

**100 YEAR
CELEBRATION
OF THE CHICAGO
LABORATORY
SCHOOL**

***100 YEAR CELEBRATION OF THE CHICAGO LABORATORY SCHOOL:
JOHN DEWEY EXPERIENCES A TEXAS TELECONFERENCE***

“To understand is to invent.”

Piaget

INTRODUCTION

The following simulated exercise is designed for three purposes: (1) to celebrate John Dewey’s forward thinking when he promoted “learning by doing”; (2) to engage Texas educators in a simulated and/or real-time teleconference experience; and, (3) to share research on the effect of the use of multimedia on student motivation and concept attainment.

SIMULATED ROLE PLAY SETTING

If John Dewey returned to the University of Chicago in 1996 to celebrate 100 years since the founding of the famous University Laboratory School, he would most likely be engaged in conversations with colleagues about the computers, laser discs, interactive compact discs, presentation and multimedia devices, and telecommunication capability in classrooms. Because Dewey believed in “active learning” and the use of technology as tools, envision Dewey inquiring about the technology tools and their potential to engage the child in active ways. He would be naturally interested in the ways educators are using the learner’s natural curiosity to stimulate the interaction between the learner and the “real” world?

Dewey’s colleagues, knowing his interest in learning theory and research, have arranged a site visit to Austin, Texas. Professor Dewey is told that Texas has been praised for its systemic approach to implementing school reform using technology as a catalyst.

At 9:00 a.m. Professor Dewey’s plane lands in Austin. He is welcomed by Governor George W. Bush, Dr. Michael Moses, Commissioner of Education, and the Texas Education Agency Technology Services Staff. Deputy Commissioner Geoffrey Fletcher then escorts Professor Dewey to 1701 North Congress Avenue where a teleconference has been organized. Professor Dewey will be able to have dialogue via satellite technology with a distinguished panel of colleagues interested in

educational opportunities using constructivist and applied learning approaches.

Upon arrival at the Texas Education Agency (TEA), Professor Dewey smiles as Governor Bush, Commissioner Moses and Deputy Commissioner Fletcher describe to him the T-STAR network, TENET, and other technology infrastructure components. Texas Commissioner for Higher Education, Kenneth Ashworth, then shares the latest study of telecommunications. They emphasize to Professor Dewey that we now have interactive tools connecting people and resources in new ways. However, the emphasis continues to be on improving learning for students and adults in Texas communities.

Anita Givens, TEA Senior Director for Technology Services, briefs Professor Dewey on panel members to be included in the teleconference. These persons include Seymour Papert and Nicholas Negroponte, both professors from the Massachusetts Institute of Technology (MIT). Other panelists are located in Washington, DC, at the U.S. Department of Education. Washington guests include Richard W. Riley, U.S. Secretary of Education; Linda Roberts, U.S. Department of Education; and Kathleen Fulton, the 1995 Project Director in the Office of Technology Assessment. Additional Washington guests include Paul Evan Peters, Executive Director of the Coalition for Networked Information; and Willard Daggett, Director, International Center for Leadership in Education.

Since research on effective learning clearly indicates that technology teleconferencing is more effective if the learner has prior information, Professor Dewey was provided selected texts and audio/visual materials prior to his flight from “the windy city” to Austin. First, he received a copy of the Office of Technology Assessment’s **Teachers and Technology: Making the Connection** report which had been presented to the U.S. Congress in April, 1995. A videotape of the 300 page document was attached so that he might absorb text, audio, and visuals as he synthesized the progress, or lack of progress of technology in public education in the United States during the past century. Professor Dewey also received a copy of the 1994 videotape, “What We Know and What We Don’t Know,” filmed in Dallas’ Informart during the National School Board Association’s Technology in Education conference. On this videotape, Dewey could see and hear MIT’s professor Seymour Papert speak in a parable contrasting “schoolers” and “yearners”. Next, Dewey’s friends shared Papert’s 1993 book, **The Children’s Machine: Rethinking School in the Age of The Computer**. The section of the book depicting Papert lamenting the megachanges in the adult world in areas such as telecommunications, medicine, transportation, while schools have changed little was highlighted for Dewey.

