DOCUMENT RESUME

ED 392 386   HE 029 029

AUTHOR   Neal, Ed, Ed.; Richlin, Laurie, Ed.
TITLE   To Improve the Academy: Resources for Faculty,
              Instructional, and Organizational Developoment,
              1995.
INSTITUTION   Professional and Organizational Development Network
              in Higher Education.
PUB DATE   95
NOTE   272p.; Published annually. Issues of this journal
              have been entered into ERIC out of normal sequence:
              see ED 325 062-063 (1939-1990), ED 344 537-540
              (1985-1988), ED 366 279 (1992), HE 029 025-029 (1982,
              1991, 1993-95).
AVAILABLE FROM New Forum Press, Inc., P.O. Box 876, Stillwater, OK
              74076 ($10).
PUB TYPE   Collected Works - Serials (022) -- Reports -
              Descriptive (141) -- Viewpoints (Opinion/Position
              Papers, Essays, etc.) (120)

EDRS PRICE   MF01/PC11 Plus Postage.
DESCRIPTORS   *College Faculty; College Instruction; Computer Uses
              in Education; Critical Thinking; Educational
              Practices; Educational Principles; Electronic Mail;
              *Faculty Development; *Higher Education;
              *Instructional Improvement; Mentors; Peer Teaching;
              Reflective Teaching; Student Evaluation of Teacher
              Performance; Teacher Evaluation; Teacher Improvement;
              Technological Advancement; Urban Universities
IDENTIFIERS   'Professional Organizational Devel Net High Educ

ABSTRACT

                    This annual journal issue contains 17 papers on
issues of faculty development, instructional improvement, faculty
collaboration and collegiability, students, and educational practices
in higher education. Many of the papers were developed for the annual
conference of the Professional and Organizational Development Network
in Higher Education (POD). The papers are: (1) "Reflecting Critically
on Our Efforts To Improve Teaching and Learning" (Ronald A. Smith);
(2) "Improving Teaching Across the Academy: Gleanings from Research"
(Ben Ward); (3) "A Quantum Leap in Faculty Development: Beyond
Reflective Practice" (Donna Qualters); (4) "Credibility: The Crux of
Faculty Development" (Margaret M. Morgan et al.); (5) "Faculty
Development Programs at Research Universities: Implications for
Senior Faculty Renewal" (Arthur L. Crawley); (6) "Teaching
Improvement: Disciplinary Differences in Faculty Opinions" (Lynnda J.
Emery); (7) "Peers Coaching Teaching: Colleagues Supporting
Professional Growth Across the Disciplines" (Kate Kinsella); (8)
"Improving Teaching Through Reflective Partnerships" (Roy Killen);
(9) "The Case for Instructional Mentoring" (Richard J. Nichols and
Beverley T. Amick); (10) "A Special Colloquium on Teaching Excellence
to Foster Collegiality and Enhance Teaching at a Research University"
(James K. Wangberg et al.); (11) "Faculty Development and Changing
Environments of the Urban Campus" (Debrah Jefferson and Susan
Peverly); (12) "Academic Syndromes Revisited" (Robert R. Dove); (13)
"Teaching and Learning in the Diverse Classroom: A Faculty and TA
Partnership Program" (Matthew L. Ouellett and Mary Deane Sorcinelli);
(14) "Using Electronic Mail for Teaching and Learning" (James M.
Hassett et al.); (15) "Exploring Student Ratings Through Computer
Analysis: A Method To Assist Instructional Development" (Robert
Lewis); (16) "Improving Students' Critical Thinking Outcomes: A
Process-Learning Strategy in Eight Steps" (S. Kay A. Thornhill and
Melissa Wafer); and (17) "Family Portrait: Impressions of a Nurturing
Organization" (Jon Travis et al.). Most papers contain references.
(DB)

ED 392 386

TO IMPROVE THE ACADEMY

◆ 1 9 9 5 ◆

Resources for Faculty,
Instructional, & Organizational
Development

A Publication of the Professional & Organizational
Development Network in Higher Education
Volume 14

HE029 629

2

To Improve the Academy

Resources for Faculty, Instructional, and
Organizational Development

Volume 14, 1995

To Improve the Academy

●

Resources for Faculty, Instructional, and Organizational Development

●

Volume 14, 1995

●

Editor

Ed Neal
University of North Carolina at Chapel Hill

●

Associate Editor

Laurie Richlin
University of Pittsburgh

*The Professional and Organizational Development Network
in Higher Education*

To Improve the Academy

To Improve the Academy (ISSN: 1065-237X) is published annually by the Professional and Organizational Development Network in Higher Education (POD) through New Forums Press, Stillwater, OK., and is abstracted in FRIC documents and in *Higher Education Abstracts*.

ORDERING INFORMATION

The annual volume of *To Improve the Academy* is distributed to members at the POD conference in the autumn of each year. Additional copies can be ordered at a cost of $8.50 plus $1.50 for shipping and handling. To order or to obtain more information, contact Doug Dollar, New Forums Press, P. O. Box 876, Stillwater, OK (Phone: [405] 372-6158).

PERMISSION TO COPY

The contents of the 1995 *To Improve the Academy* are copyrighted to protect the authors. Nevertheless, consistent with the networking and resource-sharing functions of POD, readers are encouraged to reproduce articles and cases from *To Improve the Academy* for educational use, as long as the source is identified. A journal citation has been placed at the bottom of the first page of each entry to assist in citing the source.

INSTRUCTIONS TO CONTRIBUTORS FOR THE 1996 VOLUME

Anyone interested in the issues related to instructional, faculty, and organizational development in higher education may submit manuscripts. Typically, manuscripts are submitted to the current editors in January or early February of each year and sent through a blind review process. Correspondence, including requests for information about guidelines and submission of manuscripts for the 1994 volume, should be directed to:

Laurie Richlin
International Alliance of Teacher Scholars
414 S. Craig Street, Suite 313
Pittsburgh, PA 15213
Phone: (412) 361-5425
Fax: (412) 362-6195

Reviewers for the 1995 Volume

Shirley M. Adams
University of Scranton

Cheryl Amundsen
McGill University

James Browne
University of Southern Colorado

Phillip G. Cottell
Miami University

Arthur Crawley
Athens, Georgia

Deborah DeZure
Eastern Michigan University

Nancy A. Diamond
University of Illinois

Madelyn Healy
Kean College of New Jersey

Erin Porter
University of Texas at Austin

Rita Rodabaugh
Ocean County College

Chuck Spuches
SUNY College of Environ-
mental Science and Forestry

Christine A. Stanley
Ohio State University

Emily C. (Rusty) Wadsworth
McHenry County College

Dina Wills
Lehigh University

Foreword

In his keynote address at the 1994 POD conference, William Plater identified six forces pushing higher education inexorably toward institutional change. Most of the forces are external to higher education and reflect shifts in American society that move in rhythms independent of the academy, e.g., the demand for accountability in all professions, technological advances that are redefining the boundaries of learning, real-world problems that don't fit under traditional disciplinary categories, and changes in the student constituency.* A perusal of the 1994 conference program shows that many presenters addressed these issues in various ways, which seems to indicate that professionals in our field are sensitive to these important emerging trends. Ten sessions at the conference dealt with assessment or accountability, nine involved the use of new technology, and 13 addressed issues related to the changing student population.

This issue of *To Improve the Academy* provides further evidence that we are concerned with these trends and are seeking new ways to meet these challenges. Plater also speculated about the impact of institutional changes on traditional faculty roles and the way professors will spend their time in the future. Asserting that "teaching must be our chief concern," he suggested that faculty members need to become facilitators of learning, collaborate more closely with colleagues, and conduct classroom research. You will find several articles in this issue of *To Improve the Academy* that focus on these goals and the ways developers can help faculty members achieve them.

Plater's analysis of higher education's past and future has many implications for the field of faculty development. If the national focus on teaching is as deep and far-reaching as he asserts, the future of the field is much brighter than at any time in the last 30 years. However, it is also clear that we must re-examine the traditional theories and

approaches to faculty development and create new goals and new strategies for achieving them. Four articles in the present volume suggest ways that we might reconceptualize our work and thereby better serve our faculty and our institutions in the future.

Creating this issue of *To Improve the Academy* required many hands, hearts, and minds, especially those of our excellent review board, this is the first year of a new review system for the journal: in order to provide a stable population of reviewers and to distribute the work load more efficiently, twelve reviewers will serve staggered two-year terms in the future. (Two additional reviewers were press-ganged into service this year.) The reviewers did a thorough, efficient, and timely job of analyzing the manuscripts and providing detailed feedback to the editors and the authors. Laurie Richlin, the associate editor, shared the editing load and provided excellent advice and guidance throughout the entire process. She will edit next year's volume, and I am sure she will do an excellent job. Rusty Wadsworth, Don Wulff, and Jody Nyquist, previous editors of the journal, supplied advice and words of wisdom that were invaluable. I am also grateful to Doug Dollar of New Forums Press for his patience, cooperation, and good humor throughout the process of publishing this volume.

Ed Neal
Chapel Hill, North Carolina
August, 1995

* Plater's speech was published in *Change* magazine this spring: Plater, W. (1985, May-June). Future work: Faculty time in the 21st Century. *Change*, 27, 22-33.

Professional and Organizational Development Network in Higher Education (POL)

Mission Statement

Approved by the Core Committee on March 24, 1991

The Professional and Organizational Development Network in Higher Education (POD) fosters human development in higher education through faculty, instructional, and organizational development.

POD believes that people have value, as individuals and as members of groups. The development of students is a fundamental purpose of higher education and requires for its success effective advising, teaching, leadership, and management. Central to POD's philosophy is lifelong, holistic, personal and professional learning growth, and change for the higher education community.

The three purposes of POD are:

- To provide support and services for its members through publications, conferences, consulting, and networking.
- To offer services and resources to others interested in faculty development.
- To fulfill an advocacy role, nationally, seeking to inform and persuade educational leaders of the value of faculty, instructional, and organizational development in institutions of higher education

Membership

For information on membership in POD, contact:

David Graf, Manager of Administrative Services, POD Network
Media Resources Center, 15B Exhibit Hall South
Iowa State University
Ames, IA 50011
(515) 294-3808

Conference and Programs

For conference and program information, contact:

Nancy Chism	or	David Graf
President, 1995-96		Manager of Administrative Services
Faculty and TA Development		POD Network
The Ohio State University		Media Resources Center
20 Lord Hall, 124 W. 17th Ave		15B Exhibit Hall South
Columbus, OH 43210		Iowa State University
		Ames, IA 50011
(614) 292-3644		(515) 294-3808

Contents

11

Section I

Reconceptualizing the Practice of Faculty Development

In his keynote speech at the 1994 POD Conference, William Piater declared that faculty development professionals "by bearing in mind the incredible organizational, social, economic, and technological upheaval that is occurring right now . . . have unprecedented opportunity to make a difference in the lives of individual faculty and the viability of whole institutions."* The authors of the articles in this section provide different perspectives on the practice of faculty development, past, present, and future, and suggest ways that we might adapt our approaches to the changing environment of higher education.

Ronald Smith, drawing on his 21 years of experience in higher education and the work of thinkers such as Donald Schon, Peter Senge, and Parker Palmer, examines faculty development practices in terms of the way we have defined the "problem" we are trying to solve. In his survey of some of the historical definitions of the problem and the programs that were created to solve them, he points out that most of these strategies have been aimed at the problem of changing the behavior of faculty members (through support or coercion). However, Smith suggests that we have begun to move toward a new, more holistic, conceptualization of the problem that takes into account the

1

social, psychological, and institutional environment of higher educa-
tion.

Surveying the research on teaching improvement, Ben Ward
poses the question: How do we improve teaching and learning *across
the academy*? The research tends to focus on particular areas—the
faculty, the reward system, teaching evaluation—but we need to see
the complete picture in order to understand the dynamics that operate
within and across the academy. He divides the research results into
three categories (driving forces, neutral forces, and restraining forces)
and examines what research tells us about each of them, concluding
that only a comprehensive approach that combines organizational and
faculty development is likely to create the desired changes.

Donna Qualters also sees faculty development at a crossroads,
suggesting that we really operate in a "quantum world" in which
relationships, not *things*, define reality. From this premise, she exam-
ines the ways we can exploit the strength of relationships through
various means, including reflective practice, transformative learning,
and dialogue. Our task is to help teachers reach a transformative stage
of understanding in which they become aware of the assumptions and
values that underlie teaching and the environment in which it operates.

A different conception of faculty development, drawn from the
literature on management theory, is represented in the article by
Margaret Morgan, Patricia Phelps, and Joan Pritchard. They suggest
that faculty developers can achieve credibility through the practice of
six "disciplines" related to leadership. Each of these disciplines rep-
resents an important facet of faculty development, and together pro-
vide a checklist of practices that are vital to our success.

Although William Plater did not address the issue, another impor-
tant change in American society is the tendency for workers to remain
employed well past the traditional retirement age. The abolition of a
mandatory retirement age for tenured faculty in 1994 will have impor-
tant consequences for the practice of faculty development, since much
of the focus of our work seems to be on junior faculty and graduate
teaching assistants. Arthur Crawley's article addresses the profes-
sional development needs of the senior faculty and how well these
needs are currently being met at research universities. Crawley's
survey of faculty development programs and policies at research

universities provides a fairly positive picture of the level of support for traditional approaches to faculty development, especially with regard to helping faculty members integrate their research and teaching roles. He suggests various ways faculty developers might work with senior faculty to promote renewal and help them maintain their productivity through the end of their careers in higher education.

We have always known that professors at research universities are not all alike, that they respond differently to the same faculty development programs and services. In her article, Lynnda Emery addresses the question of how they appear to differ by discipline. In surveying the faculty at a research university, she found interesting differences in their perceptions of incentives for teaching improvement and their beliefs about the rewards for various professional activities.

*Plater, W. (1994, October). *Future work: Faculty time in the 21st Century.* Keynote speech presented at the annual meeting of the Professional and Organizational Development Network, Portland, OR.

