ABSTRACT
                Interactive training approaches are used in industry and business for
on-demand and compulsory training. However, use by counselor educators has been slow
in developing this potential area of growth. Given current technologies, uses for
interactive, easily created materials can become an important addition to the training
of professional counselors in classrooms, by distance learning, in web-based training
and, importantly, as a stand-alone product for increasing skill. Recently a self-
directed interactive CD-ROM training program, "Clinical Supervisor Training: An
Interactive Training Program for the Helping Professions," was developed by the
authors. The training package presents a format for the use of current technologies
for enhancing training and teaching efforts of educators, particularly counselor
educators. The focus of the program is clinical supervision. While this discipline
lends itself to the use of computer-based interactivity, it is the premise of this
document that many other areas of teaching and learning also can be enhanced by these
methods. In fact, while this document covers details of the creation and development
of the CD-ROM and training manual that accompanies the program, similar processes can
be adapted for almost all areas within counselor education. (Author)

On-Demand Interactive Clinical Supervision Training: Using Multimedia for Building Basic Skills in Supervision

by

Michael L. Baltimore and Lori Brown

Chapter Thirteen

On-Demand Interactive Clinical Supervision Training: Using Multimedia for Building Basic Skills in Supervision

Michael L. Baltimore and Lori Brown

Introduction

Interactive training approaches, including supplemental multimedia products, are used in industry and business, including medical training and technology, for on-demand and compulsory training. Essentially, providing adjunct and additional training on a "just-in-time" basis has become a vital part of training in a growing number of institutions. However, use by counselor educators has been slow in developing this potential area of growth. Given current technologies, uses for interactive, easily created materials can become an important addition to the training of professional counselors in classrooms, by distance learning, in web-based training and, importantly, as a stand-alone product for increasing skill (Baltimore, 2002).

In fact, interactive CD-ROM-based training, for example, can enhance class instruction associated with professional training programs and also serve as self-initiated training tools. As the availability of multimedia software and hardware has increased, creation of one or the other techniques such as video-based instruction becomes a viable option for counselor educators. In addition, supplemental content can often broaden the teaching efforts of counselor educators as students have access to instructor-driven materials as needed (Chandras, 2002; Hayes, 2001). One such area of development has been the area of clinical supervision.

A recent example is the self-directed interactive CD-ROM training program, *Clinical Supervisor Training: An Interactive Training Program for the Helping Professions* (Baltimore & Crutchfield, 2002) published by Allyn and Bacon/Longman. The training package, developed by the authors, presents a format for the use of current technologies for enhancing training and teaching efforts of educators, particularly counselor educators. The focus of the training program is clinical supervision. While this discipline lends itself to the use of computer-based interactivity, it is the premise of

this chapter that many other areas of teaching and learning also can be enhanced by these methods. In fact, while this chapter will cover details of the creation and development of the CD-ROM and training manual that accompanies the program, similar processes can be adapted for almost all areas within counselor education. It is hoped that this material will provide a starting point for those educators interested in adding interactivity technologies to their teaching approach in direct or supplemental ways.

Overview — Establishing a Comprehensive Program

In the following discussion, development of this interactive learning project as well as process and content from the project will be covered. Outlines of two distinct yet harmonious areas, those of clinical supervision and CD-ROM technology, will be looked at. Further, it must be noted that exacting technology specifications is beyond the scope of this chapter. However, the creation of advanced video CD and interactivity was accomplished with ordinary and easily-accessible computer and video equipment and software. Therefore, those wishing to create similar products can find the means and begin the learning process toward merging the technology with a subject area. Our purpose will be to provide beginning information toward that goal.

