

Creating a Web-Based Child Welfare Certificate Program: A collaborative Approach

Journal:	Professional Development: The International Journal of Continuing Social Work Education
Article Title:	Creating a Web-Based Child Welfare Certificate Program: A collaborative Approach
Author(s):	Sally G. Mathiesen, Thomas E. Smith, Pamela W. Graham, Lisa D. Barbanell, and Scottye J. Cash
Volume and Issue Number:	Vol. 5 No. 3
Manuscript ID:	53037
Page Number:	37
Year:	2002

Professional Development: The International Journal of Continuing Social Work Education is a refereed journal concerned with publishing scholarly and relevant articles on continuing education, professional development, and training in the field of social welfare. The aims of the journal are to advance the science of professional development and continuing social work education, to foster understanding among educators, practitioners, and researchers, and to promote discussion that represents a broad spectrum of interests in the field. The opinions expressed in this journal are solely those of the contributors and do not necessarily reflect the policy positions of The University of Texas at Austin's School of Social Work or its Center for Social Work Research.

Professional Development: The International Journal of Continuing Social Work Education is published three times a year (Spring, Summer, and Winter) by the Center for Social Work Research at 1 University Station, D3500 Austin, TX 78712. Journal subscriptions are \$110. Our website at www.profdevjournal.org contains additional information regarding submission of publications and subscriptions.

Copyright © by The University of Texas at Austin's School of Social Work's Center for Social Work Research. All rights reserved. Printed in the U.S.A.

ISSN: 1097-4911

URL: www.profdevjournal.org Email: www.profdevjournal.org/contact

Creating a Web-Based Child Welfare Certificate Program: A Collaborative Approach

Sally G. Mathiesen, PhD; Thomas E. Smith, PhD; Pamela W. Graham, MSW; Lisa D. Barbanell, MSW; Scottye J. Cash, PhD

Authors' Note: This project was funded through a grant by the Administration on Children, Youth, and Families (grant number 90CT0056/01).

In recent years there has been an increased focus on social work distance education programs, due in part to the development of a comprehensive set of guidelines by the Council of Social Work Education's Commission on Accreditation (CSWE, 1995). The guidelines were intended to assist social work programs in creating distance education programs that "address both the accreditation standards and the specific issues associated with incorporating technology into education and mediating the distance between instructor and students" (Wilson, 1999, p 329). Much of the literature to date has focused on specific aspects of distance learning and technology, including efficacy (Faux & Black-Hughes, 2000), comparisons of traditional instruction with other methods of delivery (Dabbagh, 2000; Johnson & Huff, 2000; Schoech, 2000; Thyer, Polk, & Gaubin, 1997) and preparation of faculty and students (Padgett & Conceicao-Runlee, 2000).

A national survey (Siegel, Jennings, Conklin, & Napoletano Flynn, 1998) reported that the use of distance learning has increased in social work programs. Yet, the shift towards increased technology in classroom instruction has been a slow process (Schoech, 2002). One reason is the need to gain faculty support for utilizing web-based teaching methods (Padgett & Conceicao-Runlee, 2000; Schoech, 2002; Siegel, et al, 1998). This can be more difficult with faculty members who received their education years ago, since they may not have the desire to incorporate newer, more technologically sophisticated techniques. Another reason is the lack of guide-

lines for developing web-based instruction for specific courses (Dabbagh, 2000). Established guidelines would make the process of transforming a traditional course into a web-based course more efficient and effective (Dabbagh, 2000).

While some social work educators may be reluctant to begin incorporating web-based platforms, such as Blackboard or WebMC, into their teaching, it is important to highlight some of the advantages. These platforms can help professors keep pace with increasingly technologically savvy students (Sandell & Hayes, 2002) and gain access to students in remote locations (Blakely, 1992; Siegel, et al, 1998; Thyer, Polk, & Gaudin, 1997). The programs are not difficult to learn and even include "pre-made" forms that allow professors to simply add course content (Cox, 2002).