3

Reflecting Critically On Our Efforts To Improve Teaching and Learning

Ronald A. Smith

Concordia University

Donald Schön, in The Reflective Practitioner, describes how professionals act to solve the problems they have set for themselves. Peter Senge, in The Fifth Discipline, introduces the ideas of "mental models" and "learning horizons" to describe learning in organizations. These ideas form the basis of a critical analysis of efforts to improve the quality of teaching and learning in higher education over the last 25 years. (An earlier version of this paper was presented at the University of North Carolina Conference on Faculty Professional Development: Faculty Vitality Through Faculty Development. Chapel Hill, NC. June 1992)

I have spent the last 21 years of my career working in higher educ=tion as both a faculty member and a faculty developer. My efforts have been focused on trying to help other faculty members and to develop myself. I have always wanted to be a teacher and to be the very best one that I could possibly be. The research suggests that most profes-. sors "view teaching as their primary role" (Angelo, 1994, p. 3), want to do a good job, and work hard at improving their effectiveness (Boice, 1992), each in their own way. Most colleges and universities proclaim their commitment to encouraging and supporting excellence in teaching; although many faculty members believe this is only empty

rhetoric and rarely reflected in their institution's practices, particularly at promotion time (Diamond, 1993; Smith, 1991).

Efforts to enhance teaching and learning excellence appear under different names; for example: faculty development, professional development, personal development, instructional development, or organizational development (Bergquist & Phillips, 1975; POD Mission Statement, 1991). In this paper I take a careful and critical look at what universities and colleges actually do when they work on developing excellence in teaching and learning, no matter what they call it, and at what individual faculty members do. What is the problem we are trying to solve when we work to improve the quality of teaching and learning in colleges and universities? I believe that what we do depends on what we see as the "problem" to be solved. I will examine three specific areas: 1) professional problem solving in general, how we do it and some of the difficulties we encounter; 2) institutional efforts to improve teaching effectiveness, including a brief historical review; and 3) some of the current efforts in the area of faculty development.

Professional Action as Problem Solving

Donald Schön, in *The Reflective Practitioner: How Professionals Think in Action* (1983), describes how professionals (a concept which would include both faculty members and faculty developers) behave when they confront problems, puzzles or surprises, those ambiguous situations where their usually skillful and automatic responses don't seem to be adequate. They first have to frame, or name the problem. Next, they take action, or make moves to explore the situation, or to test some hypothesis about the problematic situation. They then examine the consequences of their actions, they listen to the "talk back" from the situation to see if they have solved the problem they have named. If they have, they move on; if not, they either find new action strategies or they find a new name for the problem, they reframe it. Schön calls this process of framing, acting, and responding to the consequences of our actions "reflection-in-action."

In imposing a structure on the "messes" that we encounter, we actually construct the problem we will attempt to solve. We can be ineffective in solving a problem either because we have chosen the

17

wrong action strategy, or because we have named the problem incor-
rectly. Let's consider some examples. Schön (1983) suggests that in
building a road, a civil engineer may attend to drainage, soil stability,
and ease of maintenance; while not even seeing the differential effects
of the road on the economies of the cities and towns that are near it.
He claims that problem finding, defining the problem to be solved, is
often the most difficult part of problem solving. What is "the problem"
of improving teaching and learning in higher education? It seems clear
that it is not a simple problem, since it is repeatedly identified as an
important issue to be addressed. This also suggests that our previous
efforts have not been as successful as we might like. Often we don't
explicitly name the problem we are trying to solve, so it sometimes
requires an examination of what we actually do in order to discover
the problem we are trying to solve.

We always act to solve the problems we have set for ourselves.
How we name a problem depends on a variety of factors: our discipli-
nary training and background, the roles and responsibilities we have
in the organization, our previous experiences and history in similar
situations, our interests and skills, and our political and economic
perspective. Schön (1987) describes how different professionals
might respond to a worry about malnourishment in developing coun-
tries. A nutritionist sees a problem of selecting the optimal diet; an
agronomist focuses on food production; an epidemiologist frames it
in terms of diseases that increase the demand for nutrients or prevent
their absorption; a demographer sees population growth which has
outdistanced agricultural activity; an engineer looks at food storage
and distribution; an economist at purchasing power and the inequitable
distribution of land or wealth. It is important to note that the "debates
about malnourishment revolve around the construction of a problem
to be solved. Debates involve conflicting frames, not easily resolvable
— if at all — by appeals to data. Those who hold conflicting frames
pay attention to different facts and make different sense of the facts
they notice" (Schön, 1987; p. 5).

Universities, like most large organizations, are very complex.
Senge (1990), in a book about learning in organizations, identifies two
factors, "mental models" and "learning horizons" which can signifi-
cantly influence our effectiveness as problem solvers. These factors

can be related to Schön's concepts of **framing** the situation and responding to **consequences** of our actions, listening to the "talk-back" (see Figure 1).

Mental Models

FRAMES ⟶ ACTIONS ⟶ CONSEQUENCES

Learning Horizons
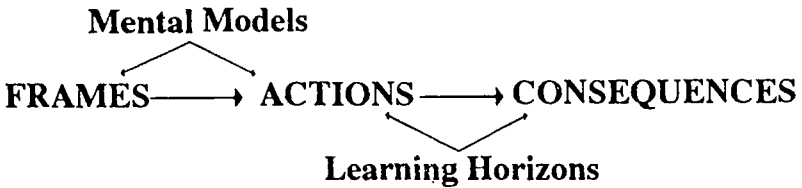
Figure 1. Connecting Senge and Schön

Although most of us have had considerable experience in our own universities, it is often quite difficult for us to learn from these experiences. The situations are complex and ambiguous; the problems are multi-faceted. No one person in the system ever has all the required information. Like Schön, Senge sees the basis of learning from experience as trial and error: we take action, we see the consequences of our action, then we take a new and different action. But what happens if the consequences of our actions are in the distant future, or in another part of the organization? What is the impact on our ability to learn from our actions if there is a significant delay in the feedback loops in the system? How long will you have to wait to see if improving the system for evaluating teaching has led to an improvement in the quality of teaching? How long will you wait to see if promoting active involvement in your classes leads to increased student learning? When the responses to our actions are beyond our "learning horizon," that is, that "breadth of vision in time and space within which we can assess our effectiveness, it becomes impossible to learn from direct experience" (Senge, p.23).

Each of us approaches the tasks of problem finding and problem solving with our own "mental models," those "deeply ingrained assumptions, generalizations, or even pictures or images that influence

how we understand the world and how we take action. Very often, we are not consciously aware of our mental models or the effects they have on our behavior" (Senge, p. 8). For example, Parker Palmer (1987) suggests that our epistemology, our personal mental model of what knowledge is and how it is acquired, has a profound impact on how we teach. If we view knowledge as constructed, instead of objective, distanced, analytic, and experimental, then we must create, both in our institutions and in our classrooms, learning communities where this continuous cycle of "discussion, disagreement, and con-sensus over what has been and what it all means ... (this) arena for creative conflict is protected by the compassionate fabric of human caring itself" (p. 25). Our view of what "good teaching" is will certainly influence what we, either as faculty members or as faculty developers, do to encourage and support its development. Thus, in order to increase our effectiveness in finding and solving the problems of improving the quality of teaching and learning in higher education, we need to bring our mental models to the surface, to hold them up for rigorous scrutiny in conversations which balance advocating our position with invitations to inquiry, where we can reveal how we are thinking, and where we can make our own thinking open to the influence of others.

Before I consider the formal institutionally organized efforts to improve the quality of teaching and learning, I want to invite you, the reader, to take a few minutes to reflect on your own practice. First, think about **your own teaching and your efforts to improve it.** Write down what you have done, and why you did that? What problem(s) were you trying to solve? Now, consider **the problem of improving teaching in your institution.** What has or should your institution do to improve teaching, and what is the underlying problem you think these actions are designed to solve?

Institutional Efforts to Improve Teaching

Let's consider the efforts of universities and colleges to encourage and support faculty development. If you examine these organized and systematic efforts to improve the quality of teaching and learning, you can uncover the implicit definition of the problem(s) they are designed

to solve. For example, the provision of sabbaticals and study leaves is designed to help faculty members develop and maintain their subject matter mastery. For many people their mental model of teaching is such that knowing the subject is the necessary, and for many it is also a sufficient, condition for quality teaching. Higher education seems to have taken a long time to realize that this is not enough, perhaps an indication of the distance of some learning horizons! The strategy of sabbaticals and study leaves is also supported by the mental models, or myths, that are widely held about the close connections between teaching and research. A connection which is not supported by the empirical research on the issue (Terenzini & Pascarella, 1994) . That most faculty and administrators seem unaware of this research, and don't try to seek it out, suggests still another problem to be solved.

Consider the strategy of student course evaluations. Implicit in the efforts in the 70s to use students to evaluate teachers, teaching, and courses were some assumptions about professors' lack of knowledge of what their students really thought about what was happening in their classrooms. The mental models of these change agents included the idea that if the students only told the professors which areas needed attention, the professors would change. These mental models probably also included assumptions about change and power: if the faculty did not readily respond to this feedback from the students, they could be embarrassed into changing by the publication of their evaluation results. Or alternatively, the students could avoid the poor teachers and teaching by careful and informed course selection.

In Table 1, I have identified some of the more common approaches to improving teaching used by colleges and universities over the last two decades. The Table can also be interpreted as a reflection of the evolution of our strategies for improving teaching and learning, and as a description of the development of our thinking about the underlying nature of this problem. This evolution in our construction of "the problem to be solved," in the way we name and frame it, and in the development of our strategies to solve it is not surprising. In fact, this evolution through a process of trial and error is necessary, although somewhat frustrating, as well as paradoxical. We cannot really act (to

21

TABLE 1
A Brief History of Formal Teaching
Improvement Efforts

Moves What institutions do:	Frames Because the problem is:
1) Provide sabbaticals, study leaves, and travel to conferences.	Professors need to know what they are teaching and be up to date.
2) Audio-visual departments provide films, TV, overheads projectors, computers, laser disks, etc.	The technologies for teaching have advanced beyond the book and the blackboard.
3) Provide consultants on teaching and instructional design to work with faculty.	Most professors have no training in teaching, or in using these technologies.
4) Establish research programs/centres on higher education and circulate the results in newsletters.	We need to know what works and what doesn't; and faculty and administra ; need to be informed.
5) Develop questionnaires for students to evaluate courses and teachers. Student association published "anti-calendars".Professors don't know what their students think about their teaching effectiveness.	Students need information to select wisely.
6) Offer workshops on life planning, career transitions, teaching styles.	Professors will work best in the areas that are personally and professionally satisfying.
7) Work on organizational development, develop mission statements, procedures for evaluating teaching; e.g., teaching portfolios.	If you want professors to work on their teaching, you need to recognize and reward good teaching.
8) Provide consultants on team building and conflict management, and training for chairs and other administrators.	Professors cannot concentrate on their teaching if their department is not functioning well.
9) Provide assistance to both faculty and students for innovative curriculum projects; e.g., McMaster's Medical School, Harvard's New Pathway.	Individuals will be most interested in and open to change when they are developing a new program.
10) Provide orientation programs for faculty who are new to the institution.	Teaching at this institution is different from teaching anywhere else.
11) Provide training programs for teaching assistants (and conferences for people who run these programs).	Training to teach should be part of graduate training.
Note: Adapted from Lindquist (1978).	

improve teaching) unless we know what we are doing. Yet. we cannot really know what we are doing (what the problem is and what will solve it), unless we act.

An examination of Table 1 can provide some insights into a) the nature of professional problem solving, b) the process of reflection-in-action, and c) the necessity of learning from experience. When our actions do not produce the intended consequences, we see ourselves as not being effective, as making errors. Learning to be more effective requires that we detect and correct these errors, these gaps between what was intended and what was produced. Sometimes that learning involves changing our action strategies; sometimes it involves changing the names or frames we have for the problem to be solved. Schon, in his writings (1983, 1987), is talking about how individuals learn from experience, but his ideas can also be applied to describe how larger groups, such as departments, universities, or professional associations might change over time. Since all groups are collections of individuals, any change in the group requires change in the individuals. (Argyris 1982, 1985, 1993; Argyris and Schön 1978; and Senge 1990 discuss in detail the relationship between individual and organizational learning.)

Each of us, based on our own experiences and our own mental models of how the world of higher education works, will have our own versions of this story. When we, either as faculty developers or as individual faculty members, thought that improving teaching meant staying up-to-date with the subject matter, we looked to sabbaticals and study leaves. When we did not achieve the consequences we intended, when the quality of teaching did not improve, we reframed the problem to focus more directly on teaching. Our new solution was to provide a variety of teaching aids. When it was discovered that people weren't using them very much, or weren't using them effectively, training and expert support were provided.

When the consequences of our actions are interpreted as indicating that our goals are not being achieved, that professors are still teaching in much the same way as they have for the last three hundred years, a new strategy is implemente 1. Perhaps what is needed is more and better information about what has worked and what has not, either from the research literature, or from the students in the classrooms.

Since each of these strategies for change represents an intervention into a complex system, it is hard to know exactly what is the impact of any particular strategy. How would we collect the data in order to know if circulating a newsletter, or the results of student evaluations has improved teaching and learning on our campus? We often hear the complaint from administrators, from faculty members, and sometimes from faculty developers, that we are "preaching to the choir," only the good teachers respond. The faculty members who really need to improve never participate in the programs. Thus, the name of the problem changes to: How do we get more faculty to want to work on their teaching? Some of the problem-solving strategies have focused on improving the recognition and reward (or punishment) system, on organizational development. Others have focused on the personal development side, on career development and life planning.

The last three moves described in Table 1 seem to bypass this issue and define the problem differently. The previous problem-solving strategies can be interpreted as activities and programs to support, if not force, faculty members to change their behavior, and were usually designed to affect all faculty members. The last three strategies (9, 10, & 11) try to respond to faculty members, or future faculty members, at the moment when they should be most interested in learning, by addressing more specific needs. When faculty members embark on a new curriculum, move to a new institution, or take on new responsibilities (such as being a TA or TA supervisor), they may be more responsive to faculty development initiatives.

