# Integrating Computer Content into Social Work Curricula: A Model for Planning

Richard L. Beaulaurier

**SUMMARY.** While recent CSWE standards focus on the need for including more relevant technological content in social work curricula, they do not offer guidance regarding how it is to be assessed and selected. Social work educators are in need of an analytic model of computerization to help them understand which technologies are most appropriate and relevant to the professional development of social work students. This article develops a flexible model that can be used by faculty to assess, develop, and evaluate computer content in their curricula. The model presents a cost-effective approach that takes into account the enormous flux and pace of change in the computer industry. 

**KEYWORDS.** Computers, CSWE, accreditation, social work education, curriculum development

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## *INTRODUCTION*

As social work moved from independent training schools to become part of major universities, pioneers such as Edith Abbott, Sophonisba Breckinridge and others advocated that professional social workers be educated in the latest scientific and practice technologies available (Wright, 1954; Costin, 1983). In keeping with this tradition, CSWE accreditation standards developed in the last decades have begun to require that master and bachelor-level social work programs include relevant content on technology. The goal is to enhance opportunities to learn about and actually utilize the latest advances in information technology for practice, research, and other curriculum areas (Commission on Accreditation, 1994, 2003). While CSWE requirements focus on the need for including more relevant technological content in practice courses, they offer neither guidance nor criteria regarding how it is to be assessed and selected. Considering the enormous variety of computer hardware, software and related technologies now available, and the rapidly accelerating rate at which manufacturers develop new and updated products, faculty and administrators can easily become overwhelmed when considering what, how and when to introduce this content to students.

CSWE's guidelines are in part a response to recent developments in the practice community which has come to be acutely aware of the need for increased levels of computerization. In recent years computer applications have been developed that are relevant to virtually every aspect of social work practice including counseling and clinical work (Bischoff, 1992; Engen et al., 1994; Kolodner, 1992; Poulin and Walter, 1990); case management (Vafeas, 1991); community practice (Cordero, 1991; Tolman and Edleson, 1991); human services administration (de Haas, 1995; Johnson, Williams, and Kotarba, 1991; Kaye, 1991; Neugeboren, 1995) and social policy (Flynn, 1990; Gray, 1994). Computer applications have even been discussed in regard to social work ethics (McClintock, 1990) and diversity (Carlson and Falk, 1990). In recent years there has been growing recognition that computers are actually changing the nature of some types of social relations, and there has been a corresponding interest in social work and related fields about computer-mediated communications, virtual communities, and cybernetically-delivered or assisted counseling and community building (Bloom and Walz, 2000; Denzendorf and Green, 2000; Falk, 1999; Finn, 1996).[1]

With the swift proliferation of new hardware and software, and the rapid rate of change that characterizes the information technologies industry it is easy to be overwhelmed by how best to incorporate such technologies into the curriculum. Social work educators are in need of an analytic model of computerization to help in understanding which technologies are (a) most appropriate for human services students, (b) necessary in order to work with clients and modern human services organizations, (c) an integrated element of practice, and (d) likely to be necessary in the future. Minimally such a model should meet CSWE standards. These requirements call for social work programs to develop innovative approaches to integrating computer and other high-technology content into their courses. Ideally, such a model should also help educators and administrators make decisions that maximize the efficient use of resources and provide students with learning experiences that will still be beneficial long after today's computers have become obsolete.

This article will develop a flexible model that can be used by faculty to assess, develop and evaluate computer content in their curricula. The model should also assist faculty in developing curricula that (1) facilitate student learning about computers, (2) create efficiencies, by eliminating redundant content and "reinventing the wheel," and (3) are cost effective. The model will also address the needs of "stakeholders" in curriculum development. Principally these include faculty, who are ultimately responsible for assessing, developing, and evaluating changes, and administrators who will oversee and fund changes. Students also have a clear stake in their learning experiences, and in many cases will be called on to make purchases, or at least acquire access to the technology being learned. Finally, knowledge of computers acquired by students should be relevant and useful to the practice community, which relies in some ways on recent graduates to inform and assist them in implementing the latest practice technologies.