There has been little attention paid to the need for collaboration between systems to enhance technological efforts. Blakely (1992) presented a model for distance education for schools of social work. The model anticipated systems problems primarily related to issues within the school, such as the need for additional support staff and access to technological facilities. This is a critical part of a collaborative perspective, but it does not look at interactions with other systems that may impact outcomes. Regarding faculty development programs on technology, Padgett and colleague (2000) suggested the importance of the organizational and professional context within the school. Other social work researchers noted the variation in resources among institutions and suggested that the profession "incorporate a collaborative model for the design and implementation of distance learning tech-

Sally G. Mathiesen. PhD, is a Professor in the School of Social Work at San Diego State University, San Diego, CA.
Thomas E. Smith, PhD, is a Professor in the School of Social Work at Florida State University, Tallahassee, FL.
Pamela W. Graham. MSW, is the Assistant Dean in the School of Social Work at Florida State University. Tallahassee, FL.
Lisa D. Barbanell, MSW, is a Research Associate in the School of Social Work at Florida State University, Tallahassee, FL.
Scottye J. Cash, PhD, is an Assistant Professor in the School of Social Work at Ohio State University, Columbus, OH.
Correspondence should be addressed to: Sally G. Mathiesen, PhD, San Diego State University School of Social Work,
5500 Campanile Drive, San Diego, CA 92182-4119.

Email: smathiesen@earthlink.net

The authors wish to thank everyone who collaborated on this project, as their contributions were invaluable.

niques" (Siegel, et al, 1998, p 79).

In summary, it appears that there is consensus that web-based technology in social work classrooms is increasing, but at a slower pace than anticipated. There is a need for collaboration with other systems to ensure that social work professionals at all phases of their careers have access to resources and are motivated to further develop their skills. Involvement with other systems, both within the university and between the university and the community, would increase the visibility of social work programs, encourage efficient use of existing resources, and identify training and professional development gaps. Descriptions of how systems may be engaged in this complex technologyenhancing process are needed so that future efforts can benefit from the lessons learned.

The purpose of this article is to describe the collaborative efforts involved in the technological development of a web-based project at a school of social work. The paper summarizes the technological challenges and lessons learned during a threeyear project funded through an Administration on Children, Youth, and Families (ACYF) training grant. In line with CSWE's call for web-based curricula and strategic plans within schools of social work, a group of researchers proposed a web-based child welfare certificate program. To address the continuing education needs of experienced practitioners as well as degree-seeking students, the certificate was offered to students in the BSW and MSW programs and to child welfare professionals. The project team was comprised of senior and newly hired faculty members, the MSW program administrator, and doctoral students representing varying degrees of technical ability and interest. With a focus on children's mental health, the team collaborated with and utilized support from many systems, including the School of Social Work faculty, the university, the Department of Children and Families (DCF) administrators, experienced practitioners employed by DCF, and other social work programs in the state.

This case example of an educational program that combines traditional students and agency employees highlights the complex process of collaboration. It demonstrates the process of working with relevant systems that may impact the success or failure of similar projects and focuses on the following major areas: (a) getting started (assessment of needs and capabilities of all systems); (b) the technological structure of the resulting certificate program; and (c) lessons learned and recommendations for a collaborative approach to distance learning projects for students and practitioners.

Getting Started

The faculty team met immediately after the proposal was funded and began to address the many challenges facing the project. First, what were the needs articulated in the grant proposal? Second, which faculty, consultants, and child welfare administrators would address these needs? Third, what were the technical capabilities of the university and social work program? Fourth, what knowledge and skills did child welfare staff and students need to increase effectiveness with their client population? Finally, what strategies were needed to gain support for the project?

What were the needs?

As with most successful grant notifications, the faculty team was delighted but daunted by the tasks in front of them. We were faced with developing a curriculum on children's mental health within a child welfare context to be presented to non-degree seeking, baccalaureate, and graduate students. We were faced with developing a method of delivering the curriculum that would be easily accessible by traditional social work students as well as child welfare practitioners. Finally, we needed to design a method to evaluate the acquired knowledge and skills of participants in the child welfare certificate program.

After finding a dearth of literature on children's mental health in child welfare, we met with state child welfare administrators to determine what topics they believed were priority issues. Faculty and

consultants advised us on their perspectives of essential issues in children's mental health. We spoke with members of a statewide child welfare consortium on their experiences in coordinating curricula and the long-term goal of an entirely web-based child welfare curriculum. With this input we revised our existing coursework in child welfare and developed a new course that would address children's mental health.