Certainly, few colleges or universities have tried all of these approaches, but at most institutions you can find some selection of these activities. Lindquist's original ordering reflects the general sequence of the development and implementation of these services. The faculty development programs or centers that have been created more recently usually offer a variety of services, reflecting the local definitions of the specific problems to be solved. Some developers believe that the best solution is to provide faculty members with access to a range of resources, together with the opportunity and responsibility to choose, each according to his/her own personal definition of the problem to be solved.

How Well Have We Achieved Our Goals?

How successful have we been in improving the quality of teaching and learning? How well have these programs worked? Have the faculty responded? Sadly, there is not very much good data on the response of the faculty to these formal efforts to improve teaching and learning (Angelo, 1994). Weimer & Lenze (1991) conclude their review of the literature with *"more research must be undertaken....* instructional interventions are being used with virtually no empirical justification as to their effectiveness" (p. 327). Faculty/instructional developers have been working on this project for quite some time, since at least the late 60s. In 1972, Alexander and Yelon were able to report on the activities of only 16 centers or programs. The first POD conference was held in 1976. It was also in 1976 that Centra reported that 1044 institutions in the US had some set of practices for faculty development or instructional improvement. In 1978 Lindquist was writing about different approaches to improving instruction, and by 1981 Bergquist and Phillips had published the third volume of their *Handbook for Faculty Development*.

While numerous programs to support and encourage the improvement of teaching have been developed over the last 25 years, it is still not clear that teaching well really matters. In 1993, Robert Diamond, in *Recognizing Faculty Work: Reward Systems for the Year 2000* stated it bluntly: "the focus on research and publication and the mad dash for federal funds and external grants has diverted energies away from important faculty work and has had a direct and negative impact on the quality of classroom instruction" (p. 8). In 1991, Stuart Smith in the *Report of the Commission of Inquiry on Canadian University Education*, which had been established by the Association of Universities and Colleges of Canada, declared that "teaching is seriously undervalued at Canadian universities and nothing less than a total recommitment to it is required."(p. 63.) He declared that "the Commission perceives a deep cynicism among the faculty concerning the real importance accorded to teaching," and that there is a deep concern that "the quantity of research publications is more important to the careers of university professors than is the excellence of their teaching" (p. 31). Furthermore, "innovation, either in the form of technol-

ogy or in the use of novel teaching methods, is disappointingly uncommon."

One could conclude from this analysis that there is a significant gap between what is intended and what is produced. Is it that the "improvers" haven't yet used the right strategy (e.g., they haven't clearly disseminated what is known about effective teaching, or developed the right workshops, or invented the right evaluation forms for student feedback); or is it that they still haven't figured out what the real problem is (i.e., they are trying to solve the wrong problem)? Before considering some of the most recent institutional solutions to the problem of improving the quality of teaching and learning, I want to examine briefly what individual faculty members do in this regard.

Faculty Perspectives on Improving Teaching

In study after study the majority of faculty members continue to report that teaching is a very significant and satisfying part of their professional lives, and that they work hard at improving their teaching (Boice, 1992). At most institutions faculty would like to see more of a balance between teaching and research, as opposed to the current tilt towards research (Gray, Froh, & Diamond, 1992). When faculty work on their teaching, what do they do? What problem(s) do faculty members try to solve when they work on their teaching? Smith (1984) reports that most faculty seem to have framed their problem in terms of the course content or materials, focusing their attention on organizing it better, getting it more up to date, and arranging to present it more clearly on slides or transparencies. And they only seem to work on those problems they think they can solve. After all, they are very smart people! Faculty often define their problem as "too much content, too little time"; so they concentrate on arranging the best material in the best package for the most efficient transmission. This is often seen as a continuous task, one on which they need to work throughout their entire career.

If you examine their analysis of the source of their difficulties in being more effective teachers, it reflects problems within the framework of this transmission metaphor; that is, the "receivers" or the "channel" are flawed in some way. Faculty identify students who are

unprepared, unmotivated, or just too diverse; there are too many students, the room is poor, or the time of day is not just right. These problems are seen either as unsolvable by the individual professor (e.g., the general decline in reading ability or SAT scores) or as someone else's responsibility (e.g., admissions, scheduling, physical plant). Hence, many faculty are left feeling helpless and disempowered. The apparent lack of institutional response to their versions of these problems is interpreted by the faculty as further evidence that teaching doesn't really matter. In contrast to this view, I want to now turn to an examination of some of the current thinking by some parts of the higher education community about the problem(s) which need to be solved in order to improve the quality of teaching and learning.

Some Current Thinking about The Problem

In 1979 Freedman, based on interviews with over 700 faculty, concluded:

[Professors'] discussions of educational programs or reforms proceed as if education had no discipline, no organized systematic body of theory and knowledge and no need for such a discipline. In short, faculty approach teaching and education as would any intelligent adult chosen at random - on the basis of some opinion and reading and some knowledge based on experience.... Very few faculty members can define the basis on which they evaluate themselves or can offer any rationale for what they do in the classroom. It is apparent most of them carry on in the way they learned as students. Not only does traditional academic culture ignore basic educational issues, it does not even possess the concepts to deal with them (p. 8).

How much evidence is there that the situation has changed significantly in the last 25 years? Patricia Cross begins her 1990 article "Teachers as Scholars" by commenting how intellectually challenging teaching can be, while observing that it is generally "practiced at such a primitive level. Professionally it stands where medicine stood a hundred years ago.... Most doctors learned their trade by apprenticeship, in which ignorance as well as experience was passed along

generation to generation — much as potential teachers learn their trade today" (p. 3).

She ends that article with an analogy to farming to describe the situation:

We don't really know why some students thrive and others don't. We often don't observe whether the seeds we plant take root. We can't detect wilt. And even when we see the beginning signs of boredom or disengagement, we don't take immediate steps to treat it because we assume it's the nature of the plant to wilt - or more often, perhaps because we don't know how to treat wilt, cr we don't have time.

Focus on Student Learning

Implicit in her comment is the suggestion that in order to improve teaching we need to pay attention to learning. Other writers have also recently echoed this concern. We should focus on enhancing the *productivity of learning* (Johnstone, 1993). "Most faculty-develop-ment efforts focus primarily on improving teaching — and only secondarily, if at all, on improving learning" (Angelo, 1994, p. 4). Knapper (1995) is more direct: *"The bottom line is learning"* (p. 70). Guskin (1994) suggests that we should restructure faculty work "to maximize essential faculty-student interaction, integrate new tech-nologies fully into the student learning process, and enhance student learning through peer interaction" (p. 19). His focus is on connecting the different types of learning expected from students (the accumula-tion of information, skill development, and conceptual development) with the most appropriate use of the institutional resources of faculty time, peers, and technology for each type of learning.

There are certainly differences of opinion about what needs to be done. Do faculty need to radically reconceptualize the task of teaching, as Guskin and others argue? Metaphorically speaking, do we need to design a new means of transportation? Or will helping the old horses run faster be good enough? In general, the culture of the academy doesn't seem to include much discussion of differences in learning styles, or of adapting teaching to individual differences. Many faculty seem to be saying: "send me students who can learn from the way I know how to teach," rather than "i need to learn how to teach the

students I am sent." Guskin is not overly optimistic about the pace of these changes: "Restructuring the role of faculty will, at first, prove to be a monumental undertaking. All of the incentives seem to be against doing so — except in the end, survival" (p. 16). Will the faculty, if not the colleges and universities, just be by-passed, if we/they refuse to respond?

Ramsden's (1992) perspective is quite clear. He states: "To teach is make an assumption about what and how the student learns; therefore to teach well implies learning about students' learning" (p. 6). At the core of his approach is a body of research, conducted primarily in Great Britain and Australia, on the connections between various teaching practices and "deep versus surface learning." Like Guskin's radical restructuring of faculty work, Ramsden also advocates dramatic changes, while still keeping the faculty member at the center of the improvement project. Faculty need to move beyond their *amateur approach to teaching* in higher education towards becoming more professional. They need to establish a theoretical base which will inform and support their practice. He states: "the professional authority of the academic-as-teacher should rest on a body of didactic knowledge. This comprises knowledge of how the subject he or she professes is learned.... the key to improving teaching is changing the way in which the process of education is conceived by its practitioners" (Ramsden, 1992, p. 9). Unfortunately, he is less clear about how to get individual faculty members to rethink their roles, to attend to this research, and to incorporate it into their practice, beyond suggesting that we need to change our evaluation procedures, an idea which many others have also recommended (Wright & O'Neil, 1995). Yet, how do we get that to happen? Before we consider that issue directly, let's examine in more detail this idea of the *professional responsibility* of the faculty member in terms of teaching.

Is it enough to do research on teaching and learning and to disseminate the results of that research to faculty members? It certainly seems clear that more research is needed, as well as newsletters and journals to disseminate it. Many campuses publish their own newsletters on teaching, and nationally we now have *The Teaching Professor*, *To Improve the Academy*, and *The Journal of Excellence in College Teaching*, to name but a few. However, are they being read? To what

extent do they influence practice? Based on the slow pace of change, it seems clear that our analysis of the problem needs to be more subtle and sophisticated. Angelo (1994) has suggested a reframing of the problem, we need to move from "*Faculty* Development" to "*Academic* Development." Angelo and Cross (1993) have argued that we need research to improve teaching and learning, but the research we need can and should be done by individual teachers; they should become "classroom researchers." This is similar to Ramsden's suggestion that faculty members need to become more professional about our teaching roles. It is also quite clear that faculty developers need to become more professional in terms of carefully documenting in a credible manner "the wisdom of practice and the voice of experience" (Weimer & Lenze, 1991, p. 327). Light (1990 & 1992), with the Harvard Assessment Seminars, created opportunities for groups of professors to assess the impact of their practices on their own students. These seem like worthwhile ideas and successful projects, they provide methods, techniques, and opportunities for faculty to learn more about their own teaching effectiveness, and they go beyond some of our earlier strategies; e.g., providing the results of student course evaluations and disseminating traditional educational research. Will these ideas only work well for the faculty members who are truly interested in teaching? Are they powerful enough to address the problem that teaching does not seem to be taken seriously enough on far too many campuses?

Create a Culture of Teaching

Perhaps the problem is: How do we change the very culture of the academy; that is, change the place of teaching in higher education? Some people have suggested that we need awards to recognize excellent performance. In the United States, there is the CASE outstanding teacher competitions, as well as the Hesburgh Award for faculty development. In Canada, the 3M Teaching Fellowship was created as a national award to honor excellence in teaching and contributions to teaching improvement. Since it was established in 1986, 100 faculty members have been honored. In 1991, the University of British Columbia awarded twenty-four $5000 prizes to faculty in recognition

of their commitment to teaching. Other people have suggested that we need to create opportunities to talk about teaching. The American Association for Higher Education has taken a leadership role through its recent national conference themes: "Taking Teaching Seriously," "Stand and Deliver," and "Celebrating Teaching." Their "Teaching Initiative" now includes the annual "Forum on Exemplary Teaching" as part of their national conference. AAHE is also sponsoring projects on cases about college teaching and the peer review of teaching. All of these programs are designed to create opportunities and vehicles for professors to come together to talk about their teaching, a rare occurrence on most campuses. We need to know more about what type of talking will lead to improved teaching and learning.

What is required (the problem to be solved) and what is being recommended (the solution to the problem) are nothing short of a radical transformation of the culture of the academy, including our fundamental conceptions of teaching and scholarship. But how do we accomplish this? Many of the most recent interventions seem to be designed to directly address this problem of taking teaching seriously. We are returning to the issue of recognizing and rewarding teaching with renewed vigour and sophistication, and with new mental models. Russell Edgerton (1990), President of AAHE, has argued that teaching is not a derivative or afterthought to research, but that it reflects the highest form of understanding:

There is more to teaching than simply knowing the subject and talking about it; that's the easy part. The difficult part is finding the words, the metaphors to represent the ideas of the discipline to those who don't already understand it. How do you represent the idea of electricity to a freshman? Is it like water flowing through pipes, cars on a highway, an assembly line? Is there a better analogy? Viewed this way, effective teaching becomes the highest form of understanding. Aristotle's strictest measure of whether or not someone really knew their subject was whether they could turn around and teach it.

The connections between teaching and scholarship are being redefined. The Carnegie Foundation for the Advancement of Teaching in a report entitled *Scholarship reconsidered: Priorities of the profes-soriate*, proposed a re-conceptualization of scholarship to include: the scholarship of discovery, of integration, of application, and *the schol-*

arship of teaching. Shulman (1993, November/December) has sug-
gested that we need to move beyond our "pedagogical solitude"
toward treating teaching as community property. This requires arti-
facts which can capture the complexity of teaching, and peers who are
willing and able to review these materials. If that is the problem to be
solved, then strategies such as teaching portfolios (Edgerton et al.,
1991) and the Peer Review of Teaching Project (AAHE, 1995) seem
to make good sense. Shulman (1993, January) has set the problem to
be solved as follows:

[To] organize the evaluation of teaching so that the very proce-
dures we employ raise the likelihood that teaching gets treated seri-
ously, systematically, and centrally in the lives of individual faculty
and institutions ... to use procedures from which teachers learn how
to teach better ... (and) to think about the reward system and think
about the evaluation of teaching and therefore about such strategies as
portfolios, not simply as psychometric devices to increase the accu-
racy of our evaluations, but as culture-producing strategies that change
the fundamental ways in which we live and think (pp. 9-10).

Learning to Close the Gaps

Rethinking the issues of faculty roles and rewards has been the
subject of three national conferences sponsored by AAHE. Various
disciplinary associations are beginning to work on defining the schol-
arship of teaching in each of their areas (Adams & Roberts, 1993).
Will these strategies be successful? Has the problem to be solved been
framed more accurately this time around? Shulman (1993, Novem-
ber/December) has argued that in the academy we only take seriously
that which is reviewed by peers. But, the faculty are the academy (or
at least one very important part of it). What leads us to create and
maintain systems in our colleges and universities where teaching is
not taken seriously, in spite of the rhetoric to the contrary? Perhaps
the very first step that needs to be taken is to acknowledge the gap
between what we say and what we do. We need to identify the ways
that our own behavior, either as faculty members or as administrators,
has contributed to creating and maintaining a climate and culture
where teaching doesn't seem to matter much. This recognition and

acknowledgement of the gap between where faculty think their institutions are going versus where they think their institutions should be going in terms of the balance between undergraduate teaching and research is an important first step (Gray et al., 1992).

