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# Empowering Teachers for New Roles in a New Educational System

In-Sook Lee and Charles M. Reigeluth

**Introduction**

We are currently in the "third wave" era (Toffler, 1981), the post-industrial information age in which change continuously takes place at all levels of society. People are required to be more critical, creative, and multi-dimensional in thinking and decision-making in this age than in any other in human history. Accordingly, education, which is "designed to carry out the specific societal function of nurturing learning and human development" (Banathy, 1991a, p. 31), should be responsible for developing human competence for the new era.

Judging from current literature and the various studies and reports on school restructuring, we note that there is still no consensus, except perhaps on several general features, on the structure of a new educational system. Second, nonetheless, most research and practice imply that *teachers* should be regarded as leaders in every activity for educational change, and that teacher collaboration should be one of the main themes in school restructuring.

Recognizing the fundamentally important roles of teachers in a new educational system, one of the most urgent themes for teachers should be to prepare themselves to fulfill their new roles in the system. This article proposes a *teacher's workshop* as a means for enabling teachers to carry out their new roles in a third-wave educational system.

In order to design the workshop, first of all, we need to identify what should be taught in it. Before identifying and listing the tasks and content, we need to find the gaps between the capabilities required of the teachers in a future educational system and teachers' current capabilities. In order to identify these gaps, we must identify teacher roles and responsibilities in the new system. We can only identify these roles through

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analyzing the future educational system. Such a broad-scope analysis will provide a birds-eye-view of the teachers' new roles and their relationships with other parts of the educational system, as the "LARGEST POSSIBLE PICTURE of education within the LARGEST POSSIBLE SOCIETAL CONTEXT" (Banathy, 1991a, p. 16). Once we find the "should be" roles and responsibilities, we can identify the teachers' current status regarding these roles and responsibilities. This can be done by analyzing teachers in the current educational system.

## Analysis of the Future Educational System

### I. What Are the Main Features of the New Educational System?

The main features of an educational system that meets the needs of the emerging information society seem likely to depend on the educational goals, the internal environment of a school, the external environment of the school, and the resources available to the school.

#### A. Educational Goals

The curriculum in the new school system will likely be planned to reflect the nature of change in our global environment (Burns, 1989, p. 33). It will emphasize societal needs, family needs, and student needs. Banathy (1991a, p. 77-79) identifies the new learning goals as focusing on the following five demands:

1. A shift to higher-order learning.
2. The development of competence for the technological age.
3. The ability to manage and shape change.
4. Competence in cooperation.
5. Competence in systems thinking and action.

When examining changes in society, we can identify several more educational goals, including the development of global knowledge, mental and physical health, and effective communication skills.

#### B. Internal Environment

The internal environment is comprised of the main culture of an individual school interwoven with two aspects: (1) the perspectives of the various subsystems that make up the school, and (2) the structures that make up the school. Strategies for improving a school must take into account the following four features which are emerging in the internal environment of the new system, and which represent an increase in direct teacher involvement in the operation of the school.

**1. Site-based decision making.** Teachers and their schools will be leading educational restructuring. Schools will have more discretion and authority to make decisions and manage the decisions. This trend is also known as teacher-led school improvement,

teacher leadership, school renewal, and decentralized management.

#### 2. Participatory decision making and partnerships.

Participatory decision making ensures that everyone will be instrumental in schools' instructional and organizational operations. Teachers, of course, will play key roles in making educational policy and performing instructional operations.

**3. Collaboration and collegiality.** When stakeholders work collaboratively and share responsibilities, they can identify more problems themselves and develop more solutions. Moreover, in this circumstance, people will be more supportive of each other and will work toward common goals.

**4. Heterogeneous student grouping.** Another internal feature in the new system is the heterogeneous grouping of students. Students are being placed in multi-age groups without regard to grade level but according to interests.

#### C. External Environment

The external environment includes systems outside individual schools, including districts, communities, and the larger society. Based on input from the community and larger society, as well as their own and their students' exploration, teachers should plan the new educational goals and curriculum. This "community-based restructuring" (Norris & Reigeluth, 1991, p. 96) is an important dimension of school restructuring.

More importantly, the relationships between the district and its schools will be fundamentally changed. The district will likely establish certain minimum requirements for development in different subject areas in different age groups (Reigeluth, 1987, p. 12). The districts or states will have to develop measures to assess valued outcomes of performance of individual schools (O'Neil, 1990, p. 6) and coordinate and provide support for evaluating each school.

#### D. Resources

**1. Technological resources.** Technological tools will allow teachers to concentrate more on individual students and small groups. Instructional strategies and activities will be provided by using a computer-based integrated learning system (Bailey, 1993), extensive video-based instruction, telecommunications, desktop publishing, hypermedia technology, and other information technologies. Teachers will serve as mentors in learning centers for specific subjects such as math, science, communications, and technology. In addition, teachers will also communicate with students by electronic mail through a local area network.

**2. Community resources.** The community will be used as a learning center. The community's libraries, museums, theaters, industrial plants, communication and research centers, and various other resources will

provide a variety of out-of-school experiences. Not less important, parental support and participation will be strongly encouraged.