Once we clarified the content to be developed, we turned to examining how to best deliver it. Although members of the faculty team were experienced in evaluating research methods, we were faced with assessing an entirely new content area using media with which we had little to no experience. Our proposal outlined the need to address diverse student populations in different areas of the state. We believed that the use of an electronic course delivery platform would solve many of the challenges that we faced, including the ability to deliver curricular content asynchronously in geographically remote locations. Because of the ubiquitous nature of Internet access, our diverse student population and child welfare workers would be able to access course material. The proposal also included the use of an electronic format for evaluating student learning. In developing the evaluation tools, the fact that students took courses out of sequence, in remote locations with different instructors, and over different periods of time had to be considered.

Who would address the needs?

From the beginning, we acknowledged that we would need a faculty project director, a grant manager, core faculty with child welfare and/or children's mental health expertise, and a supporting cast of consultants. In addition, we knew that we would have to work closely with DCF and the state consortium of social work programs offering coursework on child welfare. We met frequently with DCF representatives throughout the project to ensure that it maintained credibility. The interplay of these systems was crucial throughout the project.

We examined our faculty's knowledge base

about children's mental health within a child welfare context and their willingness to teach in this area. Feedback from colleagues around the country indicated that this project would be well received. Our concern was that to deliver the proposed program in multiple locations beyond the grant period. Therefore, we needed to identify additional faculty resources with child welfare expertise.

Our decision to use an electronic delivery platform to augment the classroom lectures dominated many early discussions. First, we knew that we would need different levels of assistance. It was necessary to collaborate with a web developer who had both the technical and aesthetic skills to produce the certificate web site. Second, we knew that we would need an individual to assist with course delivery platforms. Additionally, we needed a highly skilled course developer, as the pedagogical challenges associated with electronic course delivery systems differ from those used in traditional classroom settings.

As part of the electronic course delivery and evaluation system, technical personnel were needed to produce a video based certificate exam to be accessed through the Internet. For students who would be unable to access the video streamed version of the exam, a compact disk version of the same materials was produced. This required videographers, actors, scripts, and technical assistance with video streaming and the production of the compact disk.

What were technical capabilities of the university and social work program?

To answer this question, we examined our curricular content and electronic course delivery systems. Because of our familiarity with classroom instruction, both faculty and consultants thought we would be able to develop the curricular content in a timely fashion. We were less confident about incorporating the curriculum into electronic delivery platforms, as the school had few faculty members with experience using these platforms. Commercial applications and their languages are constantly changing (Faux et al, 2000), and finding individu-

als with the requisite skills to adapt our curricula into user-friendly commercial applications was uncertain. They would need to understand our topic materials and the university supported electronic course delivery products.

In examining the capabilities of the school and university, faculty and participant access would not be a concern. All faculty members had access to up-to-date computers, and on-campus students had access to the computer lab. Initial conversations with child welfare administrators indicated that workers had adequate equipment to access online resources as well.

What were the skills and needs of participants?

The original ACYF grant emphasized improving the knowledge and skills of current and future child welfare workers—both non-degree and degree-seeking students—with a specific focus on increasing expertise of children's mental health in child welfare settings. A certificate program would address the education needs of two populations of students, those who were employees of DCF and our traditional undergraduate and graduate social work students.

To assess the skills and needs of the child welfare workers, we spoke with DCF administrators for their candid appraisal of their workforce. They noted that a small percentage of current child welfare workers had degrees in social work. Successful completion of a certificate program would be beneficial as a means of increasing expertise and earning credits toward social work degrees. Also, many of these individuals had been out of school for years and thus may not have current computer skills. Returning students' lack of computer skills has been expressed in the literature (Faux et al, 2000). The DCF administrators were also concerned about worker retention and felt certification might help to reduce job turnover rates. It was our belief that the hard-earned experience of the child welfare workers would enrich classroom discussions.

The other population being served by the certificate consisted of our own undergraduate and graduate students. Many of these students indicated a strong interest in child welfare, but only one course was routinely offered in the curriculum. As a result of our examination of needs and capabilities, we decided to develop a Certificate in Child Welfare Practice at the school of social work that would be reviewed and approved by the entire social work faculty.