## *A MODEL OF COMPUTERIZATION*

Despite the growing importance of computers in the social work field there are few models which address how such technology fits into social work curricula, and the models that do exist were developed before the latest CSWE Handbook on Accreditation (MacFadden, 1994; Hernandez and Leung, 1990; Chaiklin, 1991). The model developed in this article

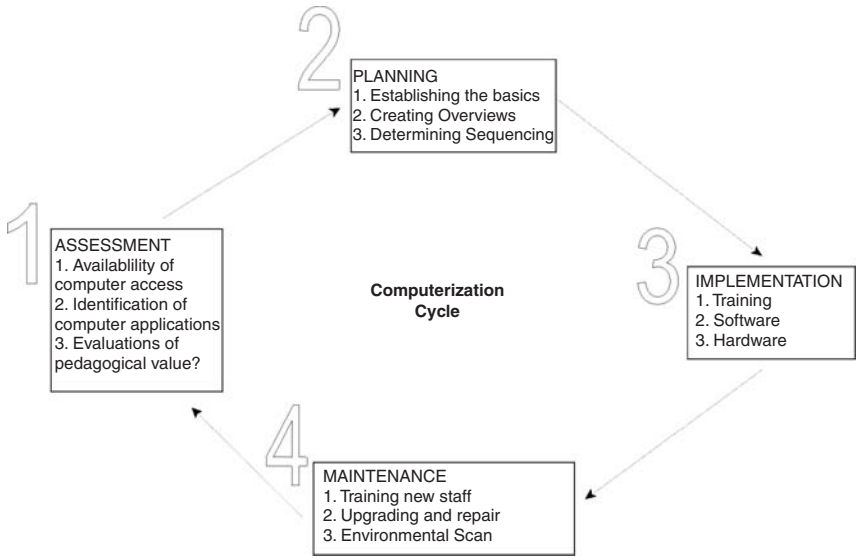
seeks to update earlier work in this area as well as help faculty to meet current accreditation standards.

The proposed model is based upon four basic phases: Assessment, Planning, Implementation, and Maintenance (see Figure 1 and discussion section on each phase below).

It should be noted that this computerization model takes into account the rapid depreciation and obsolescence of computer equipment which is due to one of the four factors:

1. New technology has features or capabilities that were unavailable in earlier versions of the same technology.
2. New technology does what the old technology does, but does it easier or faster.
3. Old technology cannot be supported either because support is too expensive to be cost effective or because it is simply not available.
4. Only more recently developed technology is compatible with other new technology that has been installed elsewhere in the users' "computing environment."

FIGURE 1. Computer Planning Model



Specifically, this model will help to recognize changes in (a) the level of computerization in most social agencies and university departments and (b) the state of flux in computerization that most social agencies and university departments have undergone. The proposed model will help meet the challenge of constantly managing these changes, and the need to develop a strategy of computerization that incorporates change as a constant. Consequently, the proposed model will help administrators and other stakeholders to gain insight about goals they wish to achieve through computerization. The proposed model also stresses that these goals will almost certainly change and develop over time as new products and functions become widely available. Therefore, the model is based upon a flexible process that allows those involved to respond to changes in the computing environment that cannot be predicted in advance. At critical junctures the model also incorporates a reflective process of overview and discussion where information about current states and plans for the future are discussed with stakeholders, and where changes and course corrections can occur.

## *PHASES OF THE MODEL*

### *Phase 1: Assessment*

The first phase of this model assesses the need for access and use of computer technology by students and faculty. Such an approach must examine the technology that is available and evaluate the pedagogical value of incorporating these technologies into the curriculum.

#### *Assessing Access to Computer Hardware and Software*

First and foremost is the question of access. How much time and where will students be expected to use computers? How many students will need to be able to use computers at the same time? Will it be sufficient for students to use computers at home on assignments, or will they need to be able to do things with the instructor, in class?