What leads professors to say that teaching is an important and satisfying part of their professional lives, yet to rarely talk to their colleagues about it? What leads faculty members to rarely recommend their colleagues for promotion on the basis of teaching; to rarely demand, as part of the hiring process, that each candidate be required to teach a lesson or prepare a course outline? Why is there is no equivalent of medicine's grand rounds where faculty members discuss their difficult cases in presenting concepts, or the exciting experiments they are conducting in their teaching? We seem to behave as if teaching is "so straightforward that it requires no special training, and yet so complex and idiosyncratic that mere training could never meet its extraordinary demands" (Group for Human Development in Higher Education, 1974; p. 14). It is the faculty members who do not take teaching seriously, who do not see it as "one of the most profoundly intellectually challenging aspects of our jobs", to quote Cross. However, just saying it is won't make it so. Why do we believe that inviting, or demanding, that faculty members create teaching portfolios will change our culture? Can our behavior until now be explained by the mere absence of this good idea? Or is the problem more complicated?

Most faculty come to the classroom with no training for teaching beyond expertise in the discipline. The discrepancy between what is espoused, that teaching matters, and what is practiced, is glaring. Yet, this gap is not discussed in any productive way. Parker Palmer (1992) suggests an alternative model to the organizational approach to change. He calls it the "movement approach," where individuals decide to live "divided no more." He says: " Most of us know from experience what a divided life is. Inwardly we feel one sort of imperative for our lives, but outwardly we respond to quite another" (p. 12). As faculty members, if teaching really matters to us, we need to find the courage to act through coming to realize "that even if teaching is a back-of-the-bus thing for [our] institutions, it is a front-of-the-bus thing for [us].... Caring about teaching and about students brings [us] health as persons, and to collaborate in a denial of that is

33

to collaborate in the diminishment of [our] own lives" (p. 13). We need to refuse to respond to the pressures of our institutions by coming to realize that "there is no punishment worse than conspiring in a denial of one's own integrity" (p. 17). Is there a movement towards taking teaching seriously? Has it just begun, or is it well under way? It remains to be seen whether or not any our "new strategies" will be able to solve the problems we have set for ourselves. What exactly is the problem to be solved? Is it to get more of the faculty to take their teaching responsibilities seriously? Or is it to help those faculty who already do care about their teaching to find a way to live more satisfying and rewarding academic lives?

If we are to take teaching and faculty development seriously, if we are to become more professional about our work, we need to create "learning organizations" which can identify and correct the gaps between what we wish for and what we create. No faculty member, faculty developer, or administrator deliberately sets out to create an organization where individuals feel that their contributions are not recognized and rewarded. We need to be able to create the conditions in our institutions where the gaps between what we espouse and what we produce can be identified and corrected. It is our challenge as scholars and our responsibility as professionals. In our roles as individuals concerned with faculty development, what actions will we take, what problems will we try to solve? To the extent that we can make our frames public, bring our mental models into our consciousness, and into our conversations, I believe we will be in a better position to be able to act more effectively as faculty developers. The goal is not to reach a consensus, but rather to engage in a discussion which will keep the inquiry going.

References

Adams, B. E. & Roberts, A. O. (1993). Differences among the disciplines. In R. W. Diamond & B. E. Adams (Eds.), *Recognizing faculty work:: Reward systems for the year 2000.* New Directions for Higher Education, No. 81. (pp. 101-114). San Francisco: Jossey-Bass.

Alexander, A. T. & Yelon, S. L. (1972). *Instructional development agencies in higher education.* East Lansing, MI: Continuing Education Service.

American Association for Higher Education. (1995). *From idea to prototype The peer review of teaching. A project workbook.* Washington, DC: AAHE.

Angelo, T. A. (1994, June). From faculty development to academic development. *AAHE Bulletin*, pp. 3 - 7.

Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers*. (2nd ed.). San Francisco: Jossey-Bass.

Argyris, C. (1982). *Reasoning, learning and action: Individual and organizational*. San Francisco: Jossey-Bass.

Argyris, C. (1985). *Strategy, change and defensive routines*. New York: Harper Business.

Argyris, C. (1993). *Knowledge for action: A guide for overcoming barriers to organizational change*. San Francisco: Jossey-Bass.

Argyris, C. & Schon. D. A. (1978). *Organizational learning*. Reading, MA: Addison-Wesley.

Bergquist, W. H. & Phillips, S. R. (1975). *A handbook for faculty development*. (Vol. 1). Washington, D.C.: Council for Independent Colleges.

Bergquist, W. H. and Phillips, S. R. (1981). *A handbook for faculty development*. (Vol. 3). Washington, D.C.: Council for Independent Colleges.

Boice, R. (1992). *The new faculty member: Supporting and fostering professional development*. San Francisco: Jossey-Bass.

Centra, J. A. (1976). *Faculty development practices in U.S. colleges and universities*. Princeton, NJ: Educational Testing Services.

Diamond, R. M. (1993). Changing priorities and the faculty reward system. In R. M. Diamond & B. E. Adams (Eds.) *Recognizing faculty work: Reward systems for the year 2000*. New Directions for Higher Education, No. 81. (pp. 5-12). San Francisco: Jossey-Bass.

Cross, K. P.(1990, December). Teachers as scholars. *AAHE Bulletin*, pp 3-5.

Edgerton, R. (1990, Winter-Spring). Forward to aristotle: Teaching as the highest form of understanding. *Teaching Excellence, A Publication of the Professional and Organizational Development Network*.

Edgerton, R., Hutchings, P., & Quinlan, K. (1991). *The teaching portfolio: Capturing the scholarship of teaching*, Washington, DC: American Association for Higher Education.

Freedman , M. (1979). *Academic culture and faculty development*. Berkeley: Montaigne.

Gray, P. J., Froh, R. C., Diamond, R. M., (1992). *A national study of research universities: On the balance between research and undergraduate teaching*. Syracuse: Center for Instructional Development, Syracuse University.

Group for Human Development in Higher Education. (1974). *Faculty development in a time of retrenchment*. New York: Author & Change Magazine.

Guskin, A. E. (1994, September/October). Reducing student costs & enhancing student learning part II: Restructuring the role of faculty. *Change Magazine*, pp. 16-25.

Johnstone, D. B. (1993, December). Enhancing the Productivity of Learning. *Change Magazine*, pp. 3-8.

Knapper, C. K. (1995). Understanding student learning: Implications for practice. In W. A. Wright and Associates, *Teaching improvement practices* (pp. 58-75). Bolton, MA: Anker.

Light, R. J. (1990). *The Harvard Assessment Seminars: Explorations with students and faculty about teaching, learning, and student life*. Cambridge, MA: Harvard University.

Lindquist, J. (1978). *Designing teaching improvement programs*. Berkeley, CA: Pacific Soundings.

Palmer, P. J. (1987, September/October). Community, conflict, and ways of knowing: Ways to deepen our educational agenda. *Change Magazine*, pp. 20-25.

Palmer, P. J., (1992, March/April). Divided no more: A movement approach to educational reform. *Change Magazine*. pp. 11-17.

POD mission statement. (1991). *To Improve the Academy, 10*, viii.

Ramsden, P. (1992). *Learning to teach in higher education*. London: Routledge.

Schon, D. A. (1983). *The reflective practitioner: How professionals think in action*. New York: Basic Books.

Schon, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Senge, P. M. (1990). *The fifth discipline: The art and practice of the learning organization*. New York: Doubleday/Currency.

Shulman, L. S. (1993a, January). *Displaying teaching to a community of peers*. Address presented at the American Association of Higher Education Conference on Faculty Roles and Rewards, New Orleans, LA.

Shulman, L. S. (1993, November/December). Teaching as community property: Putting an end to pedagogical solitude. *Change Magazine*, pp. 6-7.

Smith, R. A. (1984). *Faculty perceptions of teaching improvement*. Unpublished doctoral dissertation, McGill University, Montreal.

Smith, S. L. (1991). *Report: Commission of inquiry on canadian university education*. Ottawa, ON: Association of Universities and Colleges of Canada.

Terenzini, P. T. & Pascarella, E. T. (1994, January/February). Living with myths: Undergraduate education in America. *Change Magazine*. pp. 28-32.

Weimer, M., & Lenze, L, F. (1991). Instructional interventions: A review of the literature on efforts to improve instruction. In J. Smart (Ed.), *Higher education: Handbook of theory and research Vol. 7*. (pp. 294-333). Bronx, NY: Agathon.

Wright, W. A., & O'Neil M. C. (1995). Teaching improvement practices: International perspectives. In W. A. Wright and Associates, *Teaching improvement practices* (pp. 1-57). Bolton, MA: Anker.

Improving Teaching Across the Academy: Gleanings From Research

Ben Ward

Western Carolina University

The field of faculty development is at least thirty years old, and although we have learned many things about improving teaching skills during that time, we have not developed many definitive answers to the larger questions of our craft; e.g., how do we raise the status and quality of teaching across an entire institution? This article surveys the research literature to ascertain what we do know about these questions, with the hope that it will stimulate a dialogue among faculty developers that will yield a fuller understanding of these broad issues.

More than merely a title for this publication, To Improve the Academy represents the raison d'être for the POD Network as well as for most of the centers and programs represented among POD members. It calls attention to the worthy but challenging goal to which many of us have dedicated our professional careers. We seek to improve the centerpiece of the academy, the one aspect of higher education that the general public, most governing boards, many legislators, nearly all students, and a majority of faculty members consider to be of paramount importance: the teaching-learning process.

If our goal is to improve teaching and learning across *the academy,* our challenge is much more complex than it would be for improving the teaching skills of an individual instructor. While most of us are probably well-qualified to diagnose the needs of an individual instruc-

37

tor and guide him or her toward improved teaching, such a one-on-one approach is not likely to have a widespread impact on the overall quality of teaching simply because it is too labor intensive, time consuming and costly. Improving teaching and learning on a larger scale requires an understanding principles of organizational change as well as the dynamics of faculty and instructional development. Gaff and Simpson (1994), based on their review of faculty development practices in the U.S. over the past 30 years, emphasize the need for a broad approach which addresses all aspects of faculty endeavor. It is essential, therefore, that we know how to capture the attention and interest of large numbers of instructors, enlist them as in-house change agents, and cultivate a broad-scale movement for improving teaching and learning.

When I consider the magnitude of our challenge, I envision the ant in the old "High Hopes" song who was determined to "move the rubber tree plant." Like the ant, I am eternally optimistic. I believe that, collectively, we can move the quality of teaching and learning to a higher level, but, it will require extensive collaboration and coop-eration. Unfortunately, the current state of our knowledge forces us to rely heavily on instinct, intuition, and experience. While we have learned much by trial and error over the past twenty years or so and those of us who have stumbled into pitfalls and banged our noses into various barriers can leave warning signs along the way for others who follow, we have not yet produced an authoritative "road map" to guide us toward our goal. As I exchange ideas with colleagues at the POD conference and enjoy their interchange on the e-mail network, I get the uneasy feeling that we are groping in the dark with only a match to light our way. We offer a variety of activities in hopes of boosting the quality of teaching, but we have not yet cleared a path, put up a string of lights, and prepared a Baedeker to guide us toward the goal of improving teaching and learning across the academy.

Considering the complexity of broad-scale efforts to improve teaching, we need a fuller picture of the forces that affect the process. For example, we need to know more about what motivates faculty to invest time in improving their teaching, how faculty cope with com-peting pressures for their time and attention, how administrative policies and procedures affect the campus climate for improving

teaching, and the potential of established reward structures to encourage or discourage improvement of teaching. If we could explain how these elements interact and begin to identify some of the factors that tend to promote, support or otherwise "drive" the teaching improvement process and the forces that tend to oppose or restrain our efforts, we could be much more systematic in designing programs and services.

I propose, therefore, that we begin a long-term, collaborative project to answer the question, *What does it take to raise the status and quality of teaching across an entire institution?* Perhaps some of us might write POD research grants to address some aspect of this question. Maybe our annual conference could include opportunities to reflect on the ramifications of this issue, or better yet, present research findings for examination and discussion. Of course, this publication would be an ideal forum for airing our opinions and conclusions. Surely, if we focus the knowledge and experience of all POD members on such a fundamental question, we can generate more light on the path to improving teaching and learning across the academy.

My purpose in this article is to initiate a dialogue based on a few gleanings from research on college teaching. Admittedly, the research is sparse and not as conclusive as we might like, but there is enough evidence to inform our dialogue. My hope is that many others will critique, correct, or otherwise add to what I have to say so that we can sustain the dialogue and eventually arrive at a fuller understanding of the process of improving teaching and learning.

Gleanings from Selected Research

In a comprehensive review of the history of research on college teaching across the twentieth century, McKeachie (1990) identifies five areas that have been the focus of research: class size, teaching/learning methods, evaluation of teaching, teaching and technology, and cognitive psychology. Most of this research has focused on teaching methods and evaluation, particularly student ratings of instruction. These two areas have produced the most conclusive findings. Researchers tend to agree that different teaching methods may be effective for different purposes and that no single method is

superior for all situations (Costin, 1972; Dubin & Taveggia, 1968; McKeachie, 1970). Teaching effectiveness is situation specific, depending on the subject matter, the students, and the setting (McKeachie, Pintrich, Lin, & Smith, 1986). Substantial evidence also suggests that student ratings of instruction are reasonably valid and reliable (Cohen, 1980; Marsh, 1984). Beyond these points, there are numerous studies with little or no replication, and therefore, little consensus.