As part of the Certificate in Child Welfare Practice, we proposed the creation of another child welfare course, specifically geared towards addressing the mental health needs of this vulnerable population. The new offering and a redesigned child welfare course would be the core of the certificate program. Students would also be required to complete two related courses of their choosing, complete a 512-hour internship in child welfare. and pass our web-based exam. Students would benefit by having additional training and expertise to prepare them for this area of practice and would have opportunities to network with workers in the field. They would also have a realistic understanding of the nature of the work, decreasing the potential for early burnout and increasing job retention rates. The certification would appear on their official transcripts and could be added to their resumes to increase their marketability.

What innovative strategies were needed to gain support for the project?

A critical consideration during this needs assessment was to ensure not only the capability but the willingness of faculty and participants to see the project through its conclusion. There was also the implicit knowledge that beyond the support period of the grant, the program would need to be supported through existing systems, and that additional training for faculty and participants would be needed as the program moved forward. The importance of developing incentives that increase faculty buy-in has been addressed in the literature (Blakely, 1992; Padggett & Conceicao-Runlee, 2000). To bolster support, brief summer sessions on the use of the Blackboard platform were offered. The university funded these overviews and encouraged faculty to

learn new skills. Included in this support was the expectation that the faculty member would develop a web based or web supported course, including courses in the certificate program. Faculty members who taught these courses off campus also received overload pay of approximately 8 percent of their salaries. Incentives for the child welfare workers consisted of tuition waivers for six credit hours as part of their employment benefits that could be applied to a degree, the potential for advancement, and certification from the university.

The Structure of the Certificate Program

The web-based curriculum for the Certificate in Child Welfare Practice consisted of a mixture of traditional and new technologies: classroom instruction, a Blackboard platform for course delivery, a dedicated website for the certificate program, web access to online journals and other electronic media, and a web-based skills exam. This is consistent with the demonstrated efficacy of multimedia approaches (Stemler, 1997), and with improved child welfare competencies (Thurston & Cauble, 1999).

First, classroom instruction was presented using lectures assisted by PowerPoint presentations. Lecture notes were made available online for students who were unable to attend class. Second, a Blackboard platform housed the following course components: syllabus, lectures, calendar, bibliography, Internet resources, classroom discussion space, small group discussion space, short audio clips, short video clips, and assignments. This passwordprotected platform allowed students to roam the course materials in a structured manner. The Blackboard calendar organized dates with assignments, lectures, readings, and course objectives. The use of Blackboard was in addition to normal classroom based instruction. Although the eventual goal is an entirely web-based child welfare curriculum, this initial effort was an amalgam of both classroom lectures and web resources. Blackboard proved to be a valuable resource for several reasons. The content was streamlined, reliable, and

available to different instructors. When participants were unable to attend class, they had access to lectures and other class materials via the Internet. For child welfare workers, this was a key selling point because it allowed DCF workers to enroll in the course despite the hectic nature of their workload.

Third, a professional web developer was hired to create a comprehensive certificate website. The website included information about the certificate, a complete on-line application process, links to resources, and the exam. The website can be viewed at http://ssw.fsu.edu/childwelfare. Fourth, the University has a wide variety of social science journals and books available online for its students and faculty. The remote access to these journals and books made it possible for certificate students to do their research without coming to campus.

The keystone of the certificate program was an entirely web-based assessment of acquired skills. This method of assessing skills was consonant with the web-assisted course delivery throughout the certificate program. A web-based test of knowledge about child welfare and children's mental health was administered before and after the two certificate courses. The larger challenge before us was to create web-based assessment tools that could be used asynchronously at the completion of certificate requirements.

To test participants' ability to apply their knowledge and skills, we developed a comprehensive certificate exam. The exam included seven videotaped vignettes depicting the child welfare continuum from the initial call to an abuse hotline through the placement of children. Many hours were devoted over several months to developing a "script" with the assistance of child welfare workers and administrators. This collaboration ensured that our content was credible, reflected the general child welfare population, and was in line with legal mandates. We recruited volunteer actors and hired videographers. Once the videotape was completed, the university's newly formed Office of Distance and Distributed Learning (ODDL) contributed its time in video

streaming the tapes. Our efforts in locating university capabilities spurred other faculty to develop their own knowledge and expertise in web design. The university provided additional support for faculty to undertake such efforts. They encouraged consultation with ODDL staff for the current project, as well as in preparing future grant submissions that may be enhanced by technological support.