Faculty may also want to address what students can reasonably be expected to purchase for school. Some business and law schools now require students to own a laptop computer as an entrance requirement. Social work programs may be reluctant to make such a requirement due to the financial burden that this may put on students, especially those who are already financially vulnerable or receiving financial aid. This is

a reasonable concern. The price of a social work education has never been higher. Meanwhile the availability of financial aid continues to diminish. Computerization, however important, is one of the factors driving up the cost of an education (Gladieux and Swail, 1999, p. 15). These factors constitute important elements of the "digital divide" which will be discussed later in this article. Despite these barriers for some students, the price of computers continues to drop. At some point it will be reasonable to consider computers more like a textbook, which we currently ask students to buy for class, than it is like a desk, which we expect to provide.

Students also need access to the software applications they will be exposed to in class. To broaden student (and faculty) access, faculty may want to develop a policy of "sticking to the basics." Basic applications such as word processors, databases, spreadsheets, graphical presentation, statistics and the Internet are the most likely to be readily available and maintained in existing university computer facilities (Hooyman, Nurius, and Nicoll, 1990; Nurius, Hooyman, and Nicoll, 1991). These are also among the applications that most computer manufacturers today are "bundling" with new computers, with the exception of statistical packages. An emphasis on these basic applications may be particularly warranted by schools of social work in the initial phases of computerization, since this maximizes the likelihood university resources already provide some support and at least a few students and faculty will already have passing familiarity with these applications. By contrast, software and hardware that have limited or highly specialized uses are often expensive to acquire and maintain, suggesting that the pedagogical or other payoffs ought to be commensurately high, particularly when students will be expected to share the expense with purchases of their own.

### *Assessing the Pedagogical Value of Computer Technologies*

Assessing the basic "fit" of the technology with the rest of the curriculum is another objective of the first phase of this model. The assessment includes first determining whether the computer technology provides additional benefits over non-technological approaches to faculty's work with students. Such an assessment will ascertain whether the incorporation of new technology in the classroom provides tangible benefits that go beyond traditional teaching methods.

Questions must be asked about whether the technology actually benefits and facilitates student learning in relation to course objectives and

hoped-for outcomes. The experience of the author and others is that technology can actually detract from the learning of substantive course content, at times, particularly when students do not see the relevance or when they have difficulties trying to learn technologies (Latting, 1994; Finnegan and Ivanoff, 1991).

In many cases, however, computer content is essential, even if it is quite specialized and expensive. It is increasingly difficult to envision doing research, or *teaching* research (particularly at the doctoral level) without using specialized programs such as SPSS, Sysstat, or SAS for statistical analysis. Indeed, most multivariate analyses would literally be impossible without the aid of a computer. Software packages are being developed constantly for even more specialized research uses. These include programs like SingWin for analyzing single subject design data, AMOS, and LISREL for structural equation modeling, HLM5 for hierarchical linear modeling. Originally quantitative researchers were the primary beneficiaries of computer technology. Currently, however, it is becoming difficult to envision doing any but the most simple qualitative studies without the aid of software programs such as Nud*ist, NVivo, Atlas.ti, Zyquest, Ethnograph, FolioViews, and other packages.

There also appears to be a trend toward providing students at all levels with sophisticated software tools for research. Many of the more popular research texts now come packaged with data analysis software (Bloom, Fischer, and Orme, 1999; Ruben and Babbie, 2001; Schutt, 1999).

Some highly specialized software, while not important to all students, may be very important to some. This is particularly true of software that focuses directly on the academic market. Bibliographic software such as Endnote, ProCite, and Reference Manager automatically format in-text citations and reference pages at the "touch of a button." The author teaches doctoral students to use Endnote, not merely for this purpose, but also to help them organize and manage the large number of articles and books that they begin to assemble for dissertations, qualifying examinations and articles they are beginning to produce for publication. A related type of software that may become an essential research tool in the near future are the so called "Z39.50" applications. These programs use a protocol developed by the Library of Congress and the National Information Standards Organization to allow virtually all popular university research library catalogs as well as citation databases (such as OVID, Silver Platter, PsychINFO, etc.) to be read using a single program that will have the same "look and feel" no

matter what database or catalog is being accessed (http://www.niso.org/ or http://www.loc.gov/z3950/agency/).

