



ADCIS SIG CBT

NEWSLETTER

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Association for the Development of Computer-based Instructional Systems Special Interest Group in Computer-Based Training

SPEAKER'S GUIDELINES FOR CONFERENCE PRESENTATIONS

Herbert W. Etheridge

What are some of the things you can do to ensure success for both the listener and the presenter? By the very nature of the conference, you are well on your way to defining your audience and identifying your presentation objectives. The first step should be to determine how large an audience will be attending your session. This will determine, to some degree, what visual aid medium should be used to support your topic.

Rule 1:

Have handouts for the participants. This minimizes the note-taking burden, speeds up the process of the participants' collection of ideas and data, and allows for subsequent discussions of the content long after the session is concluded.

Hint 1: You might want to hand out copies of each visual used in the presentation.

Hint 2: Special documents that just don't make good visuals should be distributed as handouts (copies of newspaper articles or complex statistical reports).

Rule 2:

Make sure the visual aids used can be seen clearly by the participants.

The logistics of the room will have significant bearing on this. If possible, check out the facilities prior to presentation time. We learn significantly more through our eyes than our ears.

Hint 1: Use large, bold letters. Typewritten masters work fine for some visuals, but projection size can limit their effectiveness.

Rule 3:

Design your presentation so the audience knows exactly where you are going and also what you are *not* going to do *before* you give the actual presentation.

Presentation topics tend to be a bit misleading, causing attendees to leave during the presentation knowing their personal objectives won't be addressed.

Hint 1: Tell the audience your presentation outline, define your limitations concerning depth of material, and then give them the option to stay or leave. The old military adage: "Tell'em what your going to tell'em; tell'em; and then tell'em what you told'em."

Hint 2: Identify how you want to handle questions. If you have come prepared to meet your presentation objectives, perhaps a question-and-answer period should conclude the presentation.

Rule 4:

Tell the audience who you are and how you want to be reached (phone or mail) following the session.

The seeds you plant here may precipitate participant questions long after the session.

An extra supply of business cards is an easy way to meet this need.■

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The ADCIS SIG CBT Newsletter is published quarterly by the ADCIS Special Interest Group in Computer-Based Training. Its purpose is to encourage the exchange of information on instructional computer applications in business, government, industry, and the military.

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Articles on computer-based training are invited from all members of the training community. Manuscripts should be limited to one or two double-spaced pages and submitted to the editor.

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MAKING EFFECTIVE USE OF AVAILABLE TRAINING MATERIALS THROUGH CMI: PART I

Michael Szabo

It is generally recognized that four major factors must be considered when attempting to employ computer-based training (CBT) to meet training needs: Hardware, Communication, Software, and Courseware. Before commenting upon the main topic of this article (courseware), let me briefly discuss all four factors as they relate to mini- or maxicomputers.

Hardware costs have been and are expected to continue plummeting for at least the next decade. Large gains in memory allocation and new technology for the manufacture of chips are largely responsible. Communication gear is inexpensive at a single site but communications networks are expensive and not likely to change drastically in pricing in the near future. Software, that is, operating systems, designed with the educator trainer in mind are available from several vendors, such as Digital Equipment Corporation and Control Data Corporation. Although costly, their acquisition is chiefly a one-shot fixed cost except for personnel to run them. The deterrent to computer-based education is the lack of specific training objectives associated with corporate goals. Furthermore, courseware development efforts are labor intensive and will continue to escalate with higher salaries.

A solution to this problem posed in this article is to employ, whenever possible, existing corporate training materials enhanced by diagnostic and prescriptive computer-managed instruction (CMI). This approach has been successfully conducted in several projects involving the author although he does not claim credit for inventing the approach.

The Method

The method proposed saves developmental salaries because it employs the expensive subject matter expert (SME) in an efficient manner. Rather than spending time doing what the SME (1) isn't trained to do, (2) doesn't want to do, and (3) finds unrewarding, the SME identifies the best available training materials (ATM) and uses a special algorithm for turning them into a diagnostic and prescriptive training tool. An instructional designer does the bulk of the developmental work as part of a team which includes the SME and a programmer.