After producing the videos, we developed test questions that synthesized materials learned. The completed videotape was placed on the website in a password-protected format for the final certificate exam. As an additional benefit for the successful completion of the program, participants received a certificate and acknowledgement of completion on their official transcripts.

Lessons Learned and Recommendations for Collaboration

The technological lessons learned from the project are difficult to separate from the challenges related to interpersonal dynamics. The following recommendations are intended to support those who may be embarking on such a project for the first time.

Collaborations in the classroom are beneficial

Students and practitioners enhanced each others' experiences in the classroom.

Participant evaluations of the certificate program revealed that both degree-seeking students and DCF practitioners found the courses to be practical, interesting, and of importance to their practice. To date, all participants who have completed both core courses have passed the web-based exam. Although the results of the overall evaluation are detailed elsewhere (Cash, Mathiesen, Barbanell, Smith, & Graham, "Education and Partnerships in Child Welfare: Mapping the Implementation of a Child Welfare Certificate Program," unpublished manuscript), some general comments about the types of cross-learning achieved are important to present. Both groups ranked the content and usefulness of the core courses similarly. Overall, the participants gave the highest ranking to the concept

cluster they named "Reporting, Assessments, and Case Planning in the Real World".

While many students were placed in concurrent internships, some remarked that the many years of experience represented by the workers was important to their learning. Anecdotal student comments revealed that DCF workers brought valuable "real life" experiences into the classroom, as well as examples of the challenges of legislative implementation. Workers employed by the Department of Children and Families noted that the content and research findings on children's mental health, child development, and risk assessment instrumentation were valuable to their learning. Follow-up evaluations are planned and will help to assess how the workers and students have changed their practice methods in response to certificate program material. These evaluations will also assist in future refinement of the curriculum.

Make collaboration with other systems a priority

Identify key systems that will affect participants and project team members early in the development of any project. Although this is a basic element of grant writing, it may be overlooked in terms of the technological aspects of a project. Systems may include relevant governmental agencies and practitioners (i.e. child welfare), other universities and social work programs, and technological and applied disciplines within the university. This is consistent with Blakely's (1992) urging collaboration at university and government levels. Input at early stages will enhance the commitment and involvement of all parties and may provide access to informal links that would otherwise be unavailable. Ongoing relationships established with multiple systems will help to ease inevitable difficulties along the way.

After the initial presentation of the curriculum to other districts in the state, it was clear that there was considerable and unanticipated interest in the program from outside agencies. The university's Center for Professional Development is a system that could be involved to discuss future training issues around technological implementation and curricular content

presentation. The limitations on faculty time and turnover in technological support will require that additional individuals become comfortable with all aspects of the curriculum presentation. The Center could serve as an integral part of the further development of this program and help to maximize the use of resources. For example, although we registered non-degree seeking workers as "special students," we have offered the certificate only through the school. A greater audience may be served by consideration of a certificate also offered through continuing education channels.

Be aware of technological changes that may affect your project

Everyone, from beginner to experienced "techie," will face hardware and software challenges.

Continual change is the only constant, and therefore, it will always be difficult to find people with the most up to date electronic platform development skills (Schoech, 2002). Broadband access to online resources will be increasingly available, although probably not within the next five years. Without university support for a specific electronic delivery platform, it is unlikely that a social work program will be able to succeed on its own. Be realistic about your needs and maintain contact with decision makers at all levels so that your efforts will not be outdated before they are implemented.