As the assessment phase comes to a close, it will be important to give faculty, administrators and other stakeholders an opportunity to discuss what has been learned. Ideally, knowledge gained in the assessment phase should generate discussion on the part of stakeholders about their interest in using new technologies, any limitations they feel there should be on computerization, their level of agreement with the assessment, and their commitment to further advances in computerization.

### *Phase 2: Planning*

The purpose of the planning phase is to make initial determinations about how and where computer applications are placed in the curriculum. The aim is to establish (1) what the basic level of knowledge students should have, (2) how the school will provide such learning, and (3) the sequence of learning about these technologies. In this phase it will be advantageous to create overviews and graphical representations to assist faculty in working collaboratively. Faculty will need to work together to insure that those teaching advanced courses will be able to anticipate what computing knowledge they can expect students to have acquired earlier in their course of study, and to avoid duplication of efforts.

As was the case with regard to *access* to computer technology, an emphasis on the basics may increase transferability of knowledge students acquire. Social workers who have learned a program such as, for example, an early version of WordPerfect, should have little difficulty learning a more advanced or up-to-date version or a similar new program such as Microsoft Word for Office 2000. The basic word-processing functions, such as cutting and pasting, spell-checking, creating a mailing list, creating footnotes, word searching, thesaurus, etc., are remarkably similar across different brands and updates. Once a student is aware of the various functions available through word processing, this knowledge is likely to be transferable to any newer versions or different brands that the student encounters. Similarly, the same features which were basic to early spreadsheets, are still basic functions in their modern counterparts. This can also be said for other genres of software such as databases, statistical and graphic/presentation, etc. The user interface–or "look and feel"–of the programs may have been enhanced, but the basic functions have been retained. In fact, the basic genres of software applications, such as spreadsheets, word processing, database, graphical

presentation, statistics, and telecommunications (Internet), have remained remarkably stable over time in regard to their basic functions and features. Examples of "early" uses of all these applications can be found in the social work literature since the 1980s when practical personal computers first began to appear on desktops (Clark, 1988; MacFadden, 1986; Gingerich, 1985).

### *Integrating Computer Applications into the Curriculum*

The social work literature is increasingly filled with references to computer technology. However, articles in social work journals that discuss software applications rarely give clear indications about how they fit into social work curricula, even in a general way (Beaulaurier and Radisch, 2005). Moreover, faculties and administrators preparing for accreditation need an overview of how computerization has pervaded the curriculum (Commission on Accreditation, 1994, 2003).

A visual aid, such as the matrix in Figure 2, may be of some help in facilitating discussion. Figure 2 shows how administrators and faculty members might integrate computer content into a macro practice course sequence. Rows of this chart demonstrate the *breadth*, or range of courses, in the sequence. Rows in the matrix in Figure 2 might be expanded to include different courses in other sequences, or different semesters. Columns indicate different types of computer applications that might be used. Cells denote the specific activities and level of proficiency students will be expected to develop in individual courses. The matrix identifies the different types of computer applications to which students are exposed. This example also shows the name of the software that students will be exposed to. The matrix is therefore able to give considerable information about how technology is being used in the curriculum virtually at a glance.

Figure 2 also gives an indication of how students will be required to attain increasing levels of skill in the use of computer technologies. For example, Figure 2 shows how a student might be asked to do progressively more sophisticated things with computers in a first year, macro practice sequence. The matrix allows faculty members to view the proficiency that will be attained with a range of software products over time and in several courses. This can facilitate and stimulate discussion among faculty about how computers could be used in a wide variety of settings and with a wide variety of purposes, as well as with different instructors. It is also immediately evident where gaps occur, as well as where efficiencies can be created by using the same software in different courses, or building on knowledge students gain earlier in the curric-