**3. Strategic resources.** Cooperative learning and experiential activities will be used as instructional strategies. Students will choose their own activities and projects, as well as work on independent and small-group projects and exhibits. This approach implies that teachers will be coaches, and students will be workers and team players. In addition, the instructional time will be used with more flexibility, not with unified and fixed class schedules. Likewise, the team instructional approach will make one-to-one instruction possible. Collaborative work with peer teachers will also be a fundamental strategy.

## II. What Is the Teacher's Status in the New Educational System?

In the new educational system, all staff members will likely take instructional and organizational roles (Reigeluth & Garfinkel, 1992; Reigeluth, Norris, & Ryan, 1990). Within this notion, the teacher's fundamental roles can be categorized as facilitation and instruction; counseling and advising students' personal growth planning; course and curriculum development; staff development; resource and technology management; planning, managing, and evaluating finances; and educational decision making and system design.

### A. Instructional Roles

Instructional roles will likely include facilitating, advising/counseling, and some traditional teaching. In addition, the teacher's mission truly becomes that of an advisor, guide, coach, co-learner, mentor, facilitator, and mediator to the students.

#### 1. Teachers as instructors and facilitators.

Teachers, as facilitators, will guide and facilitate students' critical and creative thinking in a collaborative learning environment. They will help students search for references, group students into productive team arrangements, and assist them in processing and debriefing. In order to bring forth the best instructional outcomes, they will be encouraged to collaborate with their colleagues. Teachers, as a group, will work together in order to define the students' programs of study, choose learning methods, select and prepare learning resources, guide and motivate students, and share ideas for student assessment.

#### 2. Teachers as academic and social advisors.

An advisor is an "instructional manager" (Reigeluth, 1987, p. 8) who develops a personal learning plan for each student in conjunction with parents and helps the student achieve his/her educational goals. These goals are not limited to the student's intellectual development, but they may extend to his or her physical,

social, moral, and psychological development, depending on the parents' and student's wishes and interests. Advisors will work individually and in small groups in order to keep track of their advisees' progress on their personal learning plans. They will also give the students and their parents verbal and written feedback on all aspects of the student's progress at regular intervals.

Advisors' tasks (Reigeluth, 1987, p. 8; Reigeluth, Norris, & Ryan, 1990) can be specified as the following: advisors diagnose the students' academic needs for instruction and graduation; help the students select a program to meet those needs; help students access district and community resources; and help students develop academic schedules. They also maintain communications with students' instructors; review students' educational progress through commitment sheets, instructors' feedback, and journals; keep a record of teacher comments from every course; meet with each advisee and evaluate their outcomes in order to identify areas of strength and/or weakness, such as time management, communication and decision-making skills; collaborate with parents; and suggest academic schedule revisions when appropriate. Furthermore, they help the students improve their chances for admission and financial assistance to colleges and universities, offer college preparation and guidance in career selection, and hold parent conferences and personal conferences for each student.

### B. Organizational Roles

In addition to being instructors and advisors, teachers will be expected to be leaders and decision makers (Futrell, 1988, p. 375).

[Teachers'] role has shifted from teachers as the objects of change to being advisers to and then partners in change: now they are emerging as leaders of change. Teachers are taking more responsibility for their profession and for the conditions under which they work.

These teachers' roles, as a momentous power for school restructuring, have been emphasized in both research and practice. Teachers will be directly involved in the operation of schools, such as making and implementing educational policy and operating school programs. As a result, the role of teachers will be broadened. The teachers' decisions with regard to these operations will affect not only their individual classrooms but also the whole school system.

#### 1. Teachers as resource and technology managers.

Teachers will have to search instructional resources and help the students access them. In addition, they will have to use technology to teach, as well as educate students to some degree in the technology itself. Accordingly, technology management and educational resource selection are regarded as fundamental roles of teachers.

## 2. Teachers as course and curriculum developers.

Teachers will need a constructivist perspective for curriculum development. The dramatic changes in every aspect of society have made changes in curriculum and in the paradigms of instruction inevitable. As a result, teachers must carefully consider a new educational agenda due to the new needs of our society and its stakeholders. They will have to change the content of the traditional curriculum, reorder the curriculum based on a new array of skills, and change the structure of the curriculum and the style of classroom instruction (Gibbon, 1987, p. 2; McGee, 1987, p. 82). Furthermore, they will reorganize curriculum delivery, develop strategies for curriculum change, implement the curriculum, and evaluate its implementation. In order to carry out all these roles, they will have to work in interdisciplinary teams for building bridges among subjects in the curriculum.

**3. Teachers as staff developers.** The scope of staff development can be categorized into "staffing" and "training" (Harris, 1980, p.24). However, we present five specific distinctions by combining the distinctions presented by Harris with those presented by Orlich (1989, p. 6): staffing, communication and coordination of resources, evaluation, inservice education, and consultation. This classification will give us a clearer view of staff developers' roles.

(a) *Staffing:* They will participate in the process of selecting, assigning, evaluating, retiring, and dismissing staff.

