

Infusing Technology into a Human Services Curriculum: A Developmental Approach

Dr. Susan Cramer

Dr. Janet Hagen

College of Education and Human Services

University of Wisconsin Oshkosh



Curriculum development to meet the changing needs of human service graduates is an ongoing process in most human service programs. In the Human Service Program at the University of Wisconsin Oshkosh, curriculum review and development is addressed, in part, through the involvement of our Community Advisory Board which meets twice per year. The Community Advisory Board, initiated as part of Council for Standards in Human Service Education accreditation, consists of human service program graduates, and others, who are currently working in supervisory capacities in local human service agencies. Each board meeting has a period devoted to discussion of trends in service delivery in human services. In the fall of 1995, talk eventually turned to technology. The consensus of the Board was twofold: 1) that various uses of computer technology were increasingly necessary to do the work of human services and 2) the skill level of human service graduates was uneven. A few students were lacking even basic word processing skills; a few students excelled in advanced applications. The majority of students had some word processing skills and occasionally used the web. Across the board however, few students held a clear understanding of how those skills are used in the practice of human services. From this initial meeting, program faculty and the Board have developed and continue to refine the process for including technology within our program.

Curricular Approaches for Including Technology within a Program

There are a number of different ways technology may be placed into a human services curriculum. Perhaps the two most common approaches to curricular revision are add-on and integration. A curriculum add-on involves development of a new course or unit which is then added onto the curriculum. The content is a stand alone entity which the student must later figure out how to apply to other concepts, skills, and processes taught in the curriculum. The benefit of this method of curriculum revision is that it requires little time or effort on the part of the department with the exception of the individual who is making the course revision/addition, because only one course is involved. From the student perspective this type of curricular revision is also very straightforward. One completes the additional requirement and is done with it. This type of revision very closely resembles the production model of schooling devised in the early 1900's. In this model, learning and content are viewed as self-contained entities which have no need to mix until they are in the learner's head. The problem with teaching segregated modules of content in this manner is the lack of compatibility with current brain research. Caine and Caine (1994) suggest that brains and humans learn by connection-making. The brain searches for interconnections and patterns as it seeks to make meaning. Stand alone courses/units do not promote rich opportunities for this type of connection-making therefore do not promote long term retention and application of material.

The second type of curricular revision that may occur involves integration of new content across a few courses or the entire curriculum. Content is taught within a context as opposed to teaching it as a stand-alone entity. This type of curricular revision involves

several departments or program members and courses. Dialogue ensues as members seek to understand the new content, how it applies to their profession, and how it may be woven into courses for student mastery and application. New skills may need to be learned by faculty members while traditional assignments may be discarded or significantly revised to accommodate these new learnings. Curricular revision beyond integration of the one new content may also occur as additional interconnections and irrelevancies are discovered. Though useful, this change can be disconcerting. Development of new lectures, assignments, readings, projects, and grading criteria take time, an asset in short supply for most faculty. Course sequencing may also need to be readjusted and exit proficiency expectations may need to change. Relevancy, application, and interconnections are stressed when learning is project based and interconnections purposefully made and discussed. This type of curriculum design aligns well with both brain research and actual learning.

Variations on the two approaches to curricular revision may also be taken. Such an approach blends various levels of integration with components of the add-on method. By combining the two approaches, revision may be accomplished in a timely fashion involving those people who wish to be involved in change. This is the approach we at University of Wisconsin Oshkosh have taken. Our story follows.

Our Approach

A Problem and an Opportunity

Based on the conversations with our Community Advisory Board starting back in 1995, we knew we needed to incorporate technology into our curriculum. Yet, by 1998 it

became obvious that accomplishing this was more difficult than we had first envisioned. Other than the inclusion of email basics and introductory web surfing, inclusion of technology into existing courses appeared to be a hit or miss endeavor as faculty took sabbaticals and ad hoc faculty filled in for a semester or a year or as faculty members continually revised their courses sometimes but not always addressing technology. Consistency was not occurring. Many students were leaving our program with a lack of appropriately sophisticated levels of technology knowledge or ability.