This procedure produces much more than just a programmed text, which cannot hold the trainee's attention or produce the "deep cognitive processing" associated with lasting learning. To illustrate, after the trainee studies an appropriate and short block of the ATM, he/she completes an examination, on- or off-line, which is keyed to the concepts/objective to be learned from the ATM.

Passage to the next block is prohibited until mastery is attained. This control is possible via CMI which also gives out individual prescriptions to each trainee based upon his/her acquisition of the content.

The CMI component, in addition to its control capabilities, can also deliver extensive corrective feedback to guide the trainee back to the sections of ATM which carry the correct or desired information.

Another powerful feature of this application of CMI permits a fine-grained coverage of the material to be learned and uses a high frequency of short tests. Typically, one is tested after studying an 8–10 page segment with a 4–8 item diagnostic test. Although some will claim excessive testing, this is only an issue if the testing is divorced from the training. In the proposed model, training and testing are carefully and explicitly linked together via the learning prescriptions function. Another role of the questions is to focus the trainee in on the specific content which has been deemed irrelevant by the SME. This handles the problem of what to do when the ATM contain content that is superfluous to the training task.

What is Required?

The first requirement is a mainframe computer and training-oriented software. The cost of purchase and ownership is a question of several tradeoffs, e.g., between lease or purchase of time-shared service with the concomitant telecommunications costs. Special planning is required when distance training is required. Often costs of trainee travel, subsistence, and lost productivity can be recouped by the savings in time associated with this mode of instruction. Distributed processing with terminals capable of operating in a stand-alone micro-mode hold promise for minimizing telecommunications costs. It can also be demonstrated that the time required to ready a CMI/ATM course for delivery is substantially lower than to prepare and deliver a course using a CAI mode.

Designing a Training Program Using CMI/ATM

Assuming one has access to the hardware, software, and communication network appropriate for the training requirements, a special algorithm has been developed for combining the skills of an SME, programmer, and instructional designer to produce the course of instruction. The basic structure of that algorithm will be presented in Part II of this article to be included in a subsequent (hopefully next) issue of the Newsletter. Also to be included are some data regarding the time savings that may be expected to accrue to the SME.■

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THE CHAIR'S VIEWPOINT

Jesse M. Heines

This column marks my last communication with you as Chairperson of the SIG CBT. We have seen a lot of growth in these first three years, and I am especially pleased that this 12th quarterly issue of the SIG CBT Newsletter is again being distributed on schedule.

I feel that the most important thing that we have done is to establish a strong vehicle for exchange of information on CBT. I can measure the success of this endeavor simply by observing the large number of telephone calls that I received asking for information on CBT. Before becoming Chairperson of the SIG CBT, I received perhaps half a dozen calls in a year. Now I receive that many each month, and sometimes that many in a single week.

As outlined in my column last quarter, our committees are now functioning smoothly. At least some activity has occurred in each committee, and I feel confident that this activity will continue in the next year.

I wish to thank all of the people who have worked with us to get us to this point, especially the committee chairpeople. I look forward to continuing active participation in the SIG CBT and ask all of you to support the new officers in taking further steps to achieve our goals.■

NEW DOCTORAL PROGRAM

The University of Illinois Department of Educational Psychology has announced the formation of a new formal doctoral program in Instructional Design. This program is designed to meet the needs of people interested in working with computers in various instructional settings, and of people with a broader interest in the design and implementation of instruction. The course offering is extensive and multi-disciplinary, with course sequences being tailored to meet individual requirements. Graduation from the program demands both theoretical and practical excellence.

For further information, please contact Dr. Stanley Trollip, Instructional Design Coordinator, Department of Educational Psychology, 210 Education Building, University of Illinois at Urbana-Champaign, Urbana, IL 61801.■

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