(b) *Communication and coordination of resources:* They will assist with inter-building communications; organize and provide information regarding resources; assist with communications between administration and staff; provide central coordinating services and coordination of efforts; and encourage teachers to talk about their own thinking and teaching.

(c) *Evaluation:* They will conduct or arrange for needs assessments; evaluate the quality of resources providing inservice education or organizational development, such as programs, personnel, and media; evaluate or arrange for the evaluation of staff-development efforts; and organize for systemic feedback.

(d) *Facilitation:* They will help teachers improve their skills in implementing curricula and instructional procedures; help them expand their knowledge of subject matter and personal effectiveness; help teachers work collaboratively; and support new teachers in the positive practice and self-directing norms of teaching.

(e) *Inservice education:* They will plan, implement, and evaluate staff-development programs, such as workshops, clinics, and special projects; and they will assist in administrative planning for those programs.

**4. Teachers as financial planners and managers.** As organizational managers, teachers will likely participate in a committee for planning, budgeting, and evaluation. They must systematically determine the future allocation of the organization's resources; allocate those resources; assess the outcomes of events that occurred and programs that were offered; and provide information which thereafter can shape future decisions.

**5. Teachers as educational system change agents.** This role can be divided into participation on a coordinating council, a design team, and design panels (Banathy & Jenks, 1990a, pp. 9-10).

(a) *A coordinating council.* The leadership group will have the responsibility for overseeing the design process, selecting and establishing design teams, establishing review and approval procedures for the design outcomes, acquiring resources, developing and mobilizing commitment to design in the community, and, in general, providing a guiding and supporting voice for educational design.

(b) *A design team.* The design team is the primary group that carries out the design process. The team carries out the work of design, in coordination with the coordinating council, design panels, and community task forces.

(c) *Design panels.* As the design process unfolds, the design team will begin to identify design tasks requiring knowledge or subject-matter expertise not available within the team. Design panels for special design tasks will be formed to provide this needed capability. Other temporary groups or task forces may also be needed to accomplish certain tasks.

## Analysis of the Current Educational System

Based on the previous analysis of the main features of the future educational system, we will now discuss the features of the current educational system. Before prescribing the necessary tasks for training, we should examine the current educational system, which has been the fundamental factor in determining the teachers' current status. Although the demand placed on education has soared and success is our goal, "we have managed to teach failure equally well and with devastating effects that are completely contrary to our mission" (Carroll, 1990, p. 361).

### I. What Are the Main Features of the Current Educational System?

The main features of the current educational system are related to the internal environment of a school, the external environment of that school, and the resources available to the school.

### A. Internal Environment

The internal environment can be divided into two fundamental categories: the current perspectives and the basic structure of the educational system.

**1. The current perspectives.** Banathy (1991a, pp. 9–12) suggests that our mind-set of the fragmented and traditional scientific world view is the main source of the educational crisis. The fragmented study of education brings about unintegrated and incomplete knowledge and characterization. Likewise, the mechanistic and reductionistic world view does not permit people in the educational system to cope with the complexity, mutual causality, purpose, intention, uncertainty, ambiguity, and ever accelerating dynamic changes that characterize our systems and the larger societal environment.

**2. The structure of the educational system.** The major structural problem of our current educational system is due to the nature of an "enduring institution." For the past three decades, which have been characterized by extreme social, political, economic, and technological changes, schools have not changed their basic organizational structure. Reigeluth (1987, p. 4) identifies this structure as group learning, constant rotation, time-based grade levels, isolation, and bureaucratic organization. Based on these notions, the current educational system can be characterized as follows:

- (a) *Lack of collaboration and collegiality.* A majority of the teaching takes place within the school. Students and teachers are isolated from their peers, community, and society. Teachers tend to discourage their students from working together or sharing their experiences, because test results are the primary bases for recordkeeping. In relation to this problem, slower students often feel pressure to cheat in order to get a better grade or to keep up with the competition (Carroll, 1990, p. 363).
- (b) *Lack of participatory decision making.* The current educational system does not encourage parents and other stakeholders in the community to take part and cooperate in the teaching process (Reigeluth, 1987, p. 4).
- (c) *Lack of site-based decision making.* There are few communication channels between administrators and teachers. Furthermore, teachers have less influence and professional power within the educational system (Reigeluth, 1987, p. 4).
- (d) *Lack of attention to individual needs and inflexible time schedule.* Regardless of mastery, each student is given the same amount of time before being allowed, or required, to progress to a new level of learning. In addition, knowledge is delivered to about 30 students at a time, and

students often rotate from one teacher to another every 45 minutes or so.

The two previously mentioned features, the perspectives and the structure of the educational system, have dictated the current, piecemeal educational reforms. As a result, the existing system lacks a blueprint for comprehensive systemic redesign, integration of various solutions, and understanding of the essential nature of education as a societal system (Banathy, 1991a, p. 12). Through this extremely fragmented and incremental approach, the reform efforts can be viewed as "add-ons" to an established and immutable structure. Accordingly, there is no blueprint to integrate the various solution ideas into a comprehensive and consistent system. More importantly, the current educational system fails to interact with other societal systems so that it fails to respond to the rapid and dynamic changes of the larger society.