Professor Dewey received a series of print and videotape materials by Dr. Willard Daggett. These materials were intended to brief Professor Dewey on the progress of students in public schools of the United States in contrast to students in other developed countries at the end of the 20th century. Both the successes of public schools, and the lack of APPLIED learning opportunities would be discussed in the upcoming teleconference.

Finally, Professor Dewey was presented with Futurist David Pearch Synder's videotape, "High Noon for High Tech" and the ITTE Technology Leadership Network Special Report, **Multimedia and Learning: A School Leader's Guide**, 1994. Both National School Board Association (NSBA) resources contain comprehensive and current research findings on the impact of technology in education. High Noon for High Tech's content focuses on the trend data and implications of technology in business as well as education. Anne Ward's publication on multimedia and learning, that you will find in the resource section, provides Professor Dewey with the latest comprehensive research on learning theory and multimedia as it currently impacts learning.

Knowing how important it is for Professor Dewey to have in-depth understanding of the complexity of the 21st Century learning environments as well as the diverse needs of Texas learners, Paul Evan Peters, Executive Director of the Coalition for Networked Information, was asked to recommend authors and thinkers that Professor Dewey might like to become acquainted with prior to the teleconference. Selected readings by George Gilder, Nicholas Negroponte, Peter Drucker, Walter Wriston, Alvin and Heide Toffler, Esther Dyson, Richard Lanham, Robert Reich, Lewis Perl, Jeremy Rifkin, and Clifford Stoll were identified for that purpose. These resources are not essential readings for all learners prior to engagement in this training exercise. However, resources from these authors provide stimulating, thoughtful, and future-oriented materials for college professors, educators such as Directors of Centers for Professional Development and Technology in Texas, and other persons seeking a better understanding of the emerging technological future.

SIMULATED ROLE PLAY AND TRAINING EXERCISE:

STEP 1: IDENTIFY A FACILITATOR FOR THE TRAINING EXERCISE

STEP 2: IDENTIFY KEY QUESTIONS TO INITIATE THE DISCUSSION

Professor Dewey and other participants in the simulated role play are provided with the following **questions** as prompts from the facilitator during the simulated or actual teleconference training event. These six questions are not intended to be inclusive; rather, they are designed to initiate discussion.

1. Explain your idea of education as the reconstruction of experience. (Professor Dewey)
2. “Why, through a period when so much human activity has been revolutionized, have we not seen comparable change in the way we help our children learn?” (Seymore Papert).
3. What are the implications of APPLIED learning in the 21st century, given that research on computers provides evidence that the technology gives learners the tools to reconstruct experience? (Willard Daggett)
4. Given what we now know from research about cognition and human learning, what is the most effective way to support educators in acquiring and matching appropriate technological tools to the learning situation? (Anita Givens)
5. How can we assure quality learning environments, including access to appropriate technology for all children? (Governor Bush; Richard Riley)
6. What will effective learning environments look like by 2050 given the nature of the technology revolution? (Geoffrey Fletcher; Paul Evan Peters)

STEP 3: PREPARE THE RESOURCE MATERIALS FOR USE BY THE GROUPS

Secure the videos and text materials identified on the resources page for use by the training group at the campus, ESC, university classroom, and CPDT sites. Be certain that appropriate multimedia equipment is available for each of the six groups. The facilitator will need to provide marking pens and chart tablets for each group. Name tags identifying both the name and role of each player need to be prepared before beginning the simulated role play and/or actual teleconference.

STEP 4: MAKE GROUP ASSIGNMENTS FOR PARTICIPANTS

This role-play experience is designed for a group of 24 (six groups of four persons per group), to a group of 36 (six groups of six persons per group).

