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                Teaching Methods; Telecourses; Videodisks;
                Workshops

ABSTRACT
                This document presents nine bibliographies, compiled
from training materials used at workshops conducted by Project
RETOOL, on the integration of special education technology into the
higher education curriculum. Workshop topics include: "Effective Uses
of Technology for Teaching Math, Science, Social Studies, and
Writing"; "Technology Tools for Teacher Educators"; "Multimedia";
"Integrating Technology into the School Curriculum (Elementary,
Intermediate, Secondary)"; "Technology as a Research Tool";
"Roundtable on Special Education Technology in the Higher Education
Curriculum"; "Teaching in an Electronic Classroom"; "Developing and
Repurposing Videodiscs"; and "Distance Education through Television."
Each bibliography is preceded by an introductory section outlining
the workshop title, date, location, presenters, and scope. The
bibliographies, each consisting of from 20 to 50 references, list
English-language monographs, reports, and journal articles. (JDD)

ED354686

EC 301869

BIBLIOGRAPHY

SUMMATION BIBLIOGRAPHY

Project RETOOL:
Integrating Special Education
Technology into the
Higher Education Curriculum
1990-1992

Project #H029K90025

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Funded by:

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THE COUNCIL FOR EXCEPTIONAL CHILDREN
Teacher Education Division
1920 Association Drive
Reston, VA 22091

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INTRODUCTION

December, 1992

Since its establishment in 1974, Project RETOOL has been concerned with the continuing education of teacher educators and the development of quality personnel preparation programs. For the past 3 years, The Council for Exceptional Children (CEC), in collaboration with its Teacher Education Division (TED) has conducted Project RETOOL: Integrating Special Ed ation Technology into the Higher Education Curriculum. Training materials and workshops provided higher education faculty an opportunity to integrate technology into their teacher preparation programs.

In the course of 3 years, the project conducted nine research-based training modules that could be incorporated into college courses in education. Three workshops addressed the integration of technology into the school curriculum for special education students; three focused on effective uses of technology for teaching specific content; two demonstrated to teacher educators how to model the use of new technologies in their teaching and research; and one provided information about quality training practices and programs in higher education.

For the convenience of those who are interested in special education technology, the following document was compiled from the training materials used at the nine workshops. A separate bibliography is provided for each workshop topic. For those of you who were able to attend some of the workshops, we hope the bibliography will be a useful reference; for those unable to participate in workshop activities, we hope the references provide helpful background information on the increasing use of technology in special education programs.

TABLE OF CONTENTS

WORKSHOP TITLE:	Effective Uses of Technology for Teaching Math, Science, Social Studies, and Writing
DATE:	May 24-26, 1990
LOCATION:	George Mason University
PRESENTERS:	Ted S. Hasselbring, Vanderbilt University Charles MacArthur, University of Maryland John Woodward, University of Oregon
SCOPE:	Effective Uses of Technology for Teaching Math, Science, Social Studies, and Writing introduced teacher educators in special education to the concept of integrating technology into effective teaching practices for math, science, social studies, and writing. Ted Hasselbring demonstrated technological applications in math, including fluency software for computers and interactive videodisc programs. Charles (Skip) MacArthur emphasized the teaching of effective writing and showed how to integrate computers into instruction for teaching the writing process. John Woodward focused on the computer as a tool for integrating social studies/science "text structure" activities. He also offered guidance in selecting appropriate software and activities for professors whose teachers might have limited access to a computer.

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|  WORKSHOP                                                             |
|  TITLE:          Technology Tools for Teacher Educators              |
|                                                                       |
|  DATE:           June 21-23, 1990                                    |
|                                                                       |
|  LOCATION:       University of Arkansas at Little Rock               |
|                                                                       |
|  PRESENTERS:     A. Edward Blackhurst, University of Kentucky        |
|                                                                       |
|  SCOPE:          Technology Tools for Teacher Educators featured     |
|                  Edward Blackhurst.  He showed some methods that     |
|                  teacher educators can utilize to facilitate the many|
|                  professional activities expected of today's higher  |
|                  education faculty.  Participants explored the ways   |
|                  available software could help professionals with the|
|                  following tasks:  writing for publication, preparing|
|                  presentations, writing proposals for grants and     |
|                  contracts, using technology as a teaching aid,      |
|                  managing the paperwork in higher education, and     |
|                  preparing NCATE review forms.                       |
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Renne, D.J., & Blackhurst, A.E. (1977). The effect of adjunct auto-instruction in an introductory special education course. Exceptional Children, 43, 224-225.

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WORKSHOP
TITLE:           Multimedia

DATE:            August 16-18, 1990

LOCATION:        University of Wisconsin at Milwaukee

PRESENTERS:      Robert Gall, University of Lethbridge
                 Ted Hasselbring, Vanderbilt University
                 David Keefe, IBM
                 Kuo-Ping Yang, IBM

SCOPE:           Multimedia allowed teacher educators to explore its use
                 in college courses through HyperCard and Linkway
                 software.  Ted Hasselbring and David Keefe led
                 workshop participants through the steps of the software
                 that integrates text, sound, graphics, videodiscs, and CD-
                 ROM into instructional materials.
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Wood, R.K., & Stoddard, C. (1990). Repurposing video for local production: Implications of copyright laws. Educational Technology, [July], 44-45.