Fortunately, a few studies are helpful in identifying some of the factors involved in the process of improving teaching. These factors can be classified into the following three categories: (1) driving forces—factors which tend to support improvement of teaching; (2) neutral forces—factors which might be expected to have considerable influence on teaching improvement efforts, but which, according to research findings, actually have negligible impact; and (3) restraining forces—factors which tend to oppose improvement of teaching. This review shows that primary driving forces include faculty intrinsic motivation, consultation services related to improvement of teaching, and a positive institutional climate for teaching. Neutral forces include faculty career age, end-of-course student ratings that are not supplemented with consultation or other assistance, and, surprisingly, the institutional reward system. Major restraining forces include low perceived need to improve teaching among faculty (i.e., high sense of self-competence in teaching), and a negative institutional climate for teaching.

While these factors probably do not represent all of the forces involved in the complex process of improving teaching, they provide a useful starting point for understanding the process of improving teaching on a broad scale. Points pertaining to student ratings and teaching consultation services are based on substantial evidence and are probably the most conclusive. Although other points are not supported by voluminous evidence, the studies cited are generally of high quality. Additional research will be necessary before a definitive analysis of the teaching improvement process is possible. In the meantime, this analysis is offered as a basic foundation for better understanding of that process.

Driving Forces

Faculty Intrinsic Motivation

The significance of faculty intrinsic motivation for improving teaching was implied in findings from one of the first large-scale studies of faculty development practices. Based on data from a national survey, Centra (1976) found that the most active participants in faculty development programs were "good teachers who wanted to get better" (p. 25). In view of the fact that "participation in most development activities is usually voluntary" (p. 27), the presence of intrinsic motivation seems probable. When good teachers voluntarily seek out and participate in teaching improvement programs without any promise of extrinsic rewards, intrinsic motivation is apparently high. According to Farmer (1993), "The power of intrinsic rewards to motivate senior faculty has been traditionally undervalued" (p. 52).

Additional indicators of faculty intrinsic motivation were found in the Project for Faculty Development Program Evaluation (Blackburn, Boberg, O'Connell, & Pellino, 1980). In their final report on this project, these researchers observe that "faculty apparently have a highly internal set of criteria for judging their classroom performance, one which is supported by their personal experience with students but is relatively free from colleagues' and supervisors' opinions" (p. 21). Coupled with the finding that "faculty value very highly their teaching role" (p. 15), this report reinforces Centra's suggestion of the significance of intrinsic motivation. If faculty rely primarily on their own individually developed criteria for judging their teaching performance and hold themselves to high standards, then these "highly internal" judgments may be a source of intrinsic motivation for participating in teaching improvement activities.

The most direct and persuasive evidence of faculty intrinsic motivation for improving teaching is found in a study of institutional policies, particularly extrinsic reward structures, that influence faculty participation in faculty development programs and changes in teaching behaviors (O'Connell, 1983). O'Connell found that the degree of faculty participation in faculty development activities was not significantly affected by different institutional reward structures for promo-

tion, tenure, and salary increases. To verify this finding, O'Connell surveyed faculty in selected institutions to more accurately measure their participation in faculty development activities and the degree of change in their teaching behavior. Results of this second phase of the study were "nearly identical" to those discovered in phase one, showing no significant differences between "faculty in colleges in which changed teaching highly influences rewards of promotion, tenure, and salary increases and faculty in colleges in which it does not" (p. 668). Based on these findings, O'Connell concludes that "faculty are inner-motivated persons whose professional values move them to seek the rewards intrinsic to teaching regardless of the institutional policies that support that effort" (p. 662).

Although this study was limited to a relatively homogeneous group of liberal arts colleges, the conclusion is consistent with implications in the more heterogeneous studies conducted by Centra and Blackburn, cited above. Taken together, these three studies provide substantial support for the argument that faculty intrinsic motivation is a major driving force in the teaching improvement process.

Teaching Consultation Services

Since 1976, when Melnik and Sheehan described "The Clinic to Improve University Teaching," many institutions have offered teaching consultation services as part of their faculty development programs. As outlined in *A Handbook for Faculty Development* (Bergquist and Phillips, 1977), such services usually involve a three-stage process in which an on-campus consultant guides faculty through a systematic analysis of teaching responsibilities related to one specific course. While research on the teaching consultation process is not abundant, two empirical studies (Erickson & Erickson, 1979, and Wilson, 1986) and one critical review of literature on improving college teaching (Levinson-Rose & Menges, 1981) support the opinion of Bergquist and Phillips (1977) that this type of consultation is "perhaps the most powerful methodology yet conceived for the actual improvement of in-class teaching" (p. 78). Findings from these three studies indicate that consultation services of this nature are driving forces for improvement of teaching.

Erickson and Erickson (1979) evaluated the effectiveness of the teaching consultation process by comparing results of an experimental group and a control group of volunteer faculty at one institution. Results of the study showed that "students of experimental group instructors perceived more positive change on teaching performance over the semester than did students of control group instructors," that "experimental group instructor self-ratings of improvement were more positive than those of control group faculty," and that "the responses of the experim ital group instructors to the two question-naires about the consultant and the consultation procedure were very positive" (p. 676). After conducting a follow-up study, these re-searchers concluded that "volunteer faculty who use the teaching consultation process consider it useful and well worth their time and effort, and that it results in significant, positive, and lasting changes in their classroom teaching skill performance" (p. 683).

A more recent study of teaching consultation services (Wilson, 1986) found similar results at a different institution. Wilson collected student ratings and faculty self-descriptions of teaching at the end of three offerings of the same course and provided two periods of extensive consultation between points of data collection. Differences in ratings were statistically analyzed and then juxtaposed with similar data from a comparison group of faculty who had received results of their student ratings without the benefit of consultation. Results indi-cated that (1) "The consultation process was associated with statisti-cally important change in overall teaching effectiveness ratings for 52 percent of the faculty clients," and (2) the comparison group "showed no significant change in the ratings of their teaching" (pp. 209-210). This study adds support, therefore, to the case for teaching consult-ation services as a driving force for improving teaching.

In an article entitled "Improving College Teaching: A Critical Review of Research" (Levinson-Rose & Menges, 1981), one study (Bray & Howard, 1980) concludes that "videotape feedback with consultation" is the most effective method for improving teaching assistant instruction. Citing seven other studies of consultation in combination with student ratings, Levinson-Rose and Menges find that, although the quality of the studies varies widely, they "generally support the ratings/consultation intervention" (p. 412). Only two

studies fail to support a ratings/consultation treatment, and one of these (Erickson & Sheehan, 1976) was later redesigned and superseded by the highly supportive study by Erickson and Erickson, discussed above. The weight of existing research data, therefore, indicates that teaching consultation services are indeed one of the driving forces for improvement of teaching.

A Positive Institutional Climate for Teaching

As defined by Peterson et al (1986), organizational climate stems from "shared perceptions of patterns of organizational behavior" (p. 81). These researchers present a conceptual model of "The Organizational Climate for Teaching and Learning" which hypothesizes a direct relationship between organizational climate and teaching/learning outcomes. Based on an extensive review of research literature, this model hypothesizes that the prevailing psychological climate at an institution has a direct affect on teaching and learning outcomes.

Support for this hypothesis is found in a recent study by LaCelle-Peterson and Finkelstein (1993). Based on responses from 111 faculty members on eleven New Jersey campuses, they conclude that "teaching vitality is, at least in part, a product of a positive teaching climate" (p. 21). Their findings suggest that elements of such a climate may include a stimulus-rich environment characterized by a wide array of opportunities for teaching enrichment, opportunities for collective/collaborative teaching, systematic brokering of opportunities for faculty development, and institution-wide faculty development programs.

A positive institutional climate for teaching may be the single most influential factor in efforts to improve teaching across an entire campus. When a majority of faculty perceive that teaching is important at their institution, their shared perception may create a general climate where improvement of teaching is accepted as the norm rather than as an admission of inadequacy. Once such a positive climate for teaching is established, faculty are more likely to be receptive to activities designed to improve teaching. Without such a climate, however, the impact of other driving forces, including faculty intrinsic motivation and teaching consultation services, may be severely weakened if not virtually squelched.

Neutral Forces

Faculty Career Age

If faculty career age is at all a force to be considered in the teaching improvement process, it is extremely modest. In a critical review of research literature on aging and faculty performance, Blackburn and Lawrence (1986) conclude that correlations of teaching performance and age "are predicted to be as they are most often found, vacillating around 0.0" (p. 273). Their review cites five studies which found "low order positive correlations" between teaching effectiveness and academic rank, but they point out that, since the rank of full professor may cover an age span of approximately 30 years, "even the weakest positive relationship is questionable" (p. 272). They also cite a few studies that show that "there is no strong relationship of student-judged teaching effectiveness and age" (p. 273).

Other evidence suggests that interest in teaching may increase with age (Rice & Finkelstein, 1993, Fulton & Trow, 1974) or, as modified by Baldwin and Blackburn (1983), at least increase again late in the career. There is no evidence, however, that senior faculty tend to become dominant figures in the teaching improvement process. Thus, faculty career age is not likely to be either a major driving force or a restraining force in efforts to improve teaching.

End-of-Course Student Ratings

A common practice at many colleges and universities is to collect student ratings of teachers and courses near the end of each term, tabulate the results, and return them to instructors with no additional feedback or consultation. Research shows that, under these conditions, student ratings have a negligible impact on improving teaching.

Rotem and Glasman (1979) reviewed nearly twenty years of literature on student ratings and concluded that, with the exception of two studies with methodological shortcomings, "none of the studies conducted in higher education demonstrated significant effects due to feedback on any of the dependent variables investigated" (p. 498). The main implication arising from their review was that "feedback from student ratings does not seem to be effective for the purpose of

improving performance of university teachers" (p. 507). Cohen's meta-analysis of literature on this same topic (1980), while not supporting Rotem and Glasman's conclusion in all respects, reached the same general conclusion concerning the use of student ratings with no additional information or guidance: "instructors need more than just student-rating feedback to markedly improve their instruction. . . .It is evident that when instructors are left to their own resources, ratings provide little help" (p. 338).

Although Marsh (1984) argues that "The introduction of a broad institution-based, carefully planned program of student evaluations of teaching effectiveness is likely to lead to the improvement of teaching" (p. 746), he makes it clear that a "carefully planned program" must be more than the unsupplemented feedback that is typical at many institutions. He finds that the results of Cohen's meta-analysis support his own findings and "demonstrate that feedback from students' evaluations, *particularly when augmented by consultation,* can lead to improvement in teaching effectiveness" (p. 746, emphasis added). Without any such augmentation, however, the bulk of evidence shows that student ratings of teaching are a neutral force in the teaching improvement process.

Institutional Reward System

One of the most surprising findings in the research literature is that different types of institutional reward structures have little direct effect on faculty participation in faculty development activities. Based on an extensive review of the literature, Finkelstein (1984) concluded that faculty behavior is not related to institutional incentives. O'Connell (1983) investigated the question, "Does the degree of faculty participation in faculty development activities differ significantly between colleges in which changed teaching highly influences rewards of promotion, tenure, and salary increases and those in which it does not?" Analysis of data from 80 responding liberal arts colleges answered the question with a resounding "No."

Considering that O'Connell's study is the only one identified to date on this question and that it is limited to small liberal arts colleges, this finding must be held as tentative until additional research on the question accumulates. As O'Connell acknowledges, "A complex set

of factors may be at work to reinforce sound teaching at the colleges in the study. Possibly no one factor can be isolated as the sole contributing influence" (p. 673). Indeed, it may be that a set of driving forces such as those discussed above and perhaps others not yet identified are powerful enough to override or negate the effects of the different reward structures. Although Fairweather's study of the relationship between teaching and compensation (1992) shows that faculty who spend the most time on teaching tend to be among the lowest paid, he does not address the question of whether a stronger link between teaching and compensation would motivate instructors to improve their teaching. Likewise, Berman and Skeff (1988) and Jabker and Halinski (1978) report that faculty members tend to view teaching as a very important activity, which is influenced by extrinsic rewards, but they do not explore the power of extrinsic rewards to improve teaching. It is possible that the impact of reward structures varies greatly for different types of institutions. At certain types of institutions, particularly small liberal arts colleges, the power of that force may be negligible, while at other types of institutions it may be much stronger. Until more conclusive evidence is accumulated, therefore, it seems appropriate to consider institutional rewards for teaching to be a neutral force for improving teaching.

Restraining Forces

Low Perceived Need to Improve Teaching Among Faculty

According to Blackburn, Pellino, Boberg, and O'Connell (1980), "Faculty don't believe they have any problem with their teaching" (p. 35). Data from their study of nearly 2000 faculty at twenty-four institutions show that approximately 90 percent of the faculty judge themselves above average or superior teachers. This suggests that faculty have a high sense of self-competence for teaching and, consequently, must not feel a great need to improve.

This does not mean, however, that faculty are indifferent to or disinterested in improving teaching. Data from the same study show that most faculty place exceptionally high value on their teaching role. Therefore, the low perceived need to improve is probably modified by the high personal value of teaching. As a result many faculty are likely

to be sympathetic to instructional improvement programs for their colleagues but feel little need to get involved in such activities for their own sake. This interpretation is supported by the finding that faculty think their colleagues need more help with teaching than they do. As stated by Blackburn et al., any individual faculty member is likely to say "I don't need help, but my peers do" (p. 35).

This attitude represents a restraining force on the teaching improvement process. In view of the multiple demands for faculty time and attention, it is difficult for many faculty members to schedule time for teaching improvement activities when their perceived need to improve is low. According to Nordvall (1982), "it is very difficult to institute change in an institution where there is little perceived need for change" (p. 42).

Negative Institutional Climate for Teaching

Any type of organizational climate which does not place high priority on effective teaching is likely to be a restraining force on efforts to improve teaching. If teaching is taken for granted or if improvement of teaching is assumed to be each instructor's individual responsibility with little or no visible organizational support, the impact of instructional improvement programs will probably be minimal. If most faculty members at a given institution become convinced that their administrators and colleagues place high value on research, publication, and grant writing and relatively less value on teaching, then motivation to put extra time and effort into improving teaching is likely to be undermined.