Conceptualization - Content

As this project began, an outline of the subject area was developed by the authors that began from regularly scheduled training workshops given as part of an outreach approach for offsite supervisors in conjunction with responsibilities for practicum and internship students. Using much of the discussion stemming from the development of the workshops, the authors constructed an outline of introductory and advanced courses of study for graduate level clinicians. This discussion included factors necessary to build a well-rounded curriculum and fit the need of those with little or beginning supervisory background and for those more accomplished. Once this outline was created, materials used in the workshop, including video vignettes, were compiled for use in the training package. The content was outlined into chapters with varying numbers of pages depending on the depth of the material and supplemental materials for adjunct learning activities. This structure allows end users to navigate easily to topic areas and to return to points in their training where they left off. Ease of navigation is but one of many constructs to employ in creating an interactive project. Additional requirements for creating an effective training approach are needed.

Obviously, and foremost, it is important to have a thorough knowledge of any content area prior to beginning a project to train others. Several questions need to be asked: What are the necessary components to the training package? How will this content be delivered? What basic foundation must be in place before more difficult or demanding material is presented? How will the users interact with the material? How closely does this content need to match materials delivered in the classroom? What content can be added that goes beyond simple text-based material? How will the multimedia content be created and readied for CD-ROM authoring?

Secondly, the target population must be considered. Information concerning the trainees should include: background knowledge of the subject; skill level with the subject matter; interest in the subject; and the need to learn. If, for example, the target population consists of graduate students, then this assessment becomes relatively easy. However, for the general population, a more broad view must be considered given the diversity and range of skills and knowledge of potential participants.

Given this criterion, the authors may choose to limit the depth and comprehensiveness of the project to a reasonable level. That is, the depth of the subject matter usually exceeds the limitation with respect to time and, of course, technology constraints. In this project, the interactive CD-ROM for supervision was restricted to the beginning-to-intermediate level. As follow up, other interactive volumes of the subject matter may be authored for advanced and topic-specific areas. It is important to consider matching the amount of material to be covered for a complete presentation. Otherwise, any project may well suffer from attempting to be comprehensive outside the scope and limitations of the technology.

Conceptualization - Technology
In addition, knowledge of the technology necessary for CD-ROM authoring, including video-on-CD and software that allows for the design and creation of self-starting, menu-driven CDs, was essential. Basically, software for the creation (or burning) of CDs has become standard on most, if not all, computers purchased today. Along with a CD-R or CD-RW drive on one's computer, software can compile any digital file located on the computer and users can choose which files or folders to create on the CD up to the limit of the CD-ROM, usually 640– 700 MBs of storage. This factor alone will determine the content limit, especially with larger files such as video.

As one looks at content material for delivery on an interactive CD, several issues arise. First, text content and graphic content, such as pictures, slides, etc., are easily transferred and recognized from a CD on a computer

5

system. There is little difficulty in compiling this information to disk. Other issues regarding this content pertains to design, that is, the font style, size, color, etc. with written information and graphic presentation of pictures that concerns size of the graphic on the computer screen, as well as file size. These considerations relate to format and layout much as one would design a PowerPoint presentation. The layout and design of the subject content for CD is subjective and a matter of taste to a certain point, but other considerations are just as important. For example, not all computer monitors present the same colors in the same way. A rich, dark color on one computer screen may be much too dark on one and unreadable on another. The author must be careful to consider compatibility issues in terms of design and layout of material. There are many sources to aid understanding of these issues on the web.

An important area, if not the most difficult, is the creation of video for CD. This topic is a constantly evolving area within technology and has many restrictive considerations. Many understand the difficulty in viewing video presented on the web and on CD by viewing small, pixeled and often distorted attempts at streaming video. The picture size is often small and long video clips are next to impossible to use. However, the growth in this area has been quite impressive. Given the advances in video editing equipment and software, and importantly, the video codecs (the algorthyms for compressing and decompressing video files, therefore, allowing the video to stream and maintain clarity), much of the difficulty has been addressed. These gains allow for video tape and other sources of video to be compressed to reasonable file size and displayed back to the viewer on typical computer equipment in the home. This area of the technology is also beyond the scope of this chapter. However, many websites provide futher information for those interested.