The facilitator needs to divide the total class into groups, with 4-6 participants in each group. Task assignments are suggested as follows:

- **Group 1** is designed to represent professors who advocate constructivist views of technology. Their task is to formulate questions and responses to use as they engage in the role play of a simulated or actual teleconference. Their responsibility is to respond with a perspective true to that of the University of Chicago's Laboratory School. **Remember**, this is the 100th birthday of the Chicago Laboratory School in which experiential learning was considered essential to true comprehension.
- **Group 2's** task is to ask questions and role play representing the Massachusetts Institute of Technology (MIT) perspective, with Negroponte and Papert's perspectives from the educational multimedia labs at MIT as the focus.
- **Group 3's** task is to ask questions from the perspective of the Texas Education Agency and the 1058 Texas school districts. This group would use the Texas Long Range Plan for Technology, 1995-2000 and TEA's Academics 2000 resources as the focus.
- **Group 4's** task is to ask design questions and responses that best fit the perspectives from Washington's Department of Education and the U.S. Congress.
- **Group 5's** task is to develop questions and responses from the perspective of Applied Learning advocates such as Willard Daggett and the business community.
- **Group 6's** task is to ask questions from the perspective of educational futurists and information technology specialists. Suggested authors are included in the resource list. This group is also encouraged to use the video "High Noon for High Tech" in preparing for this training experience.

STEP 5: ASSIGNMENT OF ROLES

Group 1

John Dewey, University of Chicago

Paul Resta, Director of the Learning Technology Center, UT-Austin

Judi Harris, Director of the Electronic Emissary Project, UT-Austin

Gerald Knezek, Department of Technology and Cognition, UNT

James Poirot, Associate Dean and Director of TCET, UNT

Jon Young, Chairman, Department of Technology and Cognition,
UNT

Group 3

George W. Bush, Governor of Texas

Beth Ann Bryan, Director of Education, Texas Office of the
Governor

Michael Moses, Texas Education Agency Commissioner

Geoffrey H. Fletcher, Deputy Commissioner, Texas Education
Agency

Anita Givens, Senior Director, Texas Education Agency,
Technology Services Division

Kenneth Ashworth, Texas Commissioner for Higher Education

Group 2

Seymour Papert, Professor, MIT

Nicholas Negroponte, MIT

Jerry Baird, Regional VP, Computer Curriculum Corporation

Bill Adkins, Director of Instructional Technology, Plano ISD

Paula Brady, Director, Texas Learning Technology Group, TASB

Daryl Ann Hansen, Assistant Superintendent, Technology &
Information, Houston ISD

Group 4

Richard W. Riley, U.S. Secretary of Education

Linda Roberts, U.S. Department of Education

Willard Daggett, Director, International Center for Leadership in
Education

Kathleen Fulton, Project Director, Office of Technology
Assessment

Paul Evan Peters, Executive Director for the Coalition of
Networked Schools

Lynne Jordon, Scholastic, Inc.

Group 5

Anne Meyn, President of the Texas Computer Education Association and ESC 4
Jackie Pederson Shepperson, Vice President, TCEA
Joe Tom Farmer, Executive Director, ESC 10 in Richardson
Don Knezek, Director of Technology, ESC 20
Raylene Renfrow, Chair, ESC Technology Directors, ESC VI
Gregg McFarland, Jostens Learning Corporation

Group 6

Delia Duffey, TEA, Texas Center for Educational Technology Representative
David Sharp, Superintendent of Schools, Gladewater ISD
Charles McMath, Superintendent of Schools, Rosebud-Lott ISD
Pearl Garza Fracchia, Southwestern Bell Telephone Company
Tom Wall, IBM Eduquest
Tom Burnett, Apple Corporation

STEP 6: DIVIDE INTO ASSIGNED GROUPS

Divide into six groups of at least four and no more than six members per group. Have each group identify their roles. It is suggested that each group be provided with a page of information of each of the roles as a starting point of information.