These points are consistent with the findings of Peterson et al. (1986), which indicate that the prevailing organizational climate is a dominant influence on teaching and learning outcomes. Since the Peterson model does not specify any particular type of climate, it can be applied to both positive and negative climates in regard to teaching. In the same way that a positive academic climate is a driving force for improving teaching, a climate where teaching is not highly valued is likely to be an obstacle in the teaching improvement process. As pointed out by Nordvall in *The Process of Change in Higher Education Institutions* (1982), some scholars argue that "piecemeal change is not effective; total institutional renewal is required to make change

43

really count" (p. 33). If the prevailing organizational climate at a given institution is not favorable for improving teaching, then the change process may need to begin with reexamination of the institutional mission, reevaluation of administrative policies and procedures, and assessment of faculty motivation and educational values.

Conclusion

While this review is not comprehensive or conclusive, it does begin to sketch some of the parameters of the teaching improvement process. It suggests that any promising approach to improving teaching across an entire campus should begin with a thorough assessment of driving and restraining forces peculiar to the specific institution. After identifying the opposing forces that affect efforts to improve teaching, the strength of each force needs to be estimated. On campuses where restraining forces are dominant, the overall quality on teaching amcng the majority of instructors is not likely to change significantly in response to instructional improvement programs. Where driving forces slightly outweigh restraining forces, broad scale improvements may be possible if systematic intervention strategies are sustained over time, but the improvements are likely to be gradual and incremental in nature. Only when driving forces significantly outweigh restraining forces can extensive improvements be expected over a relatively short period of time. In general, college and university teachers on a given campus will be motivated to improve teaching to the degree that driving forces outweigh restraining forces.

Contrary to common opinion, the prevailing climate at a particular institution may be more heavily influenced by faculty values and beliefs than by administrators' policies and management practices. Since one of the main driving forces—faculty intrinsic motivation for teaching—and one of the main restraining forces—a high sense of self-competency in teaching—are both deeply rooted in faculty values and beliefs, these forces are likely to remain strong regardless of whether administrative policies and practices are supportive or unsupportive. According to Blackburn et al. (1980), faculty tend to be highly independent in judging their teaching, and their strong internal criteria are not heavily influenced by colleagues' and supervisors' opinions.

39

It seems unlikely, therefore, thai the collective commitment to teaching among faculty would be determined by anything other than their own internal standards. While the prevailing institutional climate for teaching probably stems from a complex interaction of various forces, faculty values and beliefs appear to be at the core.

Of course, the impact of institutional rewards for teaching deserves more detailed scrutiny. We may find that the institutional reward system can be a driving force for improving teaching at some institutions, a restraining force at others, and yet a neutral force elsewhere. No matter how this point turns out, it seems clear that institutional rewards for teaching—or lack thereof—is only one of many considerations in the process of improving teaching.

Apparently improvement of teaching requires a broad program of organizational development as well as intensive faculty development. Efforts must be aimed simultaneously at changing the academic climate for teaching and at changing faculty priorities and perceptions concerning the need to improve teaching. Teaching centers and organized faculty development programs do not bear sole responsibility for promoting such changes, but they surely should be in the forefront of the endeavor. If we are to achieve any measure of success in our efforts "To Improve the Academy," we need to take stock of the evidence and insights that are currently available and seek to fill in the gaps as quickly as possible.

References

Baldwin, R. G. & Blackburn, R. T. (Eds.) (1⁓ ⁓). College faculty: Versatile human resources in a period of constraint. *New Direc⁓ ns for Institutional Research, 40.* San Francisco: Jossey-Bass.

Bergquist, W. H. & Phillips, S. R. (1977). *A handbook for faculty development* (Vol. 2). Washington D.C.: Council for Advancement of Small Colleges.

Blackburn, R. T., Pellino, G. R., Boberg, A., & O'Connell, C. (1980). Are instructional improvement programs off-target? *Current Issues in Higher Education, 1,* 32-48.

Blackburn, R. T. & Lawrence, J. H. (1986). Aging and the quality of faculty job performance. *Review of Educational Research, 23,* 265-290.

Bray, J. H. & Howard, G. S. (1980). Methodological considerations in the evaluation of a teacher training program. *Journal of Educational Psychology, 72,* 62-70.

Centra, J. A. (1976). *Faculty development practices in U S. colleges and universities.* Project Report 76-30. Princeton: Educational Testing Service.

50

Cohen, P. A. (1980). Effectiveness of student-rating feedback for improving college instruction: A meta-analysis of findings. *Research in Higher Education, 13,* 321-341.

Costin, F. (1972). Lecturing versus other methods of teaching. *British Journal of Teaching. 3,* 4-30.

Dubin, R. & Taveggia, T. C. (1968). *The teaching-learning paradox: A comparative analysis of college teaching methods.* Eugene, OR: Center for the Advanced Study of Educational Administration, University of Oregon.

Erickson, G. R. & Erickson, B. L. (1979). Improving college teaching: An evaluation of a teaching consultation procedure. *Journal of Higher Education, 50,* 670-683.

Erickson, G. R. & Sheehan, D. S. (1976). An evaluation of a teaching improvement process for university faculty. Paper presented at the annual meeting of the American Educational Research Association, San Francisco.

Fairweather, J. S. (1992). Teaching and the faculty reward System: Relationships between faculty activities and compensation. University Park: National Center for Postsecondary Teaching, Learning, and Assessment.

Farmer, D. W. (1993). Designing a reward system to promote the career development of senior faculty. *New Directions for Teaching and Learning, 55.* 43-53. San Francisco: Jossey-Bass.

Finkelstein, M. J. (1984). *The American academic profession: A synthesis of social scientific inquiry since WWII.* Columbus: Ohio State University Press.

Fulton, O. & Trow, M. (1974). Research Activity in American Higher Education. *Sociology of Education, 47,* 29-73.

Gaff, J. G. & Simpson, R. D. (1994). Faculty development in the United States. *Innovative Higher Education, 18,* (3), 167-76.

LaCelle-Peterson, M. W. & Finkelstein, M. J. (1993). Institutions matter: Campus teaching environments' impact on senior faculty. *New Directions for Teaching and Learning, 55,* 21-32 San Francisco: Jossey-Bass.

Levinson-Rose, J. & Menges, R. J. (1981). Improving college teaching: A critical review of research. *Review of Educational Research, 51,* 403-434.

Marsh, H. W. (1984). Students' evaluations of university teaching: Dimensionality, reliability, validity, potential biases, and utility. *Journal of Educational Psychology, 76,* 707-754.

McKeachie, W. J. (1990). Research on college teaching: A review. Washington, D.C.: ERIC Clearinghouse in Higher Education, 1970. ERIC document reproduction service no. ED 043 789.

McKeachie, W. J. (1990). Research on college teaching: The historical background. *Journal of Educational Psychology, 82* (2), 189-200.

McKeachie, W.J., Pintrich, P.R., Lin, Y.G., & Smith, D.A.F. (1986). *Teaching and learning in the college classroom: A review of the research literature.* Ann Arbor: National Center for Research to Improve Postsecondary Teaching and Learning, The University of Michigan.

Melnik, M. A. & Sheehan, D. S. (1976). Clinical supervision elements: The clinic to improve university teaching. *Journal of Research and Development in Education, 9,* 67-76.

Nordvall, R. C. (1982). *The process of change in higher education institutions.* ERIC/AAHE Reports, #7.

O'Connell, C. (1983). College policies off-target in fostering faculty development. *Journal of Higher Education, 54,* 662-675.

Peterson, M. W., Cameron, K. S., Mets, L. A., Jones, P., & Ettington, D. (1986). *The organizational context for teaching and learning.* NCRIPTAL Publication, Ann Arbor, MI: National Center for Research to Improve Postsecondary Teaching and Learning.

Rice, R. E. & Finkelstein, M. J. (1993). The senior faculty: A portrait and literature review. In *New Directions for Teaching and Learning, 55.* San Francisco: Jossey-Bass.

Rotem, A. & Glasman, N. S. (1979). On the effectiveness of students' evaluative feedback to university instructors. *Review of Educational Research, 49,* 497-511.

Seldin, P. & Associates (1990). *How administrators can improve teaching.* San Francisco: Jossey-Bass.

Weimer, M. (1990). *Improving college teaching.* San Francisco: Jossey-Bass.

Wilson, R. C. (1986). Improving faculty teaching: Effective use of student evaluations and consultants. *Journal of Higher Education, 57,* 196-211.

52

A Quantum Leap in Faculty Development: Beyond Reflective Practice

Donna Qualters

University of Massachusetts Medical Center

Quantum theory has introduced a new perspective of looking at reality. This article reviews current theories of reflective practice, discussion, and transformative learning as they apply to faculty development and explores dialogue and quantum theory as the next step in faculty transformation.

Loneliness invaded not only our science, but whole cultures. In America, we raised individualism to its highest expression, each of us protecting our boundaries, asserting our rights, creating a culture that Bellah et al. writes leaves the individual suspended in glorious, but terrifying, isolation.

These words by Margaret Wheatley preface her book on leadership and quantum theory (1993, p. 30). They refer to a culture that is strongly exemplified by the teaching world of academia. As faculty members, we protect our boundaries (the classroom), assert our rights (to conduct teaching in private), and leave ourselves in terrifying isolation. Lee Shulman addressed this same issue when he discussed the isolation faculty experience in the classroom (Shulman, 1993). Both authors address an issue at the very heart of faculty development. How can we develop as teachers if we remain in isolation? If teaching is done behind closed doors, how can faculty enrich their teaching and their academic experience? Both Wheatley and Shulman would say

they can't. If we accept Wheatley's premise that we live in a quantum world, if "things" have disappeared, if "in a quantum world, relationships are not just interesting...they are all there is to reality" (1993, pg. 32), then faculty development must move beyond its traditional, linear approach. In the words of Karl Weick "we must stop arguing about truth and get on with figuring what works best" (Weick cited in Wheatley, 1993, pg. 37).

Leaders in a quantum world also have a different role. Using a jazz metaphor, Wheatly suggests that the traditional functions of making decisions and setting examples must be replaced.

> As leaders we play a crucial role in selecting melody, setting the tempo, establishing the key, and inviting the players. But that is all we do. The music comes from something we cannot direct, from a unified whole created among the players...in the end, then it works, we sit back, amazed and grateful (Wheatley, 1993, p. 44)

In a more direct connection to academic teaching, Parker Palmer echoes Wheatly's conceptual framework and suggests the creation of a community of discourse about teaching and learning (Palmer, 1993). He asks us to get over our habit of reducing teaching to "how to do it" questions, much as Wheatley asks us to get over our Newtonian quest for predictability, to stop analyzing the parts to arrive at the whole. Instead we need to look at "the challenge of ideas, the exploration of shared practice, the uniqueness of each teacher's genius, the mystery at the heart of the educational exchange" (Palmer, 1993, p. 10). Wheatley poses her challenge a little differently, but still advocates the same concept. "We need to see beyond the many fragments to the whole, we need to step back far enough to appreciate how things move and change as a coherent whole" (Wheatley, 1993).

Palmer, like Wheatley, also envisions leadership in a new way. Leaders need to invite conversations to create the learning community. The most powerful leadership is the type that provides the ways and means to do things people want to do but feel unable to do for themselves. This type of leadership will tap energies much more effectively than the exercise of power or coercion (Palmer, 1993). The role of the leader is to bring the people together and then watch and see what their energy creates.

54

If we accept this principle as a new paradigm, what does it mean for faculty development? New ideas are being tried and tested, some as deceptively simple as "personalization" (Katz & Henry, 1988) others conceptually more complicated, such as "reflective practice" (Schön, 1983). Faculty development, as traditionally conceived, is relatively narrow, and this new view certainly implies a movement beyond the traditional workshops, individual consultations, teaching tips, and the like. But what will replace the old paradigm? I suggest that we should explore the use of reflective practice, critical thinking, discussion, transformative learning, and dialogue as a basis for designing a new approach to faculty development.

Reflective Practice

Schon coined the term "knowing-in-action" to describe the way skillful practitioners often possess knowledge that they cannot name or identify (Schön, 1983, pg. 50). "Knowing in action" is defined by three salient characteristics (Schön, 1983, p. 54):

1. Actions, recognitions, and judgments that we do not think about but carry on in a spontaneous manner.
2. An unawareness of having learned these things, we just do them.
3. In some cases, awareness of the internalized understanding; in other cases unaware, yet in both cases an inability to describe the knowing.

In essence, "skillful action often reveals a knowing more than we can say" (p. 51). Shulman uses this concept again when referring to teachers as practitioners who know more than they ever try to articulate (Shulman, 1987). I found this to be true when working with faculty members who were trained in health professions. As we worked together to help them transfer their skills into a classroom setting, they were struck over and over by the fact that they "knew" a great deal of educational theory, they just never identified it as such. For example, in a session on Classroom Assessment based on the work of Angelo and Cross, they discovered that the idea was very similar to clinical assessment of patients they had practiced for years. (Qualters, 1995)

The principles and practices were very similar: find out what is wrong with the patient/student; prescribe a course of action; assess to see if the patient is healing or the student is learning; adjust the course of action based on assessment. By reflecting on their practice they were able to transfer this skill to the classroom. These techniques simply needed to be "named" for them. They certainly knew more than they could say. Schön identified this transformation as a shift from know-ing-in-action to knowledge-in-action, an awareness that one possesses knowledge that is rigorous and relevant (1983, p. 59).

But knowledge-in-action is not enough. Practitioners need to have a mechanism to identify, evaluate, adjust and apply this knowledge to make it useful. Schon calls this concept "reflective practice". Schön feels that through reflection, practitioners can bring to awareness and evaluate the tacit understanding that is part of their experience in their specialized practice. As a result, they will be able to make sense of new and unique situations when they arise (Schön, 1983).

Of course, many of us do reflect on practice. Teachers often leave class wondering what went wrong, or why a certain situation occurred, and what can they do to change it. But this kind of instantaneous, on-the-spot reflection is less intensive than that which Schön believes is necessary when he suggests "reflection-in-action." "Reflection-in-action" is not time-constrained; it can be instantaneous or it can last over a period of months. It can be a reflection on the immediate event or a reflection on the tacit norms and assumptions that underlie our actions (Schön, 1983). This kind of "double loop learning" focuses on understanding not only what we do but why we do it (Argyris & Schön cited in Issacs, 1993).