Once the materials are decided upon, the layout and presentation issues are concluded, and the video readied, the next step in the process involves using computer software that constructs the platform for delivery of the content. Several software companies offer software products that create interactivity via menu selection and the importing and placement of materials within a structure for the end result. Typically, this type of software creates "pages" or "chapters" for content and has access-controls presented to users for creating entrance and exit points. For example, in the creation of a page or chapter, the author creates "choices" for end users by ascribing commands or controls to a particular object on the page. End users can "mouse click" the object to change the parameter, such as advancing to another "page" or causing a video to play. The structure allows for expansive choice to the

6

author, and ultimately to users, by giving control of how the content is delivered to end users.

There are many other areas that affect the creation of an interactive CD-ROM. This preliminary review will be expanded as we proceed using examples from the Clinical Supervisor Training CD.

Clinical Supervision

Establishing a Foundation

Clinical supervision is an important discipline for consumers, counselors, and counselor educators alike (Bernard & Goodyear, 1998; Borders & Leddick, 1987; and Watkins, 1997). The counseling profession has reached a point where both master's and doctoral level practitioners are beginning to identify a true need for focused training in the area of clinical supervision. With this awareness of need, there arises a void that counselor educators must step up to fill. Many master's level practitioners are asked to supervise their peers without even an introduction to what clinical supervision entails. And often, even doctoral-level practitioners haven't been adequately trained in this area. There is a good deal of power and a great responsibility involved in the process of clinical supervision and astute professionals will recognize their professional duty to become better trained in the area before offering the service.

Once the need is identified, the question becomes one of how to best meet that need. Agencies will often respond by hiring consultants to come in and provide workshops on clinical supervision, but this approach, while helpful, is often limited in scope. Indeed, there is a great advantage to providing broader resources for trainees so that they may work at their own pace, spread the learning out over a greater time span, and enhance the developmental process. Using an interactive training program, via CD-ROM technology, is an excellent means of expanding the scope of the training efforts.

The Clinical Supervisor Training program has set out to expand awareness of clinical supervision methods and techniques. It addresses the needs of training programs, clinics, and individuals by providing a comprehensive self-paced program. The content of the program addresses several important areas in clinical supervision by introducing users to concepts, definitions, and other important theories and fundamentals for providing appropriate clinical supervision. Particularly, the interactive program introduces users to the role and function of the clinical supervisor and starts with the perspective needed to create a supervisory environment. The program devotes an initial focus toward the definition of clinical

supervision and the supervisor's perspective as important building blocks for training. Included in the introduction is a section dedicated to understanding the rationale for beginning training as a supervisor. This section allows users to become self-reflective, review their own supervision as a supervisee, and to define their rationale for beginning. The theme of setting goals for supervision begins with this self-reflective exercise.

Also included in this beginning introduction to clinical supervision, users will view and critique a counseling session and have the opportunity to establish a perspective as a supervisor and plan an intervention with the counselor of the session. This activity provides an entry point into the role of supervisor and supports the importance of supervisory skills and supervisor's perspective in managing the counseling efforts of those you supervise.

The Training Manual

In this product, a hardcopy training manual accompanies the Interactive CD-ROM. The design of the product utilitizes the computer and accompanying manual to ensure a greater depth of learning and gives users a supplementary learning product. An important connection is established between the CD computer training and the training document in order for users to document their progress with the program. Each chapter on the CD has a corresponding chapter in the training manual with exercises and journal activities that lead users to further develop their skills. The flow of activity between the CD and training manual was not an easy solution. It was, however, considered to be essential in adding depth of training and documentation of progress for end users.

Importantly, the reflective exercises in the training manual can be used by professors in graduate classes and constructed into group or individual activities. The program was designed for ease of use. This consideration is fundamental in having the program adopted for use in graduate training programs as well as for individual users.

In summary, an introduction into the supervision fundamentals, the interactivity and aspects of the technology, and connection with the training manual lead users to begin the developmental process of becoming a clinical supervisor through the use of this program.

