calamity than ever: the formation of the almost permanent under-class, multiple unemployment, early retirement in the forties, within the realm of advanced high tech and knowledge based new managerialism. Critiques of the information society highlight the contradictions of our 'new world' - the one is mostly mediated by ICT under global corporate governance (Menzies, 1996). This line of critique further argues that, the present form of informatisation of people's work and societal (virtual) encounters has reinforced a divided dual society, the ICT rich minority over those being controlled by the ICT- the so-called *Dual City* phenomenon: the information-based formal economy is juxtaposed by a down-graded labour-based informal economy resulting in a spatial structure: a city that combines segregation, diversity, and hierarchy (Castells, 1989, 1997).

	S. KOREA	TAIWAN	HONG KONG	SINGAPORE
Health Funding Source	Mostly Private Employers' Contribution with State Supplement	Mostly Government supplemented by Statutory Insurance	Mostly Government	Statutory Central Provident Fund: Private
Mode of Health Care Reform	Three-Tiered Referral System with Hospital Care as Centre	Networks of Hospitals, Clinics and General Practitioners (GPs)	Corporatized Hospital Authority, with minimal link with GPs	Hospital Care as Centre of Health Service
Health Insurance	Employees and Employers' Contribution Developed	Contributory with heavily State Subsidy Developed	Insignificance Not Yet Initiated	Established coupling with Employees' Contribution Developed
Integration of Chinese Medicine in Health Care System	Developing and Regulated, especially in food and drug administration	Highly Integrated within the Health Care System	Only a Brief Policy Statement, No Actual Implementation Schedule	Developing and Some Form of Regulation, especially in food and drug administration
Mode of Health Governance	Strong State over Familial Responsibility	Strong State over Familial Responsibility	Hospital Based Medical/ Managerial Professional Interests	Strong State over Familial Responsibility
Health Expenditure as % of GDP - Total: Public/Private Ratio:	Estimated: 1990 - 1995 7.5% 33:65	Estimated: 1990 - 1995 5.5% 40:60	Estimated: 1990 - 1995 6.0% 25:75	Estimated: 1990 - 1995 4.0% 60:40

Table 1: The Asian NIEs' health care reform-in-context

Obviously, there is an urgent need to call for a normative development agenda for the humanisation of ICT, the participatory democracy, equality and social justice in the system of global/local governance - all these are the very essence of participatory democracy - this is particularly important for those minorities and underprivileged groups.

Thanks to the digitisation of information and its multiple representations (text, audio-video and others), we are in a new era of digital economy, polity and society (Tapscott 1996). Participatory politics and social democratic praxis could be enhanced if the given mode of communication channel is designed in such a way as to incorporate (one-to-one, one-to-many, many-to-one and many-to-many) true communications

in a Habermasian sense. Perhaps, this is the real offering, and challenge, of the Internet, which is evolving around different modes of communication, representing both micro as well as mass media functioning (Morris & Ogan 1996). Strategically, the new mode of communication can, at least in theory, enable on-line, real time and full participation of citizens in governing their society - this is what I refer to as the Tele-Democracy (TD).

ICT utilisation in the political world: production / supply-side bias

There is a differential impact of ICT, positively or negatively, on governance and politics. Andersen, et al. (1995, and Danziger, 1995; Margetts, 1999) highlighted that most of the empirical findings present a mixed, but generally positive characterisation of the impact of information technology on politics and public sector administration. More specifically, the ICT impact on actual administrative and political settings are multi-faceted with complexity, while the substantial proportion of studies reporting 'mixed' effects; though the positive impacts of ICT on politics are reported most frequently on capabilities, especially on the efficiency benefits. Hence, impacts are also generally favorable on the effectiveness measures - for administration purpose, although there are some instances where no notable effects of ICT are identified.

More specifically, information quality for government and political activities is also enhanced, though it is perhaps not surprising that negative impacts are under-reported. Also worth mentioning is that these negative impacts were always part of a mixed set of effects - that is, every study which reported negative impacts also reported positive impacts in the same category of information quality. From this observation, it is clear that the quality of information has been improved with an appropriate ICT based regime is in place, for substantiating the political will as well as policy decision making.