Our opportunity came in the spring of 1999 when a fellow department member with technology expertise, who had not regularly been teaching in our program, became available to teach one course per semester. This person had human service knowledge, experience in teaching with and about technology, and was supervising human service field placement students that semester. She also works well in a collaborative environment and did not have preconceived ideas as to what should be taught in a particular course. Thus, she was willing to combine – think integrate and add-on – technology instruction into a course that had previously had a more singular focus. Now the course had a dual focus, the original content plus technology. Concurrently she also helped other faculty members to consider where and how technology could be woven into their courses. Cross curricular, complementary efforts of this type are critical to provide developmentally appropriate introduction of skills and continual reinforcement of taught skills.

Planning for Technology Infusion

Rosenzweig (1999) has defined basic computer technology needs in human service work as 1) client/agency data management, 2) professional communication, and 3) information access. This begins to provide a framework within which one may begin identification of critical technology knowledge, skills, abilities, and dispositions. The profession however has yet to develop technology benchmarks similar to those in teacher education models (Northrup & Little, 1996) which can be utilized as a component of ongoing student and curricular assessment. Thus, we set off on the journey knowing we needed to identify more specifically what technology skills were needed and how they would fit into a project based learning environment with the ultimate goal of preparing graduates to improve the content and process of human service delivery.

Our program seeks to follow a constructivist or project based educational approach. Traditional lectures and readings are used to introduce content and critical background information. Projects are then employed to assist students in learning how to think critically about the content and apply it. Field experiences are the third leg of our program as students do real work in human service agencies. Technology fits into this picture naturally as we envision technology as a tool, much like a chalkboard, book, telephone, or calculator rather than a discrete skill to be learned. Yet, like any tool, instruction in the use of the tool may be a necessary first step.

Initially the focus was on some very basic uses: e-mail to communicate with professors, using a word processing program for class work, web searches for class topics, and e-mail lists for the human service student organization. How to use the computer programs was not taught, instead students were instructed to seek assistance

from supervisory personnel in the computer labs on campus. This was adequate for very basic skills, but a more focused approach was necessary for students to fully appreciate the context and use of technology specifically in human service work. We also recognized that not all necessary technology skills were being mastered.

To identify the technology skills which our program graduates needed to obtain, we informally surveyed Advisory Board members, supervisors of students in field placements, and students who were completing their major field placement which is generally the last coursework in the program. We also brainstormed among program faculty as to what skills were needed; courses where they might be introduced, directly taught, or reinforced; what current practice was; and the degree to which we were modeling what we were saying. From this information a checklist of skills, courses, and projects was developed articulating how and where technology fit into the program

Technology Skill	Level of Instruction	Projects	Course Name
Email	No specific Instruction	<ul style="list-style-type: none"> • Assignments are submitted as attachments • Class materials are sent as attachments 	<ul style="list-style-type: none"> • Introduction to Human Services • Task Group Strategies • Program Planning • other classes
Listservs	No specific Instruction	<ul style="list-style-type: none"> • Invited to join when declare major 	<ul style="list-style-type: none"> • Human Service Organization
Word Processing <ul style="list-style-type: none"> • Insert graphics • Use of text boxes • Use of tables • Picture toolbar • Drawing toolbar 	Direct Instruction	<ul style="list-style-type: none"> • Develop a business card for yourself 	<ul style="list-style-type: none"> • Program Planning and Evaluation
Desktop Publishing/ Word Processing (3-fold brochure)	Direct Instruction	<ul style="list-style-type: none"> • Develop a brochure to advertise your program 	<ul style="list-style-type: none"> • Program Planning and Evaluation