FIGURE 2. Overview of Applications by Curriculum Area and Application Type*

| | World Wide Web | Databases | Spread sheets | Statistical |
|---|---|---|---|---|
| **Fall 1st Year Admin 1** | • Virtual tour of local agencies by visiting their web pages (Netscape Navigator)<br>• Interactive chat session with agency directors (IRC) | • Class assignment to create MIS system in (MS Access)<br>• Use library databases to create literature review for development of a proposed social program (Library specific) | • Create budget for project (MS Excel) | • Transfer data from MIS system SPSS (MS Access, SPSS)<br>• Generate descriptive statistics of client profile |
| **Spring 1st Year CO 1** | • Obtain raw neighborhood demographic data from census bureau (Netscape Navigator)<br>• Obtain information re. political representation (Netscape Navigator) | • Create a database template of stakeholders for community initiative (MS Access) | • Project the cost of community initiative (MS Excel)<br>• Create pie charts to show the change in expenditures used in target neighborhood (MS Excel) | • Summarize census with descriptive statistics (SPSS) |
| **Field Practicum** | • Design an email based network for alerting community groups about policy decisions (Eudora Pro) | • Assist agency in updating information and referral database (MS Access)<br>• Assist agency with upgrading MIS system (MS Access) | • Develop next fiscal year United Way budget for a project in agency (MS Excel) | • Transfer data from MIS system SPSS (MS Access, SPSS)<br>• Show significance of change on key variables comparing intake to present |

*Note: Software application that might be used to perform this task is noted parenthetically as an example of programs that may be familiar to educators and is not intended as an endorsement.

ulum sequence. Moreover, faculty teaching more advanced courses can be made aware of what knowledge it is reasonable to expect students to have when they arrive in class. This allows faculty to build more advanced applications into later courses.

*Discussing Gaps and Flagging Commitment to Computerization*

Using the matrices may have some other advantages. Faculty might, for example, be encouraged to commit themselves to learning about and using particular devices or software *before* extensive purchases for computer hardware and software are made. Moreover, this approach allows faculty to identify where they may be deficient in areas such as practice and research courses, where CSWE seems especially interested in introducing increased use of high technology (Commission on Accreditation, 1994, pp. 102-104, 141-142, 144). In such cases the overview of curriculum can facilitate discussion about how to address or resolve these issues over the course of the next accreditation cycle under CSWE's "Avenues of Renewal" (pp. 104, 144).

Once stakeholders have had an opportunity to comment on the tentative plan, a more detailed plan for implementation must be developed which includes:

- Documenting demand for new technology on the part of faculty who will implement and use it, as well as students who will be the ultimate consumers.
- A plan and a schedule for providing training and support for new technology that is to be implemented.
- A time schedule for acquiring and installing hardware and software that is as close to the time when training and support can be made available as is practical.

***Phase 3: Implementation***

The implementation phase can be characterized as a "just in time" approach whereby purchases, training and use of new technologies follow in quick succession, and only where there is demonstrated demand. As soon as purchases of hardware and software begin, so does the process of obsolescence. In order for users to get the full benefit of the new equipment, they need to utilize it while it is still new. This may mean thinking differently about computer technology than other capital pur-

chases for a unit, department or even for a social service agency. For example, it is common for administrators to have money left in some of their accounts that needs to be spent at the end of the academic year. While this makes excellent sense for capital expenditures of most kinds, as well as for consumables with a reasonable shelf life, the same cannot always be said for computer equipment.

The shelf life of computer equipment tends to be quite short. In a four-month period, say from May to September, the value of a piece of computer equipment can drop quite dramatically. Moreover, if we assume that the effective life of a computer is three years, a computer purchased in the spring and not used until the fall, has an effective life of about 2.5 years. It may be more cost-effective to make purchases of items that will not depreciate when there are budget surpluses, and buy computer technology at the time users are available to make use of them, so that the equipment does not log a great deal of shelf time.

A second problem is related to the first. When computers are purchased at the end of the budget cycle in order to use up surpluses, it is common to make purchases of computer equipment on the assumption that it is wanted and will be used. When this happens, computer equipment may sit on the shelf for far longer than the length of a summer. The author has seen cases where technology that has never been out of the box becomes obsolete before it is ever used after being purchased under the premise of assumed future demand.

It also makes sense to identify the necessary software before selecting and purchasing hardware. Virtually all software has hardware requirements. If hardware is purchased and installed much in advance of software there is increased risk that this software will not even run without the purchase of even newer hardware.

Implementation should also proceed quickly. Once plans are laid, tight timelines should be made so that the equipment arrives in the shortest possible time before training. This allows faculty to begin learning about and using new equipment before it has a chance to lose much of its value.