Yet, the utilisation of ICT is more, if not concentrated, on the enhancement of the 'quality' of the politico-administrative decision making in the (narrowly defined) government, and the benefits of using ICT are mostly captured by the elitist, powerful, privileged, and selected few of the governing bodies. Again, this reflects the predominantly production/supply-bias mode of ICT utilisation in public policy governance (Margetts 1999).

In other words, the overall performance of ICT on the soft, the most critical and controversial aspect of political governance, is far from satisfactory. Highlighted in Andersen, et al. studies, the most clearly negative impacts of ICT were on values. In many instances, the empirical studies identified unfavorable impacts of IT on individuals' privacy, legal rights and job enhancement (although positive effects on jobs are considerably more frequent than negative ones). While the impacts on values were not overwhelmingly negative, these studies raised their most serious questions about the role of ICT on the most important aspect of the social and the polities, namely, the ethical, socio-cultural and moral dimensions and their judgement in the public domain. In other words, ICT cannot replace the politicking in real life - making choices in bound conditions, at the individual level as well as society-at-large (Alexander & Pal, et al. 1998).

As ICT is being used in the present mode it is more focused on the processing of hard data information, than on the soft data (political will and dynamics) and on the decision making process, it is especially evident that positive impacts of ICT are far more frequently identified than negative impacts for virtually all impact categories. To interpret this a bit further: it is evidently clear that, up-to-now, ICT has not provided a leverage for those who have been (being put) outside the formal, elitist politicking. Here, this also echoes the similar phenomenon of the production/supply-side (bias) of ICT utilisation for health and welfare development.

Health and welfare under the Technopolis: whose benefit?

The state's project on the planned development for the *Technopolis* becomes the iconography for futuristic high-tech society, particularly the ICT enhanced and intensive mode of production in the next millennium (Castells & Hall, 1994). These projects are for national economy competitiveness, mostly being initiated by the strong states in the East (China, Japan and Singapore) and the West (the EU and USA). The building up of technopoles is no longer divided across the governing political ideologies, some questionably 'democratic systems' have been investing heavily for decades to upgrade their technologies and their selective utilisation in society - the Singaporean and socialist Chinese states represent such an endeavour (Singapore Government 1996; Olds 1997).

Social life in the ICT based, emerging, *Technopolis,* will be different judging from the present high-tech system. First, productivity enhancement for both firms and individuals is one of the major achievement of the further integration of ICT in the production domain - though that might be contradictory to the improvement of quality of life as people have to be ready to cope with incoming messages from another time zone during the night time when they are supposed to be in sleeping mode. Second, one of the major consequences of the ICT driven development in (post-)capitalism is the blurring of the division between working and leisure time, domestic with the official. More specifically, information networking perse is likely to become the only mechanism in defining, identifying who you are and what are your entitlements, as most of the gate-keeping function of the policy design are now anchoring upon the database and information processing systems (Katz 1997).

Last but not least, the behavioral repertoire of people is being shaped in accordance with the information available on-time, real-time, just-in-time and across the once geographically bound time-zone differences. In actuality, the foremost development of the informational mode in every aspect of society and economy can be represented by the round-the-clock global factory and exchange regime (Castells, 1989, 1997). This trend is being reinforced by a global regime capital financing, supported by the ICT and their integration with the representing emergence of the so-called 'informatic or telematic city' (Leyshon & Thrift 1997; Graham & Marvin 1997). More challenging is the new demand for individuals and communities to react, with good interpretative power and judgement, to real time global events, mediated by the ICT, with full and massive load of information and representation.