Electronic Presentations (PowerPoint)	Direct Instruction	<ul style="list-style-type: none"> • Develop an electronic presentation to present your program to your agency's Board of Directors for funding 	<ul style="list-style-type: none"> • Program Planning and Evaluation
Web Page/Site Development	Direct Instruction	<ul style="list-style-type: none"> • Develop a web site to communicate your program to a specified audience 	<ul style="list-style-type: none"> • Program Planning and Evaluation
Web Searching	No specific instruction	<ul style="list-style-type: none"> • Search web for information related to: • Freedom of Information Act • State statues • Legal definitions • Information on client groups and agencies • Professional information on NOHSE, CSHSE, Student handbook • Course syllabi and aids 	<ul style="list-style-type: none"> • Value Development • Introduction to Human Services • Legal and Ethical Issues in Human Services • Other classes
Paint/Draw	Informal instruction	<p>Concepts integrated into:</p> <ul style="list-style-type: none"> • Brochure • Business card • Electronic presentations • Web page projects 	<ul style="list-style-type: none"> • Program Planning and Evaluation
Hand-held Scanner	Direct Instruction	<ul style="list-style-type: none"> • Scanning documents in field 	<ul style="list-style-type: none"> • Value Development
Digital Camera	Direct Instruction	<ul style="list-style-type: none"> • Document activities in field 	<ul style="list-style-type: none"> • Value Development
Camcorder	Direct Instruction	<ul style="list-style-type: none"> • Develop videotape demonstrating course skills 	<ul style="list-style-type: none"> • Interpersonal Development

Smooth Sailing

Curricular revision which requires change on the part of many people is never without its problems and triumphs. A triumph of which we are very proud is our own increasing mastery of technology. More faculty members are placing their syllabi and general information online. This models how one can effectively use the web to communicate with others as well as a place to turn to get information. Faculty members are also utilizing electronic presentations (PowerPoint) to deliver lecture information as well as to stimulate discussion and focus attention on content mastery. With increasing use comes increasing confidence to rely on the technology as one tool among many to use during the act of teaching. Students are also employing PowerPoint when giving presentations. This suggests that they are gaining familiarity with the tool and are beginning to understand when to use it.

All human service students are enrolled to our human service listserv (with options to unsubscribe if they choose). Information related to the major, courses, and opportunities are then disseminated electronically. Again, this models how human service professionals may utilize listservs as a source of information and networking on the job.

Email is a given. All students at our university are issued a username and allocated 10 MEG of hard disk space on a university server. Multiple, staffed university computer labs are located across campus; many allow 24/7 access. Students may elect to use these accounts and labs or obtain their own. Either way, access to email and computers can be assumed. Because of this, many faculty members have set up class

lists and distribute information before or after class electronically. They also require electronic submission of assignments, papers or field journal entries, and are able to respond to student questions electronically outside of class time.

Do all students like this focus on technology? Not necessarily. For some students overcoming the fear of technology is a first step. For others, they need to develop habits of checking their email rather than only relying on communication during scheduled class times. Because a variety of software programs and platforms exist and are used by professors and students alike, directions may be quite specific yet not match what one sees on the screen. Thus, learning how to trouble shoot becomes a necessity. Computer labs are staffed with consultants. They can be a great source of information, but only if one can ask questions and understand the answer given. Learning how to pose questions and persist until one understands the answer is another skill that must be learned.

Learning how to communicate with text and graphics is yet another challenge for some as is the nonlinear format of the Internet. All of these are skills and attitudes that must be gained by students. For some, this is natural. For others it is a challenge. Passwords are forgotten. Email doesn't arrive. Attachments can't be opened. Documents are lost. The screen doesn't look like what you are used to working with so you don't know what to do. The internet is down. Programs are not compatible. Files are too big to fit on the floppy. Viruses corrupt your system or infect your programs/files. Everything takes longer as both content and technology must be mastered. New ways of thinking and communicating are being demanded.