### B. External Environment: District, Community, and Larger Society

Educational institutions have been directly and indirectly affected in many ways by various complex societal changes, including political, social, and economic trends (Lieberman, 1988, p. 5). The teacher shortage has been growing in many areas of the U.S.A. Teaching has been a female occupation. More and more experienced teachers are leaving the profession.

Teachers have felt that the social and economic changes in our society are the main causes of the students' lack of interest and respect. Teachers are suffering from the brunt of family structure changes and the unwillingness or inability of government and private agencies to respond to these changes. Moreover, business groups have begun to voice their call for changes in the educational system.

### C. Resources

Printed materials, mainly textbooks, are the dominant instructional resources. Teachers rely on experts from outside the school, directives from supervisors, and advice from others in similar roles. Moreover, the overuse of lecturing is a major problem in high school instruction. There is no incentive for independent decision making, collaborative learning, or instruction based on the students' interests.

## II. What Is the Teacher's Status in the Current System?

Most teachers in the current system are educationally conservative and accept the *status quo*. They almost unquestioningly accept the technologies that control schooling (McClure, 1988, p. 61). Moreover, the "egalitarian norm" (Lieberman, 1988, p. 7) has long been held by teachers. The norm stresses that teachers must be *teachers* no matter how

knowledgeable, how experienced, and what good leaders they are. Teachers, to comply with the norm, *must spend all their time with their students in the classroom.*

One of the major tensions comes from the conflict of values and ideas which could be brought into the school by teachers themselves. Teachers do not want others, including their own peers, interfering in their teaching. Another tension is due to a parent-child relationship between principals or supervisors and teachers (Lieberman, 1988, p. 7).

### The Content for the Workshop

Based on what we have found from the previous needs analysis, we can now clarify the gaps between the desired status of teachers and the current one. What should be taught for them to be empowered for their new roles in the third-wave educational system?

The perspectives and skills to be developed through training should likely include:

- (1) Adopting a new perspective—the systems view.
- (2) Facilitating students' learning in a collaborative learning environment, as instructors and facilitators. (Refer to II.A.1 earlier)
- (3) Working collaboratively and collegially with other teachers and stakeholders, as instructors and facilitators. (II.A.1)
- (4) Counseling and advising for students' personal growth planning, as academic and social advisors. (II.A.2)
- (5) Managing resources and technology, including searching information, selecting textbooks and software, managing resources and computer systems. (II.B.1)
- (6) Developing educational resources, as course and curriculum developers. (II.B.2)
- (7) Developing staff development, including staffing, communication and coordination of resources, evaluation, in-service education, and consultation as staff developers. (II.B.3)
- (8) Planning, managing, and evaluating a finance system, as financial planners and managers. (II.B.4)
- (9) Making organizational and administrative decisions and designing their educational system, as educational system change agents. (II.B.5)

### Design of the Workshop

Considering the roles that teachers are expected to take in a new system, but are not fully prepared for, this section will provide a workshop leader with a framework for the design and implementation of an introductory workshop to help the participants develop key perspectives and skills for their expected new roles in a third-wave educational system. However, after

applying their new perspectives and skills to their work site for a while, they will be expected to bring their experiences to the next workshop, an advanced level workshop. The target audience is educators in K-12 education. The workshop is designed as a two-week intensive summer workshop.

## I. Comprehensive Workshop Syllabus

### A. First Day

#### Topic 1: *New perspectives in educational systems.*

(Morning & Afternoon Sessions).

1. To understand the need for the systems view.
  - (a) What is the meaning of system?
  - (b) What is the systems view?  
To understand a systems view and recognize its power for transforming education
  - (c) What is the origin of the systems view?
  - (d) What is the conceptual foundation of the systems view?
2. To employ and institutionalize the systems view in education.
  - (a) Why do we educators need a systems view?  
To gain an understanding of the true nature of our educational problems and their solutions.
  - (b) What are the teachers' new roles and relationships with other stakeholders?
  - (c) What are the necessary actions that teachers must take to fulfill their roles, as leaders of change in education?
  - (d) How is the systems view applied in education?

#### Topic 2: *Electronic Mail Training: Introduction*

(Evening Session).

1. Electronic Mail keypad keys.
2. Maintaining Mail File:  
To make a mail subdirectory.
3. Using E-Mail:  
To start mail; to get help; to read new messages, the next message, and the previous message; to see a directory of new messages, of messages in the current folder, and of messages in another folder; to send a message, reply to the current message, forward the current message, send or forward a message to a distribution list; to edit a message; to see a directory of folders; to send a file as a message; to exit mail.

### B. Second Day

#### Topic 1: *Actions as a facilitator in a collaborative learning environment*

(Morning & Afternoon Sessions)

1. To facilitate learning in a collaborative learning environment.
  - (a) To divide students into heterogeneous groups.
  - (b) To set up positive interdependence within the teams.
  - (c) To ensure individual accountability.
  - (d) To teach the collaborative and social skills needed to be successful in student collaborative learning.
  - (e) To assist students in debriefing and processing so that they can discuss strengths, problems or changes needed in their group.