The synergy of tele-democracy and health and welfare advocacy

For the project of reinventing participatory politics, safeguarding health and welfare rights, the ICT' enhancement of the present form of democracy into a hyper one is a probable way; hence the Net and ICT can likely be a good facilitating agent for this. For obvious reasons, the realisation of the Internet as a new form for democracy depends upon overcoming a number of problems, not least is the control of the public over ownership and access to airwaves and the information highway (Barnett 1997; McChesney, et al. 1998; Wright 1995). For the next millennium, there are two major, contesting arenas for the ICT involved and enhanced social democracy, of which we need to be aware.

The search for informational personality in teledemocracy

First and foremost, it is the enhancement of informational personality based on socio-civic forces, against the one brand dominant mode of media engagements of the state and corporate influences. The issue of 'information-personality' should be stressed here, namely, it is the personalised (or people at large) mode of communication and

information exchanges engaging in political articulation for democracy, in both real and virtual communities. For instance, someone might have a better public speaking ability, whilst someone might have a better capacity to perform critical, informational based, reasoning.The further enhancement of the powerful force of the informational personality ins and out of cyberspace is critical for the pursuit of the social democracy project, as the diversity of social system and the emancipatory forces for social development - mostly crystallised onto individuals can be extended and further developed. That is, we need an overhaul of the 'doing' politics in both real and virtual settings. Power relationships, rather than networking per se, should be re-negotiated. Or alternatively, people should take back their power from the representative democracy system which no longer works procedurally and substantially. This is in sharp contrast to the present trend towards commercialization and depoliticalization of the ICT under state and corporate governance.

Cultural, ethical and moral mis-match of ICT?

Second, the indeterminacy of ICT on the democracy project (Tehranian 1990) should be overcome. People should be empowered and mobilised, in and beyond the mass media and virtual reality, to critically challenge the given order, relationship and hierarchy of power relationship between the haves and have-nots, between the in-formed and un-informed groups in the political. In short, the present agenda for change is to bring the Net back into the domain (hence the control) of the people, social, community and public, rather than being captured by the global capitalism (Baran 1995; Barnett 1997; McChesney, et al. 1998; Rheingold 1995) .

The key issue is ICT's compatibility to human society. For instance, in the socio-cultural arena, the development of ICT should guard against the possible cultural domination or imperialism, namely, the information provided via channels of communication means ideas, not just passive 'data', nor is information just a commodity to be bought or sold in the market place, rather, the ideas, images or data convey the powerful meanings which influences and persuade the mind and orientation of the receivers - people at large (Horton 1992: 123-4; Stover 1984: 50-52). The development of ICT for the developing economies is much dependent upon global organisation and division of technology, hence, the developing economies are bound to develop their research and development instruments which foster the development of an 'indigenisation of technology' (Stover 1984: 63-84).

To conclude, cyber-networking per se can do no more good for the project of democracy and the empowerment of the people to change the world, perhaps worse might be the case if it is being captured by the state and relentless profit-motive of global capitalism - the trend indicates such a worrying development (Stallabrass 1995).

Advocacy for better health and welfare with teledemocracy

For the synergy of better health, good welfare and teledemocracy in the next Millennium, there are three inter-related issues. First and foremost, like welfare rights, we should promote the basic right (access to, utilising) of ICT. Legal and political infrastructure should be established in such way that disabled people can participate and have empowerment in the process of rehabilitation back to society and enjoy similar (if not the same) level of rights to access and the utilisation of ICT. In short, the rights to have (or access) ICT should be incorporated into the social rights of citizens. Supportive aids following justice and equity principle should be provided when and where appropriate. Here, it should be pointed out that some (yet different) forms of social security for the needy have been provided globally, therefore, the ICT rights should be considered as an extension of the existing provision in social rights.

This basic and necessary provision in legal and political infrastructure will be influential in empowering disabled and underprivileged groups beyond the welfare and health arena. In short, ICT based empowerment is for all citizens in general and those needy in particular. Only by enacting legislation which promotes health and welfare of people with a guaranteed access to ICT, is it possible to develop a sustainable society. The basic principle for ICT aids should go with citizens participation. For the first step, for the promotion of underprivileged people's health and welfare, is to let them gain access to technology (and ICT) with the support of facilitators, namely the significant others, parent, spouse and friend, in their daily milieu. The state's enabling, via cash payment of the provision of facilitators or ICT hard and software, could be developed along with this line.