An often neglected part of training should focus on how to get support. There are a variety of sources of support, which include the hiring of consultants, paying for a service plan from manufacturers, software houses, and usergroups. Users need to be instructed about how they can get ongoing support, and what support they are entitled to, since this will contribute to their being able to employ the new technology as quickly as possible.

### *Phase 4: Maintenance*

Some maintenance functions will be familiar to administrators. When computers develop hardware or software problems they will need to be repaired. When new employees are brought on, they will need to be trained, and sometimes new equipment must be integrated into existing networks and other systems.

#### *Technical Support*

There are also some maintenance functions that may not be familiar. Technical assistance is one example. It can take many weeks to explore the capabilities of even common applications such as spreadsheets and word processors and this is even more often the case with specialized educational applications such as Internet courseware. Even very experienced users are constantly bumping into areas where they need help either because they were never trained in the operation they are attempting to perform, or because they do not use the application enough to *remember* their training. It is important to recognize that this is natural and normal and that *no* amount of training can completely obviate the need for technical support.

#### *Environmental Scans*

An important maintenance-phase function is the conducting of ongoing environmental scans. There have been remarkable growth and change in the computer industry since the mid 1980s. However, most of these changes have had to do with increasing utilization by a larger number of people, ease of use, falling prices and a change in emphasis with regard to the primary activities for which personal computers are used. The growth of the Internet, and the use of computers for entertainment and communication, which is not new, but *is* newly important, have also spurred growth. So has the widespread understanding that the modern workplace requires technologically savvy employees.

The environment remains very tumultuous. Prices for entry-level hardware have dropped dramatically in recent years. At the same time hardware continues to get more complex and sophisticated. As fast as hardware improves, however, software is developed that *requires* the new and improved hardware to do tasks that worked perfectly well with older technology. Meanwhile, there is a constant stream of new applications developed for the latest hardware and software much of which simply will not run on older systems. Once there is a new "platform" (e.g., hardware configuration like

the CPU chip in a computer, or a new operating system like the latest version of Windows), it is no longer cost-effective for manufacturers to develop technology for older systems. Thus a part, or the entirety, of older systems becomes obsolete.

Change in the industry has the effect of creating critical junctures that occur:

- When there is a need for major upgrades–for example, one that requires the replacement of many computers in order to run new software.
- When there has been a major technical advance such that computer technology may be used for something new or newly affordable (such as the now common use of optical character recognition technology to scan documents into text).
- When there is a major change in the way computer technology is used (such as the shift in emphasis from using computers primarily to "crunch numbers" to using them for communicating).

One of the important functions of maintenance is to identify when such junctures have been reached so that administrators and faculty can make decisions about whether it is cost-effective to continue upgrading and supporting old technology, or whether to replace older equipment with a new wave of technology.

*Completing the Iterative Cycle*

When a critical juncture has been identified it makes sense to call for renewed discussion with stakeholders to examine the costs and benefits of implementing new technology as contrasted with maintaining older technology. Administrators and faculty may chose to continue with older technology without making major upgrades or changes in current levels of computerization, leading to a continuation of the maintenance phase. At some critical junctures, however, faculty and administration will be made aware of the need to begin a new wave of computerization. In this case the "critical juncture" becomes, in effect, a return to the assessment phase.

## *ONGOING CONSIDERATIONS*

This is an iterative model, based on the assumption that computer technology will continue to change over time, and that, at least to some

extent, the specific nature of such changes will be unpredictable, requiring periodic assessment, discussion and careful decision-making.

An emphasis on the basics will be of some help in mitigating the uncertainties of the industry. It is unlikely, for example, that we will stop using word processors, spreadsheets or statistical programs any time soon. While much has changed, the basic features and nature of most essential computing functions were already developed more than a decade ago. The advances in these areas in recent years have generally been oriented toward making computers easier to use, more accessible to an increasing number of people, and–especially recently–cheaper.

Other applications, such as the widespread use of technologies such as web browsers, which barely existed a decade ago, are far less predictable. The one thing that seems certain is that there will be more critical junctures and new waves of computerization, and that the advent of such new technologies will remain unpredictable. There will be a need to scan for emerging trends in the industry for the foreseeable future.