- (f) To manage a technology for student collaboration.

*Topic 2: Searching Information using a Database (Evening Session).*

1. Using ERIC.
2. On-line information searches in libraries.

### **C. Third Day**

*Topic: Actions as a team-worker in a collaborative teaching environment*

1. The nature of collaboration.
  - (a) The need for collaboration and teamwork.
  - (b) The major advantages.
  - (c) The major difficulties.
2. The process of collaboration.
  - (a) To define the structure of individual courses.
  - (b) To decide on instructional strategies.
  - (c) To prepare course guides listing content objectives, activities and materials, and evaluation techniques.
  - (d) To plan classroom management.
  - (e) To select course content.
  - (f) To teach collaboratively.
  - (g) To evaluate the classes.
3. The major considerations.
  - (a) To build communication networking and an interdisciplinary planning atmosphere.
  - (b) To manage teamwork time.
  - (c) To maintain privacy and autonomy.

### **D. Fourth Day**

*Topic: Actions as a resource and information manager (1).*

1. Textbook and software selection. Responsibilities of committee members:
  - (a) To establish a committee structure which builds ownership and commitment and collaborates with principals and parents.
  - (b) To develop program goals.
  - (c) To establish custom-made selection criteria.
  - (d) To establish an adoption schedule including activities and time lines.
  - (e) To write out memos and meeting agendas.
  - (f) To work with publishers: sample letters of inquiry, bid solicitations, and follow-up.

### **E. Fifth Day**

*Topic: Actions as a resource and information manager (2).*

1. Technology management
  - (a) How computers work.
  - (b) Four general uses of computers:
    - (1) To use computers as administrative tools to process data and/or produce information for use by decision makers with applications such as spreadsheets, databases, and text editors.
    - (2) To use computers as instructional tools to teach students subject matter.
    - (3) To use computers as communication tools to share information with each other.
    - (4) To use computers for keeping records of student progress.
  - (c) Intermediate E-Mail Training:
    - (1) Maintaining mail file: To regularly delete unnecessary mail messages; to regain the disk space taken upon the account by the mail messages that have been deleted.
    - (2) Using E-Mail: To delete current messages; to place the current message in a folder; to search for text in the current folder; to create a file from a message; to print a message that has been extracted into a file; to compress your mail; to forward your mail to another account; to cancel forwarding.

### **F. Sixth Day**

*Topic: Actions as a curriculum designer.*

1. Possessing a constructivist perspective for curriculum development.
2. Working in an interdisciplinary process for building bridges between subjects in the curriculum.
3. Developing the strategies for curriculum change.
4. The process for curriculum planning:
  - (a) To reflect the new educational agenda.
  - (b) To analyze the needs of clients—students and their parents.
  - (c) To determine curriculum goals and instructional objectives:
    - To indicate additions to the existing curriculum;
    - To reorder the curriculum based on a new array of skills which would be consistent with the new educational agenda.
  - (d) To specify subject-matter content:
    - To plan changes in the content of the traditional/existing curriculum;
    - To plan changes in the structure of the curriculum.
  - (e) To design activities for instruction:
    - To indicate the style of classroom instruction;
    - To describe learner activities.
  - (f) To select a mode and medium of curriculum presentation.
    - To reorganize curriculum delivery.
  - (g) To determine what and how to evaluate.

### **G. Seventh Day**

*Topic: Actions as a staff developer.*

1. The scope of staff development: Organizational development, Communication and coordination of resources, Evaluation, Inservice education, Consultation, and Leadership training.
2. The process of content identification for staff development.
  - (a) To analyze the school's current situation.
  - (b) To establish goals for a specific future time horizon.
  - (c) To elaborate the human and material resource requirements needed to achieve the goals.
  - (d) To specify staff development activities that would augment the human resource base needed for achieving school improvement goals.
3. Methods of staff development: Coaching and mentoring.
4. The traits for effective "peer-coaching":
  - (a) To provide companionship.

- (b) To give technical feedback.
- (c) To analyze applications.
- (d) To adapt to students.
- (e) To facilitate practice.

#### H. Eighth Day

Topic: Actions as a planning/budgeting/evaluation manager.

##### 1. Budgeting

- (a) To understand the nature of budgeting.
  - (1) Budgeting as a plan for the direction of an organization's total discretionary resources—time personnel, and physical resources—not simply money.
  - (2) The budget process as a political activity.
- (b) The relationship of budgeting with planning and evaluation.
  - (1) Planning: determining future allocation of resources.
  - (2) Budgeting: allocating the organization's resources.
  - (3) Evaluation: assessing outcomes of events that occurred, and providing information which thereafter can shape future decisions.
- (c) The critical conditions for factual budgeting: Annual nature, Comprehensiveness, and Balance.
- (d) Proper budgetary procedures.
- (e) The concept of costs and the nature of educational costs.
- (f) Types of budgets.
- (g) Finding financial resources.
- (h) Budgeting resources.
- (i) Financing projects.
- (j) Controlling costs.