Constructing the Technology

A goal of most training and teaching efforts is to integrate seamlessly the technology in such a way that the technology and learning inherent with using technology does not interfere with the learning of the content.

This goal, in terms of ease of use, must allow end users to focus their attention on the content and not on apsects of technology. Another goal of interactivity in CD-ROM and DVD creation is to quickly orient users to the product and its operation. Attention to detail in the orientation process is essential in users feeling comfortable with the product. In this supervision product, users are brought into the learning process by an audio introduction to the use of the product followed by an introductory video. This instruction module outlines how users should approach the CD and gives information necessary for optimum use. The operation of the product should be simple and navigation should allow users to move through the content easily. However, it is important to point out that not every possible instruction should be included. Once users begin the process, the product can lead to additional, yet similar content having gained familiarity with the operation and navigation. This can be called the "discovery" factor. This factor provides users with the opportunity for a sense of mastery of the content and navigation of the product.

Importantly, several issues become apparent. The attention span of users to material such as lengthy text-based articles displayed on a computer screen is a consideration. Typically this span is short. Another issue is the "readability" factor. Reading long series of printed material on the computer screen is not acceptable to most. In fact, many prefer short, precise content in easily read font size. These are considerations for moving any users through content and must be balanced between providing indepth content and acceptable levels of the readability. Included in this is the editing process that breaks material into appropriate modules or subchapters. In this way, the author can include additional and necessary materials without placing an entire section in a small space.

Another goal of the introduction is to have the reader understand the "best" approach to interactive learning. Many have never used this modality before. Therefore, it is important to have instructions (video, audio, or in text) that encourage users to make use of a sequential and, in terms of this CD product, developmental approach to learning. In this case, users are instructed to read each chapter page, follow instructions given (for example, view the video clip, etc.), reflect on the material, answer questions, view the activities in the accompanying training manual, and journal their response in the manual. This thorough approach gives users ample time to reflect and respond to material that often is new and needs more than a quick read.

Finally, specific instructions to the product's interface might be necessary. For example, instructions in a popup text box and buttons on the page may need to be prominent. Many Windows-based operating systems

will allow for "hover" or "tool tips" boxes to be displayed when the mouse cursor stays over the object for a short time. These additional instruction sets will help users to navigate and maneuver confidently through the product.

Establishing Further Learning Objectives

In the middle section of the CD-ROM training program, trainees are introduced to further foundational information for becoming a clinical supervisor. It is important to consider that supervision theories have, for the most part, been ignored in many approaches to supervision training. It is believed that the theoretical foundations of clinical supervision, and those specifically focused on supervision and not counseling theory, are extremely important for training new supervisors. These models are presented for users to acquaint themselves with paradigms that are exclusive to counseling theory. Counseling theories adapted to clinical supervision are also covered. Users are exposed to this content with slide presentations with voice and audio files. These files are offered without audio on the CD in a resource folder for faculty who wish to use the slides in classroom presentations.

This section suggests that trainees begin the process of establishing a theoretical orientation to their clinical supervision work. Further reading is recommended to trainees. The models of supervision can be reviewed as often as necessary and the training manual provides exercises for strengthening this knowledge base.

Additionally, this section of the CD provides one of the most important areas in the training package. An initial supervision session is presented in its entirety and is broken into segments allowing users to fully understand the components of the session. This presentation is vital in developing a sound beginning to supervision. The segment provides users a video and text with extensive interactivity for the trainee from the training manual. Issues of confidentiality, record keeping, structure of the supervision sessions to come, theoretical orientation of the supervisor, emergency contact, evaluation, and establishing rapport are but a few of the important areas covered in this presentation. Additionally, this segment offers a process session where the supervisee presents a case in progress and the supervisor demonstrates the supervisory role and management of case presentation material.