### *The Digital Divide*

One of the persistent industry trends that will increasingly confront social work educators is inequity in the distribution of information technology. The term "digital divide" was coined in the mid-1990s to describe the increasing gulf between technology "haves" and "have nots" (McClure and Bertot, 2000). While the cost of owning a computer with Internet access is less than at any time in history, people of color, families below the median income and people in rural areas are not keeping pace with others in connectivity or computer access (National Telecommunications and Information Administration, 1999; Hoffman and Novak, 1998).

While most analyses of the problem of unequal access have studied individuals and households, institutions are also clearly unequal in their access to technology. Historically, African American colleges and universities have been considered particularly at risk of falling behind the pace of other institutions of higher learning. A recent study suggests that while most historically African American universities have made great strides in acquiring the latest technology and connectivity, they still tend to lag behind other institutions (Ponder, Freeman, and Myers, 2000).

Computer laboratories are probably the most common way of providing computer access to students who do not own computers. As a

faculty member in a nationally recognized Hispanic serving institution, the author has observed that in recent years there has rarely been a free seat in computer user areas around campus. Presumably, these areas are being used primarily by students who do not have access to computers at home. However, although such laboratories are extremely expensive to create, staff and maintain, it is unclear what their impact is on closing the digital divide (McClure and Bertot, 2000). Since an increasing number of students now have access to a home computer, this invites questions about whether such areas are becoming "technology ghettos": places where students who have no other options gather to use computers as opening hours and demand permit, while their more affluent classmates are able to use home systems at times that are more convenient given work, school, and family responsibilities.

While the effectiveness of laboratories and computer classrooms is not known, there is evidence that some students lag behind in their access to technology, particularly in predominantly minority serving institutions. A systematic examination of historically Black colleges and universities has indicated that only 25% of their students actually own a computer. Even among these students, scholarships or financial assistance for acquiring a computer is rare (Ponder, Freeman, and Myers, 2000). What are required are strategies that help technologically disadvantaged students to access and *own* computers that provide them with Internet access.

Educational institutions need to recognize that students increasingly need to have their own computer, and that it is legitimate and necessary to seek financial assistance to acquire one. Outside sources of funding also need to be sought for computer scholarships. Organizations such as the Gates Library Foundation, PowerUp, and others that currently subsidize computerization of public libraries and schools need to study the feasibility of providing computing and Internet connectivity resources access to individuals as well. While it is becoming inconceivable that students will attend college without using a computer, many financial aid policies still do not allow for such purchases. These policies are in great need of modernization.

## *CONCLUSION*

Standards are a beginning in promoting computerization and technology development in the curriculum, and CSWE's accreditation standards rep-

resent progress in this area. Moreover, there are special conferences sponsored by CSWE and the University of South Carolina, as well as symposia at the CSWE Annual Program Meeting (APM) that serve to develop, encourage and apply the latest innovations in computing to human services. These efforts are an important beginning and provide forums for social work educators and scholars already interested in the topic. Unfortunately, these efforts do not reach the vast majority of social work educators who are still struggling to add meaningful computer content to their curricula.

National organizations such as the NASW and CSWE should sponsor the development of "best practice models" that involve the use of computers. In particular, the goal should be to identify and evaluate the pedagogical value of computer applications that seem particularly important or helpful in educating students about clinical practice, case management, social administration, community organizing, advocacy, human behavior and the social environment, research, social policy, and other areas of social work. However, progress in this area is likely to be slowed unless social work faculty develop methods of communicating with each other that allow them to plan and implement computerization strategies that cross individual course and sequence lines. This paper has suggested an approach designed to help faculty integrate and use technology in ways that begin to allow technology to actually pervade the curriculum in ways that facilitate maximal depth and sophistication in the skill base of our graduates.

## NOTE

1. Readers interested in computer applications related to a particular area of the social work curriculum may wish to consult Beaulaurier and Radisch (2005) which reviews the literature on computers in social work and classifies articles by their relevance to the major areas of the curriculum.

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