#### I. Ninth Day

Topic: Actions as an advisor. (1)

- 1. The scope of academic and social advising.
  - (a) To diagnose all the student's developmental needs: academic, social, emotional, psychological, physical, creative, ethical, attitudinal, and so forth.
  - (b) To help the student make personal learning plans.
  - (c) To help the student achieve his/her educational goals.
- 2. Relationships among students, their teachers, and parents.
  - (a) To be an advisor, guide, co-learner, mentor, and coach for students.
  - (b) To form and maintain a partnership with students, their teachers, and parents.
  - (c) To help the students reach district and community resources.

#### J. Tenth Day

Topic: Actions as an advisor. (2)

- 1. Communication and feedback.
  - (a) Communications with the student's instructors:
    - (1) To review the student's educational progress through commitment sheets, instructors' feedback, and student journals.

- (2) To keep a record of teacher comments from every course.

##### (b) Communication with students:

- (1) To meet with each advisee and evaluate her/his outcome.
- (2) To encourage students to respond to feedback on what is being done.
- (3) To help them improve their chances for admission and financial assistance to colleges and universities.
- (4) To offer college preparation and guidance in career selection.
- (5) To hold personal conferences with each student.

##### (c) Communications with parents:

- (1) To inform parents of students' outcomes and suggest different courses of action when appropriate.
- (2) To hold parent meetings.

## II. Strategies of the Workshop

A higher education institution, as the workshop training institution, should prepare the workshop. Due to the complexity of the topics with which this workshop will deal, interdisciplinary planning and designing approaches are strongly recommended. The workshop design and training committee should consist of the faculty members from the departments of Instructional Systems, School Administration, Teacher Education, and Educational Policy and Evaluation.

The design team should create a participatory and action-oriented workshop program and environment—that is, more action than information. The workshop institution, ideally, has to try to receive “cadres of teachers” and a group of teachers from each participating school (Maeroff, 1988, p. 475). This group of teachers will be able to work together to innovate their school and get support from their colleagues, will have more chances of gaining access to the mechanisms of power, and will be able to support and encourage one another.

### I. The Preparation Stage

#### A. General Schedule

The workshop is designed as a two-week intensive summer course. The course meets for 7 hours every day (Monday through Friday). Morning sessions (4 hours) are basically for group work. Afternoon sessions (3 hours) are more individual-project or assignment oriented. Evening sessions provide divergent out-of-class programs and services, including specific interest group meetings, extra labs for technology management training, a suggestion or feedback box operation, meetings for group projects, receptions, special topic lectures, etc. On the first Saturday, a panel discussion should be held by professors and practitioners who have been engaging in school restructuring efforts.

#### B. Daily Schedule

- (1) Introduction to the workshop or the day's topic.
- (2) Task assignment and discussion.
- (3) Small group problem-solving activity.
- (4) Developing group reports.



- (5) Class discussion of group reports and group processes.
- (6) Individual activity and exercises.
- (7) Discussion of individual exercises.
- (8) Leader and participant feedback.
- (9) Action planning: Discussion of job transfer among the participants.
- (10) Evaluation and wrap-up.

### C. *The Development of Main Materials*

**Leader's Guide.** It includes the program outline; the comprehensive schedules; the guidelines for the leader and assistants; activities; recommended support resources; services; descriptions of handouts; and assignments.

**Participants' Guide.** It presents a comprehensive descriptions of teachers' roles in the workshop; the comprehensive workshop schedule; the main events and contents of each session; a description of the tasks and activities expected in each session; a list of resources and services including libraries, computer labs, and the audio-visual center; a list of institutions, societies and networks from which the participants can find information and assistance at their work site.

#### **Pre-workshop Questionnaire and Activity.**

**Training Materials.** Case studies or scenarios; CAI programs; E-Mail training handouts; and a manual for textbook and software adoption.

#### **Evaluation Forms.**

### D. *Administrative Support*

The college or university provides office space, secretarial help, graduate assistants, and technological and academic support, such as computing system services, information searching services and related training, and audio-visual center services. Graduate assistants help the workshop as facilitators in the group work session; as tutors in the computer lab; as librarians; and as organizers for the evening session events.

The main and branch libraries and technological or computing centers should officially support the workshop. A Xerox copy card should be issued for the participants, and a book/articles delivery service should be provided. The participants should have access to the libraries and computer labs in order to find resources to complete their projects. They should work at the computer and multimedia labs on independent and small-group projects.

### E. *Setting*

The workshop design team should consider the effect of "trappings of the setting" (Maeroff, 1988, p.475). The participants should be brought into an attractive setting for at least part of the time for activities such as dinners and receptions. Some of the school's settings, such as the Dean's Office, the faculty lounge, and the Chairman's Office, can also be used for this purpose. The participants should be brought into contact with professors. This type of setting can help inspire the participants.

### F. *Feedback and Revision*

All aspects of the workshop implementation should be evaluated and reflected on for the next day's workshop. The workshop should be immediately changed in order to flexibly cope with new needs. Evaluation forms should be distributed

after each session. A bulletin board should be put in the meeting rooms and the lounge in order to collect participants' comments. Likewise, the participants should be encouraged to send their comments through E-Mail. The workshop training team should evaluate all feedback in the evening and then revise the original schedules and program.