Can all students master the technology? Yes, although to varying degrees. Like any skill, process, and content to be learned, mastery is at differing levels for each

individual. Different amounts of effort are expended. Different degrees of interest exist. Different degrees of innate understanding and ability to master exist. However, when students are placed in cooperative groups, an existing component of many courses across the curriculum, they are able to build on one another's strengths as they will need to do in the workplace. Some will learn that they want to find positions where they are expected to use the computer extensively. Others will want to find jobs where use of computers is not a primary responsibility. Understanding personal strengths, weaknesses, and interests in this sense is extremely important while understanding that certain levels of competency are necessary for all practitioners.

Room for Growth

Our program continues to need to focus on technology integration as do many human service programs (DiPietro & Nelson, 2001). For example, we need to provide illustrations and opportunities for use of: spread sheets, electronic data bases, software for case management, software for education (such as risk assessment), online counseling, and online, real time conferencing. Patterson (2000) discusses the importance of common graphic tools used in practices such as eromaps and genograms while our Community Advisory Board recently asked if we were discussing ergonomics and software for people with disabilities. Additionally, our field placements do not have a technology requirement. We need to address those weaknesses in our program. As technology continues to evolve, we need to remain abreast of the advances and weave them into coursework and associated projects. Likewise, we need to examine online delivery of coursework.

In yet another area and as part of our development of the profession, we need to encourage and facilitate the acquisition of technology skills by human service professionals in our community. For example, we offered a six-hour Introduction to Web Page Development Workshop to human service professionals in January 2001. More of this type of outreach education needs to be available and encouraged so that field experiences include sophisticated examples of technology while at the same time moving the field forward.

Recommendations

How can other human service programs that do not have strong technology components develop them? Following our model is one step. Identification of one or two people in the program who will take the lead yet be supported by others is critical. Faculty release time to learn the technology and revise courses is extremely helpful but was not utilized by us. Starting small is important. Technology skills cannot all be mastered in two or three workshops. It takes time and practice as well as access to mentors who can help when you get stuck. Most campuses have these resources. Public libraries also are an excellent option to offer workshops and facilities for use by faculty or students. Recognition that failure will occur and that the technology will not always work as you expect is important. Self confidence, alternative plans, and the ability to say, "it isn't working!" are needed to deal with these problems. Demonstration of these attributes by professors also helps students see how they can comport themselves when they are relying on technology and it doesn't work. Additionally, programs should integrate technology into their program only to the level the college/university is able to

support it. Unsupported efforts lead to frustration which, when it occurs often enough, will turn even ardent supporters into non-users. It will also turn students off, potentially making them into life-long avoiders of technology.

The path to technology integration is not a straight line nor is it a stationary target. This adds to the excitement and uncertainty of the adventure. Watching the smiles and feelings of accomplishment of students as they master technology within human service contexts is worth the effort. Equally important is fulfilling the obligation to improve the theory and practice of human services.

References

Caine, R.N. and Caine, G. (1994). Making connections: Teaching and the human brain. New York: Adison Wesley Longman..

Di Pietro, K.A. & Nelson, J.T. (2001). Human Service challenges of the 21st century, p.347–358. McClam & M Woodside (Ed) Council for Standards in Human Service Education Monograph.

Northrup, P.T. & Little, W. (1996). Establishing instructional technology bench marks for teacher preparation programs. Journal of Teacher Education, Vol. 47 #3 p. 213-223.

Patterson, D.A. (2000). Personal computer applications in the social services. Needham Heights, MA.:Allyn & Bacon.

Rosenweig, S. (1999). Technology in Human Services p.401-408 in Harris, H.S. & D.C. Maloney (Eds). Human Services: Contemporary Issues and Trends. Needham Heights, MA.:Allyn & Bacon.

Article Published in *Human Services Today*, Spring 2003, Volume 1, Issue 1

<http://hst.coehs.uwosh.edu>

This article may be freely distributed provided above copyright information is included.

Human Services Today is a free, online publication of the College of Education and Human Services, University of Wisconsin Oshkosh.