Second, the building of a supportive community is the direction for further development. Extended from social and network groups, it is rightly pointed out that, among others, the informational support provided in the social environment is very crucial in helping disabled people to make the right and appropriate decisions when facing problems (Cohen & Wills). Hence, the further networking of and for, say disabled people locally and globally enabled, by the ever increasing new ICT can be envisaged (Fathy1991).

Networking via ICT for subsequent direct personal contacts in community can enhance the sense of belonging and neighbourhood. One of the major networking effects will be the enlargement of personal knowledge bases and the diversification (vis-a-vis traditional form) of people's outlook, attitude, and lifestyle within the global culture(s) - the world becomes smaller! However, this might be paradoxical when further networking, in some instances, prevents normal face-to-face encounters in (traditional) community settings.

Yet, the most important aspect of any community is its lively participatory dynamics, namely, people can communicate with each others without barrier or hindrance, and in this respect, IT and its networking effects can increase the level and intensity of communal participation and in return, the development of a better informed and caring community, in which disabled people could be benefiting from the ever evolving mutual and self-help behaviours (Truman & Lopez 1993). Here, to what extent should nation state and civil society assume control or guidance (private vs. public ownership, centralized vs. decentralized control) on the development of ICT and media networks is and will be a major socio-political issue (Takahashi 1990).

Last but not least, people-centred health and welfare development should be our direction in future (cf. Davenport 1994). The advantage of ICT in welfare and health promotion is its promise of developing an 'individually adaptive and tailor-made ICT set up'. The ICT and helping professionals aid to provide a tailor-made, flexible and adaptive ICT for underprivileged people thus should be the achievable goal in the coming decade.

Risks of ICT: a last reminder

The unrecognized or unknown consequences of ICT applications in different sectors of society are many, for instance, it is doubtful whether the sophisticated processing of increasing volume of information by electronic media can sufficiently reduce the risks of and actual extent of wrong decision making. How will people react to the all round-the-clock, 24 hour, operation mode of the informational society (imagining that we've a direct on-line, real time ICT set up to access to anyone, and to be accessed by all the time, in any part of the world). More problematic, there is an emerging question on the (un)governability of people over ICT development (Brooks 1990; Forester 1992; Whittle 1997): the propensity of computer system failure or malfunction, those resulting from misuse by experts as well as end-users ... the ever-increasing frequencies of computer hacking and fraud, virus creation and system failure remind us of the new

social vulnerability (particularly people's identification, privacy and intellectual property rights) because of ICT failure.

More importantly, these failures were in fact the *problematique* of social informatics, namely, the depersonalisation and fragmentation of knowledge which are derived from observable or mediated encounters (Wersig 1993). In addition, the application of ICT in many arenas has a polarized effects: the generation of those having ICT and those that have-not, the contradictory performance between the well designed system and the 'irrational' behaviours of end-users, and the appropriateness and the compatibility between the ICT system and people at large.

To cope with this one dimensional development of ICT, seemingly, we need to develop our sensitivity to IT applications in socio-cultural arenas and the system's self-reflectivity in IT's research and development programs. Hence, users (broadly defined) participation in ICT development is thus to be strengthened in future. The formation of users / producers groups for sustainable development should therefore be encouraged.

To conclude: coupled with the promise of tele-democracy, the development of ICT in health and welfare sector should have to consider (seemingly a contradictory requirement for) not just cognitive but also emotional aspects of the involving parties. Hence, a balanced and comprehensive approach in developing ICT in the related sector should have the domains of cognitive and behavioural development as well as emotional involvement. In essence, the basic issue (or debate) in the ICT based empowerment strategies for people's welfare is: how to develop people's (vis-a-vis machine) potential? The thesis is that the reinforcement, and its related positive effects, on individuals via ICT applications are crucial in determining long-term and sustainable (health and welfare) development of our global/local society.

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