The Allied Health faculty members I worked with provide a good example of "double loop learning" in conjunction with reflective practice. In a discussion on how to handle difficult students in class, we talked not only about how they handled difficult patients in the clinic but why they dealt with them in a specific way. We explored the "theory" behind their behavior. We then discussed whether this was appropriate for the classroom (it was), and why it would be a good strategy for dealing with difficult students.

This idea is also in concert with quantum theory principles: Wheatley asserts that the environment remains uncreated until we

interact with it and that there is no describing it until we engage it (Wheatley, 1993). So when we take knowledge and transfer it to a new situation, its efficacy can only be determined in *action*. This principle, reflective practice followed by action, holds a promise for for changing the field of faculty development. The American Association of Higher Education devoted an entire conference to this topic in the summer of 1995, and the conference itself may be a means for "improving teaching through conversation and community" (Palmer, 1993, pg. 8).

Discussion

As Parker Palmer points out, faculty members belong to one of the few professions that do not engage in conversation with colleagues (1993). He refers to this as the "privatization of teaching." Its roots, he speculates, are in the concept and practice of academic freedom, but it flourishes because faculty members often choose it as a way to protect themselves from evaluation. However, this development has had dangerous consequences for higher education: "The most likely outcome when any function is privatized is that people will perform the function conservatively, refusing to stray far from the silent consensus on what "works," even when it clearly does not" (Palmer, 1993, p. 8). I once talked to a faculty member who said he had taught the same way for twenty years, even though he felt for the last ten that his method hadn't worked. Incredibly, each year he applied for a waiver from student evaluations, based on his many years of teaching experience.

Palmer's suggestion to engage in continuing, thoughtful conversation that goes beyond the techniques of teaching promises to help eliminate the isolation that teachers experience in higher education. I still remember the eager phone call from a faculty member in the semester following a teaching project. She called, elated, to tell me about an innovation she had tried in the classroom that morning that had wonderful, exciting results. A couple of days later she dropped by my office to tell me how good it was just to have someone to talk to about teaching issues and how this motivated her to continue to try new and different ways, but more importantly, to continue to reflect

and question her practices and assumptions. This incident seems to exemplify Palmer's "community of discourse fed by the richness of our corporate experience" (Palmer, 1993, pg. 10).

Palmer advocates four techniques to stimulate this kind of creative conversation. The first technique is based on critical moments in teaching, which he defines as moments when "a learning opportunity will either open up or shut down for your students—depending, in part, on how you respond" (Palmer, 1993, pg. 10). An important aspect of a discussion of "critical moments" is that there are no "correct" answers. Instead, reflecting on practice with colleagues allows one to understand these situations in more meaningful ways and therefore makes practice stronger (Palmer, 1993). Brookfield, in his work on fostering critical thinking in adults, suggests a similar process he calls "critical incident exercises" (Brookfield, 1987). These exercises are used to help individuals identify incidents that have particular significance for them. Brookfield refers to the reflections done during these sessions as "identifying theories in use," which is composed of:

- contextually grounded ideas about what works best in that context

- explanation as to why these ideas work

- readiness to alter practice according to a changing context

The similarities between Schön's reflection-in-action and Brookfield's theories-in-use are obvious, a fact which Brookfield himself acknowledges (p. 155).

The second technique Palmer espouses for good conversation centers on the "human condition" of teachers and learners, by which he means metacognitive state of knowing ourselves in order to help us understand our students. It is only by confronting our own knowledge of ourselves and our fears that we can understand that of our students. Yet "we cannot see the fears that haunt our students because we ourselves are haunted by the fear that our students have rejected us" (Palmer, 1993, pg. 11). I once had a teacher ask me, "what are you

58

most loathe to know about your work?" While the question made me extremely uncomfortable, it was only by discussing it that I was able to deal with that fear and put it in perspective.

Palmer's third technique for improving teaching though conversation is to discuss the metaphors and images of what we are doing when we teach. His own example of his early image of teaching "like a sheepdog" revealed that he viewed teaching as keeping everyone in line, in the right pasture, like sheep. This allowed him to explore why he thought that way and if it was true.

His last technique is autobiographical reflection on the origins of our teaching vocations and on the great teachers in our lives. Since the "great teachers" will have used very different (in some cases, mutually exclusive) techniques, the purpose is not to examine their methods. Palmer believes that, through conversations, we can identify their commonalties: a high degree of self-knowledge, trust in their own nature, and a willingness to teach directly from that self knowledge (Palmer, 1993).

Transformative Learning

Mezirow's theory of transformative learning also bears a similarity to double loop learning. Mezirow defines transformative learning as critical self-reflection in which learners become aware of their assumptions, reflect on them, and then question whether or not they are valid (Mezirow, 1991). Many times this process will lead one to the realization that the assumptions may not be valid and thereby lead to re-forming or transformation of those assumptions, which in turn leads to new ways of interpreting reality. Again, reflection is a key component of this theory and in many ways resembles Schon's reflective practice.

Patricia Cranton has done interesting work on applying Mezirow's theory to faculty development (Cranton, 1994). She argues that while many faculty development activities appear voluntary, in the reality of higher education culture they are really mandatory. Faculty must give evidence of having examined their teaching and also demonstrate improvement thereof. Traditional faculty development activi-

ties such as workshops, conferences, or additional coursework are designed for *forming* rather than *transforming* practice.

In order to introduce the transformative element into faculty development she suggest two approaches: engaging faculty in action research on their teaching; and the development of faculty group support programs, long-term mentors, or on-going peer consultations. These methods allow faculty to examine the assumptions that underlie their teaching practice.

Dialogue

The techniques discussed above share many characteristics, and whether we refer to reflective practice, double loop learning, critical incidents, support groups or just good conversation, they all seem to point in the same direction. But there is another set of ideas that goes beyond those described so far. We often hear the phrase "enter into a dialogue," and until recently that has usually meant enter into a discussion, which often leads to dialectics, which then leads to debate and a resolution that is usually accomplished by beating down the opposition (Schein, 1993). Recent work at MIT's Dialogue Project has developed a new meaning and use for dialogue that separates it from "discussion" and appears to have potential for faculty development.

> Dialogue is the creative space in which entirely new ways of thinking and acting will emerge. Dialogue is a space of deep thinking, where there is nothing to prove, where well worn ways of thinking and being can be let go of. In a dialogue there is nothing to be solved and nothing to be defended (Isaacs, 1992, p. 1).

Dialogue can take the reflective learning process one crucial step further. Not only does it point out underlying assumptions but it helps one learn about the reasons that led one to adopt those assumptions. It is a metacognitive approach in which one learns about one's learning. Isaacs refers to it as "triple loop learning" and distinguishes it from double loop, which he feels encourages learning only to increase effectiveness rather than develop deeper self-knowledge. "Triple-loop learning is the learning that opens inquiry into underlying why's. It is the learning that permits insight into the nature of paradigm itself, not merely an assessment of which paradigm is superior" (Issacs, 1993,

p.30). Dialogue helps us get to factors buried at such deep levels that we are not even aware of their influence on our feeling and attitudes. This process is called "proprioception" by Bohm, Factor and Garrett (1993), which they define as paying attention to why we are thinking the way we are thinking. Although we may believe that our attitude toward someone is based on their actions alone, it is more often shaped by underlying attitudes that are not related to that person at all. When we use the phrase "You're just like your mother, father, etc.," we are judging someone on feelings and assumptions associated with another individual. In a recent faculty dialogue meeting, someone referred to students as "adults," a remark that led the group to examine if that assumption was operating in our methodolgy and pedagogy. Although we never reached agreement on whether or not students are adults, many faculty members admitted that they did believe this assumption and were operating on that belief. Others realized that while they did not operate under that assumption, they felt a tension between their belief that students should be adults and the reality of the classroom that seemed to prove otherwise.

Dialogue helps us identify this phenomenon while it is occurring. Although dialogue is not aimed at changing behaviors or even moving participants toward a pre-determined goal, "nevertheless changes do occur because observed thought behaves differently from unobserved thought" (Bohm, et al., 1993, p. 6). Observed thought allows us to see thinking as something to be aware of *as it is occurring*, not something to reflect on after the fact. Dialogue may also allow the creation of collective thought. At one dialogue group a participant remarked that as faculty members we all wear masks. After lengthy reflections on what that statement might mean to us the topic was changed. However, at the next meeting it was raised again and some members revealed that they had been thinking about that concept between sessions and that it had had an effect on their teaching that week.

Dialogue can be a way to break down what Argyris calls "defensive routines," early conversational patterns which teach us to be polite and to avoid confrontations but which often lead to miscommunication (cited in Schein, 1993). Dialogue techniques create mutual trust and build common ground so that communication can be more valid and

genuine, and dialogue appears to be a crucial link to opening the classroom door.

Schein asserts that discussion is a valid problem solving and decision making process only if we assume people share common meaning and understanding (Schein, 1993). However, I have found that faculty members often do not even share a common conception of the fundamental concept of teaching. To one it is the transfer of knowledge, to another it is facilitating learning, to yet another it is providing skill and tools to obtain knowledge, and so on. Of course this diversity may reflect more than simple definitional differences, since research has shown that teaching ability may be developmental (Sherman et al., 1987) and these differences could represent the developmental level of different teachers. However, it is difficult to discuss "our teaching" when we don't even share the same meaning for the terms. Dialogue can therefore make important contributions to faculty development, helping teachers create a common set of under-standings in an atmosphere of trust. On our campus, a dialogue group this semester agreed to make the time commitment to visit each other's classrooms and then to sit and talk about what they had experienced. Not only was the commitment significant, but it marked the first time in recent memory that such a critical mass of peer reviews voluntarily took place in one semester.

The dialogue technique must be adopted cautiously, for as Bohm, Factor and Garrett point out, in the early stages dialogue will often lead to frustration (1992). In pursuing an activity that appears to have no goal or direction, participants often feel frustrated or angry and some may try to "take control," thereby polarizing the dialogue. It is important to create a "container" environment "in which people can allow a free flow of meaning and vigorous exploration of the collective background of their thought, their personal predispositions, the nature of their shared attention and the rigid features of their individual and collective assumptions" (Isaacs, 1992, p. 25). Schein has found that this container environment allows people to deal with issues that generate strong emotions and feelings without becoming polarized (Schein, 1993).

A skilled facilitator is important to the dialogue process. It is the facilitator's task to sustain dialogue through the initial stage (which

62

may appear to be unstructured and non-directional) until the process can peel away the initial layers of resistance and create common understanding. Thus, skilled facilitators must model the suspension of their own categories and judgments for the participants in the dialogue (Schein, 1993). This suspension is especially important in the culture of higher education where members are judged on their ability to view ideas critically and to defend a particular intellectual position.

The dialogue technique has also been found to work best in groups numbering between twenty and forty (Bohm et al., 1993). Groups composed of less than twenty often do not have the diversity necessary to reveal underlying assumptions and sub-culture thinking, and groups of over forty are unwieldy and give participants fewer opportunities to speak. This requirement poses a serious problem for the use of dialogue in faculty development, since it can be extremely difficult to assemble and maintain a group of over twenty faculty over a sustained period, but it should not be a reason to reject the technique. Ways may be found to allow the dialogue technique to operate effectively in groups of less than twenty, and academic administrators can make it possible for large groups of faculty members to participate in a dialogue exercise through release time or other administrative adjustments.

Conclusion

If we view the world in terms of quantum theory, analyzing parts to understand the whole no longer makes sense. Bohm's work has shown us that there is an unbroken wholeness, a complex web of connections, at a level we cannot often discern (cited in Wheatley, 1993). Faculty developers need to find ways to create these connections for classroom instructors, to get teaching out of splendid isolation. Faculty development is moving out of its formative stage, in which we sought to add techniques and knowledge to a teacher's cognitive framework, to a transformative stage of examining assumptions and values that underlie teaching and the environment in which it operates. This movement is a complex process, a fact that Shulman acknowledges in his discussion of the intersection of content and pedagogy (Shulman, 1987). Faculty development must nevertheless

continue to advance, to go beyond reflective practice to the exploitation of the dialogue technique. Only through these methods can faculty see beyond traditional paradigms of teaching and develop an understanding of collective meaning, a process that should yield a new level of creativity and insight into the practice of teaching.

In a quantum world it is through small connections that larger, more complex connections are affected. We know that changes in small settings, such as individual faculty groups, can create larger system changes that ultimately unite us in the whole. Thus, the quantum model of change matches our experience in the world and reflects organizational change with more accuracy than is usually acknowledged (Wheatley, 1993). On this basis, Wheatley reminds us to "think globally, and act locally" (1993, p. 42). If our commitment to faculty and students, and therefore society at large, is to create the best learning environment in which to conduct the business of education it is important that we explore ways to engage faculty members in "dialogue."

References

Bohm, D., Factor, D. & Garrett, P. (1992). *Dialogue: A proposal.* Cambridge, MA: The Dialogue Project, Organizational Learning Center, Massachusetts Institute of Technology.

Brookfield, S. (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting.* San Francisco: Jossey-Bass.

Cranton, P. (1994, November/;December). Self-directed and transformative instructional development. *Journal of Higher Education,* 6, 726-744

Cross, K.P., & Angelo, T.A. (1988). *Classroom assessment techniques.* Ann Arbor, MI: National Center for Research to Improve Post-Secondary Teaching and Learning.

Daloz, L.A. (1987). *Effective teaching and mentoring.* San Francisco: Jossey-Bass.

Isaacs, W. (1992). *Taking flight: Dialogue, collective thinking, and organizational learning.* Cambridge, MA: Report from the Center for Organizational Learning, Massachusetts Institute of Technology.

_____. (1992). *Dialogue project summary.* Cambridge, MA: Report from the Center for Organizational Learning, Massachusetts Institute of Technology.

Katz, J. & Henry, M. (1988). *Turning professors into teachers: A new approach to faculty development and student learning.* New York: MacMillian.

Mezirow, J. (1990). *Transformative dimensions of adult learning.* San Francisco: Jossey-Bass.