Assemble your team with a critical eye

Inherent changes in technology underscore the importance of working relationships and a strong, uniform team approach. Unexpected turnovers can cause delays and loss of focus. Be sure to assess each team member's commitment level and clarify long-term responsibilities and roles early in the project. Since there is always the possibility of unanticipated circumstances, it is important to have strategies and procedures outlined in advance. For example, the first person that we hired was a computer science student. Although he had adequate technological skills, he had no experience with the time demands of grant work and translating the ideas of a team into finished products. When con-

ceptualizing the initial website, the team had a clear idea about desired content, though the end product was much more difficult to define; people who can make this transition are in high demand. The process of ending one working relationship and restarting the entire process was stressful and time consuming. Since the time and energy related to personnel issues may even threaten to overwhelm a project, clear delineation of roles and responsibilities, as well as strategies for making changes, should be present from the outset.

Use existing resources

Be sure to thoroughly and creatively search your own university or school for skilled individuals, and make your project known in the community. The person who created our final website was a former social work student who had a professional web design company. She not only had the technological expertise, but an overall awareness of the content area. In addition, contributions made by the university's Office of Distance and Distributive Learning cannot be overstated. However, our contact with this office began with a serendipitous exchange rather than a systematic effort. Their assistance with videostreaming and production recommendations was invaluable. When it came to locating actors for our vignettes, we were able to recruit from within the school much more effectively than through announcements to obvious places (i.e., school of theatre or film school). Be creative and look for resources in unexpected places.

Make grant dollars do double duty

Faculty submissions for external funding should be considered in terms of their research contribution, and also for possible usefulness in enhancing the school's curriculum and connections with professionals in the field. Training and educational proposal requests can be opportunities for a review of existing courses, identification of curricular gaps, and infusion of needed technological enhancements. It is important to overcome the pressure of inertia and actively pursue changes, even if an accreditation site visit is not immediately on the horizon.

This discussion reinforces the need for early collaboration with professionals in other systems. The continued contact with DCF and the state consortium of social work programs guided our efforts beyond the immediate needs of the school, and helped identify systematic technological gaps.

Use outside resources

Expert consultants and professionals, who can produce comprehensive, final technological products, are solid investments. The consultants we used were invaluable in assisting with the construction of course content and providing excellent feedback at many project junctures. Budgeting sufficient funds to avoid frustration and delay is recommended. While we hired student videographers to produce the CD, they were working the project into their busy schedules, and delays were substantial. There are times when using student labor is the most cost effective choice and provides opportunities for their learning, but be cautious of using students when the task may be beyond their experience and time-sensitive.

Get faculty, student, and practitioner support for learning up-grades

Achieving support for a project with multiple systems is a complex process, and cajoling or rewarding participants may not lead to complete success. What we suspected and experienced is that support stems from multiple strategies, and discovering overt and covert objections was an important lesson. We benefited from opportune timing. The curriculum was being examined for the reaccredidation process, and perhaps there was greater faculty willingness to accept changes.

In any group there will be variation in technological sophistication, and many will be hesitant to use new systems. But if technology is to be used well, it must be supported and encouraged in a systematic manner. Faculty knowledge and use of electronic delivery platforms will be important for the continuation of projects beyond the initial team members' efforts. Educational programs are being

mandated to recruit students from far beyond their normal geographical catchment area, making webbased instruction necessary. If the technological learning process is normalized, and everyone is required to "up-grade" their skills on a regular basis, there will be more support from all faculty, and students will follow.

One strategy to normalize skill building would be to incorporate the equivalent of "continuing education units" into expectations for faculty's technological advancement. Faculty would be expected. whether formally or as an incentive, to receive training in web-based classroom technology and other technological skills. Training could be via university classes or in community training sessions. Many universities that support platforms, such as Blackboard, offer training, but it often results in a self-selection of individuals that are already technologically motivated or possess beginning skills. The challenge is to reach those who avoid technology for a variety of reasons, and to create a pool of professionals with the willingness, if not the enthusiasm, to continue to upgrade their technological acumen.

The technological professional development of practitioners could be addressed in a similar manner. University course offerings could be developed to address technological advances in relevant social work content areas, perhaps as a technology certificate. As discussed earlier, finding individuals that can assist with technology can be difficult; however, finding those who possess technological skills and an understanding of the material has created a seller's market. Instituting ongoing training via collaboration with professional development programs would serve mutual goals, and trainers would become highly sought after. If a pattern of lifelong learning is the goal we attempt to instill in our students, then faculty and practitioners must follow in this important arena.