### G. *Networking*

The workshop leader should send the participants more specific evaluations of the group work and individual work, as well as an evaluation of the workshop implementation itself, through E-Mail in the evening. The participants should be encouraged to check their E-Mail accounts regularly to receive feedback and to promptly reply with comments on their feedback. In addition, the participants can share their comments with each other.

## II. *The Pre-Workshop Stage*

Aside from the goals and content, which are identified through the analysis of the current and future systems, the leader has to gather more input from registered participants. This step should also help the workshop participants warm-up before the actual workshop session. Participant input is essential for effective workshop design and implementation. These data should increase the "practicality," "relevance," and "involvement" (Mahoney, 1985a, p. 62) of the workshop.

### A. *Preworkshop Activity*

The expectations questionnaire should list the preliminary workshop objectives. This should be sent to the participants, and the completed survey should be returned as a preworkshop assignment.

The questionnaire should contain: (1) a question about the participants' preliminary objectives, (2) questions about their expectations of the workshop, and (3) questions about the internal and external environments in which the participants are situated, including the goals of their institution, the curriculum, the teachers' current roles and relationships, the resources and technology available, and their district and community. The survey should have more open-ended elements than numerical scales.

The participants should be encouraged to write one or more cases based on their previous experiences. These cases should be used as the primary activity material for the workshop. In addition, the participants should gather their other stakeholders' expectations, review recent surveys in school restructuring, and think about their implications for the workshop. These responses should also be sent to the workshop leader.

### B. *Re-design of Workshop*

Once all of the participants' input is received, the workshop leader should revise the program to fit the participants' expectations and work situations.

## III. *The Workshop Stage*

### A. *Introduction Session*

The workshop leader should briefly present the results of the preworkshop survey of participants and how this input

affected the final workshop design. The participants should be encouraged to add any additional expectations. The workshop leader should discuss workshop objectives and hand out a brief list of effective participants' behaviors. Some of the recommended behaviors include respecting ideas, needs, and feelings of others; sharing your needs, concerns, wishes, and feelings; confronting others when your needs are being blocked; disclosing potentially relevant information; trying out new behaviors in pursuit of learning; seeking feedback from others; maintaining a high ratio of positive to negative feedback for others; asking and evaluating with the group; identifying and sharing learning; and communicating effectively (Mahoney, 1985c, p. 57).

The leader has to make sure that he/she understands the participants' input by asking questions whenever s/he has trouble understanding or needs more information. This should give the workshop leader a chance to model communication skills. S/he should make sure that all the participants will have a chance to work in a group and with material and equipment designed for this workshop. S/he should re-emphasize that their ideas or comments will be encouraged while the workshop is taking place.

### **B. Gathering Information**

The participants' expectations should be put on the wall in the meeting room. The main points should be highlighted in order to attract attention. This serves as a checklist for participants during the workshop and in the wrap-up to make sure all their expectations have been met.

### **C. Grouping**

Some materials should be distributed so that the participants will be able to browse through them. However, most of the materials should be handed out as they are covered during the session. Then, the leader should divide the participants into small activity groups. The workshop should have around 24-30 participants. They should be grouped into 4 teams, each with 6-7 teacher participants. The leader should explain the role of the observer (see E. below) and any assistants during small group activities.

### **D. Task Assignment and Discussion**

Each group should be given a task assignment, such as a case study with a case brought by a participant. Each assignment should be presented using either a videotape, printed handout materials, a simulation game, or a combination of the three. After the input, the large group or small groups should review the major points that have been made. The participants can adapt generalized input cases to their local situations as they agree or disagree with the points made. The leader, observer, or assistant should encourage group members to clarify, confirm, or refute the facilitator's and the other participants' ideas and comments.

### **E. Small-Group Activity**

Before beginning each small group activity, each group should choose one observer and one recorder among themselves. The observer should watch the team interact and should then lead a discussion. For more complex tasks, a facilitator should be allocated to each group. S/he should be one of the workshop staff who has had experience with similar workshops and is fully briefed on this particular

workshop's objectives, content, and design. S/he should help participants one-to-one by providing feedback. Such feedback requires very high-order observation and communication skills on the part of the leader and facilitator. However, video recording can help the facilitator communicate about the discussion process. By playing it back, the leader, facilitator and participants can recall their experiences, assess them, and learn from them. In the evening, each group should review the tape and evaluate their activity. Meanwhile, the leader should distribute the evaluation of action on a group basis to the participants through the E-Mail system. Moreover, each participant should keep a journal for each session.

### **F. Discussion of Group Reports and Group Process**

After each small-group activity, the participants should regroup and present their reports. Reports are composed of two parts: the recorder describes the content, the way the group approached the problem, and how their methods were transferable to the work situation; and the observer and/or facilitator describes the team process. All the groups should have a chance to evaluate the other groups' decisions for the same case, and the large group should conclude with a consensus on a better solution. If different cases are given to different groups, the participants can share different cases and the decisions with each other.