STEP 7: GROUPS USE RESOURCES TO PREPARE QUESTIONS

The **facilitator** of each group assists participants in using the print and multimedia materials to prepare for the simulated or actual teleconference. This is a time for each of them to prepare questions for the panel using text and video resources identified on the resource page. It is also suggested that they contact panel representatives by e-mail, fax, or other communication means to know more about perspectives from the point of the identified panelists.

STEP 8: CONDUCT THE SIMULATION

It is now time to **conduct the simulated teleconference** in a role play situation or in an actual setting. Several options exist for the training groups: 1) use the T-STAR network, 2) use the CU-SeeMe interactive video teleconference resource, 3) use the TETN network, or 4) role play in traditional form.

For example, Centers for Professional Development and Technology (CPDT) might establish videoconferencing sites across the state. Campus faculties might find partner campuses to participate in this simulated role play as a technology professional development activity. Several ESCs might link training groups in the experience.

STEP 9: DEBRIEF THE SIMULATION

Following the simulated role play and/or actual teleconference, have each group **reflect** on the experience from both the content and technical dimensions. Facilitators at each site should guide the participants through both a verbal debriefing and a journal writing experience.

STEP 10: WHAT WOULD JOHN DEWEY SAY TO REPORTERS?

Have each group prepare a press release in which Professor John Dewey shares his experience of celebrating the 100th birthday of the Chicago Laboratory School. Focus on his ideas of applied learning, experiential learning, and the opportunities for learners in the 21st century.

RESOURCES FOR THE SIMULATION

Anne W. Ward (Ed.). Multimedia and learning: A school leader's guide. A Technology Leadership Network Special Report from the Institute for the Transfer of Technology to Education of the National School Boards Association, 1994. (\$35.00, International Standard Book Number 0-88364)

Audio and/or videotape by David Pearch Snyder, "High noon for high tech," in his keynote address to the National School Board Association's Technology Conference in Dallas, Texas, October, 1994. This tape can be ordered through the National School Board Association (NSBA4-GS1V).

Negroponte, Nicholas. (1995). Being digital. New York: Alfred A. Knopf.

Seymour Papert. The Children's machine: Rethinking school in the age of the computer. Basic Books, New York, New York, 1993. \$12.00. (Video and/or audio tape can be purchased through the National School Board Association, 1680 Duke Street, Alexandria, VA 22314). The

tape is called "Technology in Education: What We've Learned and What We Haven't" by Seymour Papert. (NSBA4-GS3V)

Texas Education Agency. (1995). Academics 2000: Education improvement plan.

Texas Education Agency. (1995). Progress report on technology long range-plan for technology: September 1992 - August 1994. This resource can be obtained from the Regional Education Service Centers or through the Texas Education Agency.

U.S. Congress, Office of Technology Assessment, Teachers and technology: making the connection. OTA-EHR-616 (Washington, DC: U.S. Government Printing Office, April 1995). Order through Superintendent of Documents, P.O. Box 371954, Pittsburgh, PA 15250-7954. \$19.00. (Videotape of the OTA study is also available for \$45.00. The video can be obtained from the OTA's Publication Distribution Office at 202/224-8996.)

Willard Daggett. Series of audiotapes and videotapes; and print materials on Educational Research in Developed Countries. These videotape series are (1) The three waves of school reform, (2) America's changing workplace, (3) School reform—Defining the problem, (4) Managing change in schools, (5) International forum on schools, (6) Standards—An international perspective, (7) A challenge for elementary/middle school students, and (8) a challenge for high school students. Each audiotape series is available for \$20.00 and videotape series is available for \$55.00. These print materials are (1) Report card on American education—An how to raise the grade (\$15.00), (2) Defining excellence for American school (\$25.00), (3) 1994 model schools conference proceedings (\$35.00), and (4) 1993 model schools conference proceedings (\$25.00). Special price for all audio/videotapes and publications is \$575.00 (a \$730.00 value). Order through Willard R. Daggett, Director, International Center for Leadership in Education Inc., 219 Liberty Street, Schenectady, New York 12305. Fax (518)372-7544