Political realities, cutbacks, and limited resources are part of the game

When the state eliminated tuition incentives for

child welfare workers, it had a significant impact on our recruitment efforts and on child welfare workers' willingness to enroll in courses. We had to rely on word of mouth from prior participants and supervisors at child welfare agencies. We presented our program to other members of the statewide consortium at a videoconference that linked DCF offices throughout the state. Political changes such as privatization may also affect enrollment. Other agencies that now are a part of the child welfare system (i.e., sheriff's departments that conduct safety assessments) expressed interest in our certificate program as a potential requirement for hiring or advancement. These changes to our original strategies were eased by the collaborative relationships with professionals that were established at the beginning of the planning process. It is hoped that program support will grow as we enlarge our audience and pursue the goal of multisystemic involvement and collaboration, while maximizing existing resources.

Conclusion

This paper described the collaborative process of working with multiple systems, and the techno-

logical challenges and lessons learned during a three-year grant. It is hoped that the questions posed and recommendations provided will serve as building blocks for others contemplating web-based projects. Using the basic assessment steps and being mindful of the recommendations at the planning stage have the potential to dramatically reduce some of the most frustrating and time-consuming aspects of complex efforts.

Overall, our experience has been successful, and collaborations are ongoing. Participants, both child welfare workers and traditional students, were overwhelmingly positive about the availability of a certificate in child welfare. The certificate will remain as part of the school's curriculum, with plans to offer it in a fully web-based format to non-degree seeking students off campus. Technology is changing so rapidly that it is nearly impossible to stay current, even if that is your primary occupation. But it is possible to develop and sustain projects that will enhance delivery and assessment of social work knowledge, and that will be consistent with major technological developments nationwide.

References

- Blakely, T. J. (1992). A model for distance education delivery. Journal of Social Work Education, 28 (2), pp 214–221.
- Council on Social Work Education. (1995). Guidelines for distance education proposals in social work. Alexandria, VA: Author.
- Cox, C. N. (2002). Becoming part of the course: Using blackboard to extend one-shot library instruction. *College & Research Libraries News*, 63 (1), pp 11–13.
- Dabbagh, N. H. (2000). The challenges of interfacing between faceto-face and online instruction. *Tech Trends*, 44 (6), pp 37–42.
- Faux, T. L., & Black-Hughes, C. (2000). A comparison of using the internet versus lectures to teach social work history. *Research on Social Work Practice*, 10 (4), pp 454–466.
- Johnson, M. M., & Huff, M. T. (2000). Students' use of computer-mediated communication in a distance education course. Research on Social Work Practice. 10 (4), pp 519–532.
- Padgett, D. L., & Conceicao-Runlee, S. (2000). Designing a faculty development program on technology: If you built it, will they come? *Journal of Social Work Education*, 36 (2), pp 325-334.
- Sandell, K.S., & Hayes, S. (2002). The web's impact on social work education: Opportunities, challenges, and future directions. *Journal of Social Work Education*, 38 (1), pp 85–99.

- Schoech, D. (2000). Teaching over the internet: Results of one doctoral course. Research on Social Work Practice, 10 (4), pp 467–486.
- Schoech, D. (2002). Technology challenges facing social work. Electronic Journal of Social Work, 1 (1), pp 1–11.
- Siegel, E., Jennings, J.G., Conklin, J., & Napoletano Flynn, S.A. (1998). Distance learning in social work education: Results and implications of a national survey. *Journal of Social Work Education*, 34 (1), pp 71–80.
- Stemler, L.K. (1997). Educational characteristics of multimedia: A literature review. *Journal of Educational Multimedia and Hypermedia*, 6, pp 339–359.
- Thurston, L.P., & Cauble, E. (1999). Using interactive multimedia to build child welfare competencies in social workers. Journal of Research on Computing in Education, 32 (2), pp 298–306.
- Thyer, B.A., Polk, G., & Gaudin, J.G. (1997). Distance learning in social work education: A preliminary evaluation. *Journal* of Social Work Education, 33 (2), pp 363–367.
- Wilson, S. (1999). Invited commentary: Distance education and accreditation. *Journal of Social Work Education*, 35 (3), pp 326-330.