### **G. Individual Activity and Discussion**

After the group reports have been completed, the participants should work on individual activities. This is a chance to apply the new information they learned during the group activity. The media used should depend on the specific tasks which the participants will assume, as well as on the capabilities which the training institution has. However, all of the tasks should be case problems which the participants have to solve.

One type of individual activity should be designed as a hypermedia simulation game connected to an interactive video. Participants should choose a role in the simulation scenario and make their own best decision while referring to the database. Computer lab consultants should be assigned to help them with any technical trouble they might have.

When the activity is completed, the participants should discuss it with the leader, who provides feedback to the participants. If a different context were given to different participants, some volunteers should discuss the way in which they handled their situations. After the workshop, the leader should discuss the exercises with the participants who want more advice and comments.

### **H. Action Planning**

This is the last section of the day's workshop. The participants should integrate all of the experiences during the previous activities into the way they will apply when they go back to work. The feedback, given by the leader, facilitators, other participants, and computer programs, should help everyone clarify ideas and provide additional information. Every participant should share his/her plans at the close of the workshop. Though not having to detail the plan, they should have to comment on the new behaviors they intend to try and the new facets of a problem they will look at.

### I. Wrap-up and Evaluation

The leader should review the workshop's design objectives and participants' expectations to be sure that both have been met to the fullest extent possible. Each participant should fill out an evaluation form. It should be used to evaluate the day's workshop by the leader and assistants every evening. The E-Mail should be used for the participants' additional comments.

### J. Follow-up

A summative evaluation should be collected from the participants who will apply what they learned through the workshop. Also, the training institution should form a network so that it provides a social setting for participants to exchange ideas with one another and with others having similar interests. It should be a center for information distribution and research exchange. It should also encourage the teachers to visit each other's schools and to peer-evaluate and peer-coach. Furthermore, it should help members publish synopses of their work and organize regular conventions and seminars.

### Conclusion

This article has presented a prototype workshop design process and its product, which can be used to help teachers to prepare themselves for their new roles in a third-wave educational system. However, this is merely a blueprint, which is useless without its appropriate implementation. The successful implementation of this workshop requires the designers and trainers to have two fundamental perspectives.

First of all, designers/trainers have to realize how unique education really is. "[E]ducation is very unique because it is the only social service system that actually creates the future" (Banathy, 1991b). In addition to realizing the uniqueness of education, we designers truly need a "wrapping cloth" perspective: a situation-specific and systemic approach to problem solving. The need for this approach originates from different configurations of conditions inside/outside different educational institutions. These configurations truly determine the contents and strategies for the workshop.

Allow us to conclude this article with a very short comparison using a metaphor. This story should show how valuable the configuration-based flexible approach is to the design process.

Suppose we have several items of various shapes and sizes to be transported and two carriers. Both of these have the same surface area, but one is a box and the other a piece of cloth, a wrapping cloth. The shapes of some of the items are such that they do not fit easily into the box. If you could choose only one of the two carriers for these items, which one do you think you would choose? We would choose the wrapping cloth, not the box. Why? There are many reasons that you will become aware of when comparing the two. The cloth can wrap around all the items almost perfectly in their original shapes, whatever they are. However, the box has a rigid shape that does not conform to the other shapes. Convenience is another strength which

only the wrapping cloth has. Once folded, the cloth does not require much space. We can easily take it wherever we want. The box, on the other hand, cannot be folded and requires too much space to be taken everywhere.

We can learn at least one thing from this metaphorical comparison between the wrapping cloth and the box: the power of flexible adaptation to meeting changing needs. □

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## Special Issue: Critical Theory

The next issue of this magazine features articles on Critical Theory, Cultural Analysis, and the Ethics of Educational Technology, guest-edited by Andrew R. J. Yeaman. The issue contains the following articles:

- Critical Theory, Cultural Analysis, and the Ethics of Educational Technology. By Andrew R. J. Yeaman, J. Randall Koetting, and Randall G. Nichols.
  - Glossary. By Denis Hlynka.
  - Deconstructing Modern Educational Technology. By Andrew R. J. Yeaman.
  - Technology and Restructuring in Education: Constructing a Context. By Robert Muffoletto.
  - The Technological Rite/Right: A Critical Response to Ethical Empowerment. By Jane Anderson.
  - Equity, Caring, and Beyond: Can Feminist Ethics Inform Educational Technology? By Suzanne K. Damarin.
  - Searching for Moral Guidance About Educational Technology. By Randall G. Nichols.
  - Marginalizing Significant Others: The Canadian Contribution to Educational Technology. By Denis Hlynka.
  - Schools and Technology in a Democratic Society: Equity and Social Justice. By Robert Muffoletto.
  - Postmodern Thinking in a Modernist Cultural Climate: The Need for an Unquiet Pedagogy. By J. Randall Koetting.
  - Where in the World Is Jacques Derrida? A True Fiction with an Annotated Bibliography. By Andrew R. J. Yeaman.
  - Discussants: P. K. Jamison and Barbara L. Martin.
  - Reactions by Contributors.
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