Other supporting material is presented on the CD for issues of "Process and Practice". This section is presented as text and audio lecture and addresses such areas as practicum and internship supervision, managing difficult situations, and style differences, to name a few. The focus of the

CD training program is largely a balance between presenting content relevant to clinical supervision and practical, process-oriented activities for learning.

Linking Interactivity

In translating the learning objectives to interactive components of the CD, the authors created differing approaches depending on the audio or visual need inherent to the material. In other words, some materials lend themselves to simple text that must be read (e.g., definitions, etc.). The materials concerning the models of supervision were thought to be better delivered through the use of slideshow presentation but needed further elaboration for complete understanding. It was decided that accompanying audio lecture material for each slide would greatly enhance the meaning for each slide and its information.

At the outset, it was clear that a presentation of actual and roleplay sessions of supervision should be included in this interactive CD. One of the first, coming from experience in the actual workshop, was to present a supervision session and ask users to describe their impression and make decisions about how they might manage the supervisee from their role as a clinical supervisor. This introduction, without the necessary instruction coming early in the training, provides the background for bringing users to a beginning stage in the training progression. This interactivity with the supervision session places the supervision trainee into the role and therefore facilitates a more experiential reaction. It further resolves the authors' desire to present an important concept in supervision, that of the supervisor's perspective. It also allows for further exploration into the differences between supervisor and counselor.

One of the most important and essential components of this CD training program was to demonstrate an initial session of supervision and its components. This hour-long introductory supervision session was divided into segments to allow for appropriate learning to take place and each of the components to be explained thoroughly. The technology involved digitizing the video from the camcorders into computer files. These files were AVI (Windows' Audio-Video Interface) files that are the standard (along with QuickTime by Apple Computers) formats for video on computers. Necessary equipment includes a video capture card with connectors that allow for the flow of large files and a comparable hard disk. Video capture cards are readily available and typically come with capture and editing software. A standard video editing software package, like Adobe's Premiere, while presenting a steep learning curve, can provide users with a comprehensive program for control over video output. Also, this package includes compression schemes that allow for reducing the

11

large files to a significantly lower file size and frame rate (frame rate is associated with the computer's ability to present video in viewable way). Once files are processed through a video editing program and readied for computer viewing, the next step is to build a background for display. The program, in this case Indigo Rose's Autoplay Menu Studio, used to build menus and chapters in the final presentation on CD, will import video and permit the author to locate and add controls to the project.

Finally, authors should be aware that navigation should move smoothly from one subject area to the next. Grouping of subject material in a coherent way that logically builds from foundational information is extremely useful in reaching this goal.

Important Concepts

A vital addition to any training in clinical supervision is that of ethics. Supervision ethics cannot be over looked in the training of any clinical supervisor. The Association for Counselor Education and Supervision (ACES) has prepared ethical standards for supervisors and standards of practice information that are important documents for the profession. The Clinical Supervisor Training Program presents these guidelines with the program. However, for purposes of training the CD-ROM adds additional interactivity to enhance the learning process. On the CD, users are presented with a number of ethical dilemmas that allow them to become familiar with the ethical standards and apply these standards to a video presentation by a supervisee. In turn, the trainee must define the dilemma, find the appropriate code in the standards, and decide a course of action as a supervisor. This interactivity is an engaging activity that goes beyond reading and memorizing ethics standards. Preparing a supervisory response is the important outcome of this exercise.

Multicultural supervision awareness is a significant aspect of any training program. Here, users are introduced to basic information regarding cultural appreciation and awareness. A video clip from an actual supervision session is presented for review. Additional practice in becoming culturally aware is contained in the training manual and in the interactive scenarios found later on the CD.

Group supervision was not the focus of this CD-ROM training program. However, an example of group supervision was used to introduce trainees to aspects of group supervision. Group process and group leadership is discussed briefly in the text presented in this chapter.