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WORKSHOP TITLE:	Integrating Technology Into the School Curriculum (Elementary, Intermediate, Secondary)
DATE:	February 14-16, 1991
LOCATION:	Florida Atlantic University
PRESENTERS:	Jeffrey Hummel, Johns Hopkins University Michael Livesay, Macro Systems International Judith Zorfass, Education Development Center
SCOPE:	Integrating Technology Into the School Curriculum at the Elementary, Intermediate, and Secondary levels featured Judith Zorfass, Jeffrey Hummel, and Michael Livesay in the presentation of three research-based models for integrating technology into the school curriculum. The models presented include (a) a curriculum model featuring inquiry-based learning; (b) a classroom-based model focusing on strategies and actions needed to support teachers; and (c) an organizational model addressing administrative and resource issues. Workshop leaders and participants discussed activities that support the models, provisions for teacher support in the use of the models, and strategies for providing training in the use of the models.

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WORKSHOP
TITLE:          Technology as a Research Tool

DATE:           March 28-30, 1991

LOCATION:       University of Georgia

PRESENTERS:     Dave Edyburn, Vanderbilt University
                Carolyn Adgar, University of Maryland
                David Malouf, University of Maryland
                George Haus, Vanderbilt University

SCOPE:          In Technology as a Research Tool, Dave Edyburn
                designed this workshop for higher education faculty who
                are interested in learning about various ways technology
                can facilitate their research.  Presenters Dave Edyburn,
                Carolyn Adgar, David Malouf, and George Haus led
                discussions, demonstrations, and hands-on activities
                focusing on the four phases of the research process:
                designing the study, conducting the study, analyzing the
                data, and reporting the results.  Resources, software
                programs, techniques, and strategies that enhance
                research productivity were emphasized.  Participants
                were encouraged to bring software programs to share
                with the group.
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215-235.

WORKSHOP TITLE:	Roundtable on Special Education Technology in the Higher Education Curriculum
DATE:	May 30-June 1, 1991
LOCATION:	Teachers College, Columbia University
PRESENTERS:	A. Edward Blackhurst, University of Kentucky Joel Mittler, Long Island University Robert Gall, University of Lethbridge James Tawney, Pennsylvania State University
SCOPE:	A. Edward Blackhurst, Joel Mittler, Robert Gall, and James Tawney presented information that is essential for higher education faculty. This information included (a) a model for planning special education technology preservice programs; (b) issues related to faculty support and development; (c) delivery systems, including long-distance education; (d) policy issues; and (e) innovative strategies for changing and upgrading technology systems. The training notebook compiled specific information about special education technology program models, descriptions of programs across the nation, course designs, faculty development plans, resources for technology trainers, and professional standards.

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WORKSHOP TITLE:	Teaching in an Electronic Classroom
DATE:	October 17-19, 1991
LOCATION:	University of North Texas
PRESENTERS:	Alonzo Hannaford, Western Michigan University George Haus, Western Michigan University
SCOPE:	Teaching in an Electronic Classroom informed teacher educators about various technologies that can enhance teaching and learning, and provided information to enable higher education faculty to make informed decisions about selecting and using electronic technologies that are most appropriate to their needs. Alonzo Hannaford and George Haus conducted demonstrations and led hands-on training that showed participants the instructional merits and limitations of various computer systems, including Macintosh and IBM. The training also included videodiscs, CD-ROM, projection systems, and emerging technologies. Factors related to deciding if, when, and how various programs may be used were also explored.

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WORKSHOP TITLE:	Developing and Repurposing Videodiscs
DATE:	February 27-29, 1992
LOCATION:	University of South Alabama
PRESENTERS:	Ted Hasselbring, Vanderbilt University Laura Goin, Vanderbilt University
SCOPE:	In Developing and Repurposing Videodiscs, Ted Hasselbring and Laura Goin demonstrated to teacher educators the development of a videodisc that can be used in teacher training. Workshop activities culminated in the creation of a videodisc showing how special education uses technology with students with varying disabilities. Workshop participants were asked to contribute short film clips that were compiled and edited onto a master videotape. Participants learned how to edit the master tape in preparation for having its contents transferred to a videodisc. Each participant received a copy of the videodisc and software application developed for the workshop.

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WORKSHOP
TITLE:          Distance Education Through Television

DATE:           December 4-5, 1992

LOCATION:       University of Utah

PRESENTERS:     M. Winston Egan, University of Utah
                Marshall Welch, University of Utah
                Helen Lacy, Station Manager, KULC
                Joan Sebastian, University of Utah

SCOPE:          Distance Education Through Television helped teacher
                educators develop practical skills necessary for
                successfully designing instruction and teaching via
                television.  The presenters focused on the selection,
                adaptation, and organization of course content,
                instruction support systems (equipment, technicians, and
                administration), and activities that are directly related to
                reaching and teaching through television.  Additionally,
                all workshop participants had opportunities for "on-
                screen" television production.
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