Finally, in this section, issues of evaluation and termination were presented. The authors were aware of the importance of evaluation

12

procedures and due process issues that related to assessment of a supervisee. These issues were presented in several ways, including handouts and exercises in the training manual. Additional issues were addressed in the Issues chapter and in the Ethics chapter. Once completed, trainees are brought to the end of the 16-chapter program and prepared to move to the supplemental materials including the video scenarios and resources content.

Linking Interactivity

In the ethics section of the current project, the authors envisioned a highly interactive section of the CD that focused on learning ethical standards, and more importantly, provided users with an application of the material. For this exercises using video vignettes were constructed and filmed leaving users to complete the following: a definition of the ethical dilemma, the matching code from the ethical standards, and an appropriate response from the position of supervisor. The videos were compressed in an AVI format for playing on all Windows-based operating systems. Each scene automatically moves to the ethical standards page where users can scroll to find the appropriate code. The training manual assists users in preparing a supervisory response.

This section challenges users to prepare a response by first consulting with the standards and becoming familiar with the code such that a response complements a customary and reasoned approach. Usually when you say "by first" there is a "secondly" or a "and then." As this is a single sentence paragraph, I wonder if you really need.

Multicultural factors in supervision are enormous challenges for counselors as well as supervisors. In preparing this section, only a sampling of the overall issues related to supervision around multicultural issues was attempted. A brief video clip from an actual supervision session discusses the supervisee's response to the client's cultural issue affecting the marital relationship. Much more is possible in this section, yet it is the author's choice to highlight this area. In another section, the supervisee scenarios, the trainee will have additional opportunities for practice with cultural issues as well.

The group supervision chapter consists of an embedded video clip with accompanying information in the chapter. Further, the trainee is pointed to the training manual exercises for exploration into group supervision. Help!!! On the previous page you said, "Group supervision was not the focus of this CD-ROM...."

Other technical concerns brought into the final phase of the main training module were the addition of text forms and examples used in clinical supervision. These model forms were addressed as popup text boxes

triggered by clicking on buttons embedded on the page. On the CD, additional resources were included in an appendix section, which users can refer to and download and print. These resources offer content that can be used in clinical supervision and is offered in addition to the regular program training. These files were saved in "rtf" format (text recognized by most word processors) and in slide presentations that can be used by faculty in teaching supervision courses.

Additional Interactive Training — Augmenting the Content

An exciting section of this CD-ROM video training program was the addition of supervisee scenarios. This section presents four supervisees presenting typical issues for discussion and response from a supervisor. The trainee is placed in the role of the supervisor and makes choices regarding responses to the supervisee's statement and questions. The trainee is guided through these scenarios, each with a different dilemma. The training manual also assists the trainee and provides ample opportunity to prepare a response. The intent of these scenarios is to give the trainee actual supervision issues to face and resolve. Being placed in this role provides a unique opportunity. The trainee may choose different responses the second or third time they navigate the scenarios.

Finally, the learning of skills as a clinical supervisor has to be developed as one is faced with a supervisee and her or his presenting issues. This interactive training approach was reviewed by other professionals and found to be helpful in creating an environment where the application of learning assists in the development of their role as supervisor. The trainee may wish to visit this section as often as needed to continue to learn and experiment.

Technology Issues

Interestingly, the interactive supervisee scenarios that have become a very important part of this project were created in the last phase of the work. A decision tree was formulated giving the trainee an opportunity to interact with supervisees who present dilemmas and questions for the supervisor. Once the trainee makes a choice, the follow up response by the supervisee has to match the first response. A continuation of the initial issue leads the trainee to a supervisory position. Obviously, there were countless choices that could be entered. These scenarios were scripted to the extent that a series of logical conclusions could be reached depending on the actual choice of the users.

14

The attempt by the authors to create actual supervision session issues was based on personal experiences in clinical supervision. Technically, training the supervisee actors was important and filming close video shots that allowed users to experience being in the role of a supervisor face-to-face with the supervisee was essential. In addition, placing the choices within the creation program was an aspect of this project that took considerable time so that once the users made a choice, the next video clip would begin or allow for a second choice. This presented some difficulty as each response had to move users to a different segment of the CD. Once completed, users then can choose another scenario or navigate to a different part of the CD. The compression of the videos in this section added a significant amount of file size to the overall size of the CD, but within the 650-megabyte limit. Routing users through this matrix of choice was resolved by drawing out the choices in a chart. Using this technique was much like using a storyboard in film.

Finally, this section was added after the main sections were constructed. Authors may wish to construct this type of interactivity after considerable thought. Thinking through what possible choices should be included and creating appropriate responses, given the vast array of possibilities, is crucial.

Conclusion

Clinical Supervision

Clinical supervision is a discipline that is essential to clients who receive counseling, counselors for their development, and society which benefits from the helping professions. The training and development of qualified clinical supervisors continues to be important across the disciplines and academic training programs. The development of an interactive training approach on computer CD-ROM opens opportunities for those in training programs and those who have little access to supervision training. The publication of this training package is focused on advancing clinical supervision. A concise yet comprehensive and highly interactive product was our objective. Ease of use and accessibility was also essential. The authors hope to see continued development in the area of clinical supervision for all practicing in the helping field. This product is just one step toward that goal.

Technology

Constructing the content and learning the technology was a significant task for the authors of the Clinical Supervisor Training Program. Many of

the aspects of the CD-ROM training program were not covered in this chapter. The technology allows for multiple ways of presenting data and multimedia technology has advanced rapidly. So rapidly in fact, that newer versions of this same software are about to be announced. There was extensive testing and retesting on this project before it reached its final form. Many people were involved in the making of this program and the authors are certainly grateful for the help and assistance.

The authors have attempted to focus on solid supervision training content and on the interactivity necessary for learning. A large focus was on the application of the content. Additional materials, such as a website that supports this training package, is in place. Users can augment their training as necessary with resources and handouts from the training program. It is believed that those interested in clinical supervision will benefit from this training. Finally, it is also hoped that other authors will decide their material can be presented in an interactive format and pursue the learning necessary to build an interactive program for their own purposes.

This project relied on a knowledge of software that creates interactivity between the user's choice and presented material on the computer screen. A knowledge of video production and editing was necessary. Authors wishing to create interactive CD-ROM products should consider their background and knowledge of computer operating systems, hardware configurations, and the latest versions of presentation software. Using the most up-to-date software and hardware is essential for a workable and reliable product. There are many commerical versions of presentation and interactive software available. Yet, there are just as many compatibility and platform issues to overcome. Technology advances at a very rapid rate. Decisions of how to incorporate the technology can be overcome and more effective means of content delivery via these newer technologies will enhance counselor education and training.

References

Baltimore, M.L., & Crutchfield, L.B. (2002). *Clinical Supervisor Training: An Interactive CD-ROM Training Program for the Helping Professions.* Boston: Allyn & Bacon.

Baltimore, M. L. (2002). Recent trends in advancing technology use in counselor education. *Journal of Technology in Counseling, 2* (2), Retrieved August 1, 2002, from http://jtc.colstate.edu/vol2_2/editor.htm

16

Bernard, J.M., & Goodyear, R.K. (1998). *Fundamentals of clinical supervision, Vol. 2.* Needham Heights, MA: Allyn & Bacon.

Borders, L.D., & Leddick, G.R. (1987). *Handbook of counseling supervision.* Alexandria, VA: Association of Counselor Education and Development.

Chandras, K. (2000). Technology-enhanced counselor training: Essential technical competencies. *Journal of Instructional Psychology, 27*(4), 224-227.

Hayes, B. G. (2001). Where's the data? Is multimedia instruction effective in training counselors? *Journal of Technology in Counseling, 1.*1. Retrieved August 1, 2002, from http://jtc.colstate.edu/vol1_1/multimedia.htm

Watkins, C.E., Jr. (Ed.). (1997). *Handbook of psychotherapy supervision.* New York: Wiley.

17