64

Palmer, P. (1993, November/December). Good talk about good teaching: Improving teaching through conversation and community. *Change, 6*, 8-14.

Qualters, D. (1995. Winter). From practitioner to professor: A reflective vision. *Journal of Staff,Program & Organizational Development, 12*, 1-6.

Schon, D. (1983). *The reflective practitioner: How professionals think in action.* New York: Basic Books.

Schein, E. (1993, Fall). On dialogue, culture, and organizational learning. *Organizational Dynamics, 22*, 40-51.

Sherman, T., Armistead, L., Fowler, F., Barksdale, M., & Reif, G. (1987). The quest for excellence in university teaching. *Journal of Higher Education, 58* (1), 66-84.

Schulman, L. (1993, November/December). Teaching as community property: Putting an end to pedagogical solitude. *Change, 6*, 6-7.

_____. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review, 57* (1), 1-22.

Wheatley, M. (1993). *Leadership and the new science: Learning about organization from an orderly universe.* San Francisco: Berrett-Koehler.

Wlodkowski, R.J. (1985). *Enhancing adult motivation to learn.* San Francisco: Jossey-Bass.

Credibility: The Crux of Faculty Development

Margaret M. Morgan

University of Central Arkansas

Patricia H. Phelps

University of Central Arkansas

Joan E. Pritchard

University of Central Arkansas

Credibility, the quality through which leaders earn the trust and confidence of their constituents, underlies effective faculty development. Drawing upon the work of Kouzes and Posner (1993), this paper examines six practices, or disciplines, by which faculty developers can increase their credibility.

The literature on faculty development does not generally address the leadership role of faculty developers, but leadership is an important part of our work and often makes the difference between success and failure. Works on management afford a much richer source of theoretical and practical information about leadership, and faculty developers might benefit by studying the principles contained therein. For example, in a recent book by James Kouzes and Barry Posner (1993), the authors make a strong case for *credibility* as a critical element of successful leadership. Faculty developers often talk about the problems of establishing and maintaining credibility, but the work of Kouzes and Posner places the issue firmly within the context of leadership and suggests approaches to building credibility as a func-

tion of leadership. We believe that their work has strong implications for faculty development programs and that credible leadership in faculty development can be achieved through the practice of six "disciplines" (Kouzes & Posner, 1993): 1) discovering your self; 2) appreciating constituents; 3) affirming shared values; 4) developing capacity; 5) serving a purpose; and 6) sustaining hope.

The Six Disciplines

Discipline 1: Discovering Your Self

As a practical exercise in self-discovery, suppose that you were to take an extended leave of absence and would be unable to communicate in any form with your faculty development colleagues. What guiding principles would you like your co-workers to use in your absence? What values and beliefs do you think should steer their decision-making and action-taking? The answer to these questions constitutes your credo, your "self," the principles you believe are important to live and work by.

The Latin word *credo* means "trust or believe," and the concept of credibility is firmly grounded in the notion of trust. However, trust is a two-way process. Credible faculty developers are those who are seen as trustworthy, but in order to be perceived as trustworthy, they must demonstrate their trust in others (Kouzes and Posner, 1987). They also need to trust and have confidence in themselves, to recognize their strengths and prejudices and to be aware of their own influence. Although self-examination is an important route to this goal, usually self-knowledge can be acquired more readily by constantly soliciting feedback from clients and peers. "Wise leaders understand their own strengths [and] work to expand them" (Bolman & Deal, 1991, p. 445). When faculty developers have confidence in the importance of their work and believe that what they have to offer is important to others, their credibility is enhanced.

The process of earning credibility is a slow one, because it depends in part upon the establishment of a recognizable identity, a "self" of which others are aware. This identity, or image, develops over time as people become aware of who you are through acts of self-disclosure.

Research indicates that self-disclosure establishes trust, a major component of credibility (Peters & Waterman, 1982; Kanter, 1983). In faculty development, self-disclosure is often promoted through newsletters, listservs, informal discussion groups, and an easily accessible center, as well as through private messages and conversations.

Discipline 2: Appreciating Constituents

Faculty developers demonstrate their appreciation for their constituents by acknowledging the time and effort they contribute to development activities. Acknowledgment often takes the form of individual thank-you notes and participation certificates, but public recognition in award ceremonies is also important. Sending personal invitations to faculty, asking them to participate in various events, also shows appreciation by treating them as individuals.

Utilizing faculty as resources in programs allows faculty to practice their disciplines for the benefit of peers, shows that we appreciate their individual expertise, and provides a way to showcase their individual talents. A philosophy professor conducting a session on ethics in teaching or an accounting professor demonstrating how spreadsheets can be used to provide feedback to students are examples of this kind of activity.

Discipline 3: Affirming Shared Values

In the midst of both physical and disciplinary divisions in the academy, faculty are more likely to identify with those who are involved in faculty development if they see them as teachers as well. As critic Kenneth Burke (1969, p. 39) aptly states, "Only those voices from without are effective which can speak in the language of a voice within." College faculty tend to define themselves by their disciplines, so it makes sense that their loyalty can best be gained by those who share a similar commitment to a discipline and who are perceived as *colleagues* who possess similar values. Giamatti (1988, p. 39) defines collegiality as "the shared sense of a shared set of values, values about open access to information, about open exchange of ideas, about academic freedom, about openness of communication and caring; collegiality is the shared belief, regardless of field or discipline, in a

generalized, coherent, communal set of attitudes that are collaborative and intellectual."

But because of the high value placed on autonomy among faculty in higher education, they may feel isolated from their colleagues and even fail to see the worth of what they do. Faculty development helps them overcome this sense of isolation and regain an appreciation of the importance of their work by providing opportunities for the affirmation of shared values: workshops, consultations, focus groups, and faculty retreats.

Affirming shared values also creates a foundation for appreciation of diversity in teaching and learning. As Giammati (1988, p. 39) observes, collegiality "does not imply unanimity of opinion; it implies commonality of assumption." By showing the strengths of different approaches to teaching, we not only emphasize that there is no one "best way" to teach, we can use these differences to explore tacit assumptions about learning and diversity and thereby stimulate growth. For example, sponsoring constructive controversies on such topics as political correctness, assessment, and tenure and promotion may provide an effective strategy for emphasizing both the commonality of assumptions as well as the strengths in diversity of opinion.

Discipline 4: Developing Capacity

Because they are already competent professionals in their fields, faculty members often fail to see the need to develop their capacities as teachers, so the challenge for faculty development is to help them perceive this need. One strategy for promoting this outcome is to make exemplary faculty members highly visible by involving them in workshops, retreats, and panels, thereby allowing others to see the potential for their own professional growth The credibility of faculty development is also enhanced when we seek faculty advice and encourage their ownership of resources and programs. Another strategy is to build on the goodwill of faithful participants in these programs, who frequently pull in "unchurched" colleagues and provide testimonials to share with others. Of course, one of the most effective ways that faculty developers help teachers "develop capacity" is through individual consultations.

69

Faculty members also develop their capacity as teachers by using information from newsletters, books, videotapes, and research reports provided by faculty development programs. This "clearinghouse" function is fundamental to most successful programs.

Discipline 5: Serving a Purpose

The purpose of faculty development is to improve teaching, but we perform that function in the context of a service philosophy. Most faculty developers would probably agree with Pete Thigpen of Executive Reserves, who asserts, "Really believe in your heart of hearts that your fundamental purpose, the reason for being, is to enlarge the lives of others" (cited in Kouzes & Posner, p. 218). This service orientation is also an important element of leadership: "The leader [who is viewed as] a facilitator and catalyst . . . motivates and empowers others to perform at their best. The leader's power comes not from position or force but from talent, sensitivity, and service" (Bolman & Deal, 1991, p. 430).

Within this service orientation, the power of faculty development is primarily moral rather than authoritarian—faculty developers essentially try to get people to *want* to do what they *ought* to do. As Kouzes and Posner (1987) point out, this too is a leadership function:

with ... extrinsic rewards and pressures, we can get most people to do things. Managers have been proving this for years. But what of those who have no bonuses to give, no promotions to offer, and no performance reviews to write? What of those who cannot pay any compensation and yet ask us to contribute our time, our resources, our services, our energies, even our lives? What of those who must rely upon our willingness, our internal motivation, to give of ourselves for some just cause? Do they not lead? (p. 26)

Of course, our purpose is also shaped by (and serves) the institution's stated mission, as well as its traditions and unique culture. If a faculty development program is not clearly part of this larger entity, it may be perceived as self-serving and narrow, which will ultimately undermine its credibility.

61

Discipline 6: Sustaining Hope

In higher education today cynicism is unfortunately rampant. The optimism of faculty members is eroded by a variety of pressures: higher expectations for publications, demands for more accountability, the need to avoid litigation, shrinking budgets, and more complex tenure requirements. Faculty developers can help counteract these pressures (and "sustain hope") by providing activities that promote faculty renewal. For example, a well-designed faculty retreat helps remind faculty of the reasons they entered the profession and why they are still there. Through such activites, faculty developers can help both faculty and administrators maintain their belief in their central mission.

William Plater, in his keynote address at the 1994 POD conference, asserted that "faculty renewal is the engine that drives the campus mission" (p. 8). Faculty who engage in renewal activities typically share a commitment to lifelong learning, a commitment whose intrinsic rewards for both faculty and faculty developers outweigh any extrinsic returns, even though tangible benefits may also accrue (e.g., merit pay, recognition, and additional vitae entries). Renewal activities thereby help combat the cynicism that undermines morale, engenders apathy, and ultimately harms students by producing poor learning. It is important, therefore, for faculty development progams to focus on renewal as a way of fighting cynicism and sustaining hope.

Conclusion

Effective faculty development requires strong leadership, a driving vision, and a desire to implement that vision., but these things alone are not sufficient to insure success. We must focus on ways to build credibility. Based on the principles outlined above, we can enhance our credibility as faculty developers in four ways: being responsive to the needs of faculty, helping others find their strengths, exhibiting a willingness to listen to and credit others' ideas, and recognizing that our common purpose is to improve students' learning. Kouzes and Posner (1993) present the process of building credibility as a continuous cycle of clarifying meaning, unifying constituents, and intensify-

ing actions. We can apply this process by recognizing the importance of credibility and striving toward congruence between what we say we believe and what we do. However, in the last analysis, we must remember that the achievement of credibility depends less upon *what* we know than it does on *how* we are known. "Credibility is an elusive quality because our level of credibility always exists in other people's minds; it is a part of their thinking, not ours." (Robinson, 1994, p. 15)

References

Bolman, L.G. & Deal, T.E. (1991). *Reframing organizations: Artistry, choice, and leadership.* San Francisco: Jossey-Bass Publishers.

Burke, K. (1969). *A rhetoric of motives.* Berkeley: University of California Press.

Giamatti, A. B. (1988). *A free and ordered space: The real world of the university.* New York: W.W. Norton & Company.

Kanter, R. (1983). *The change masters: Innovations for productivity in the American corporation.* New York: Simon and Schuster.

Kouzes, J.M. & Posner, B.7 (1987). *The leadership challenge: How to get extraordinary things done in organizations.* San Francisco: Jossey-Bass.

Kouzes, J.M. & Posner, B.Z. (1993). *Credibility: How leaders gain and lose it, why people demand it.* San Francisco: Jossey-Bass.

Peters, T.J. & Waterman, R.H. (1982). *In search of excellence.* New York: Harper & Row.

Plater, W. (1994, October). *Future work: Faculty time in the 21st Century.* Keynote address presented at the meeting of the Professional and Organizational Development Network in Higher Education, Portland, OR.

Robinson, E.T. (1994). *Why aren't you more like me? Styles and skills for leading and living with credibility* Amherst, MA: HRD Press.

Faculty Development Programs at Research Universities: Implications for Senior Faculty Renewal

Dr. Arthur L. Crawley

This article examines the research findings from that portion of the National Survey on Senior Faculty Renewal *which pertains to the faculty development programs available to senior faculty at research universities in support of their career development and renewal. Survey respondents were coordinators and directors of faculty development programs and selected academic affairs administrators with faculty development responsibilities at their respective institutions. In general, the findings reveal a high level of support for the traditional approaches to faculty development for senior faculty in the context of their teaching and research. However, the findings suggest that faculty development approaches that are targeted to enhance senior faculty careers by either expanding employment options or by creating new roles and responsibilities are more limited. Additional findings concern the availability of post-retirement options, opportunities for collaborative work, and incentives to encourage excellence in teaching, research, and service.*

Today, tenured faculty members, 50 years of age or older, constitute approximately half of the full-time faculty at colleges and universities across the United States. The likelihood is that a significant number

73

of senior faculty will continue to be employed at their respective institutions well into the next century (El-Khawas, 1991; Rice & Finklestein, 1993). Research universities have a distinctive experience in this regard. On average, their faculty are older and more tenured when compared to other higher education institutions (National Center for Educational Statistics, 1990). In addition, there is recent evidence that faculty at research universities retire at later ages than faculty at other institutions (Lozier & Doo' is, 1991).

As of January 1, 1994, col eges and universities are no longer permitted to mandate the retirement of tenured faculty on the basis of age alone (Franke, 1993). Some fear that with the abolishment of the mandatory retirement age, a disproportionate number of senior faculty will continue occupying tenured positions past the age of 70, and past their ability to perform their scholarly and teaching roles effectively (Bader, 1988; Crawley, 1990). Since the overwhelming research evidence demonstrates that an increase in the average age of faculty does not necessarily affect institutional quality (Hammond & Morgan, 1991), the concerns expressed are largely unjustified and may represent an undercurrent of age bias in the academic workplace (Crawley, 1995). The extensive research on aging and faculty productivity confirms that "faculty in their 70s can continue to perform well and that there are variations in performance among faculty at any age" (Hammond & Morgan, 1991, p. 105).

Although the general consensus on the abolishment of compulsory retirement for tenured faculty suggests that there will be no substantial negative consequences for the majority of colleges and universities, the National Research Council's Committee on Mandatory Retirement in Higher Education (Hammond & Morgan, 1991) concluded that "at some research universities a high proportion of faculty would choose to remain employed past age 70 if allowed to do so" (p. 2). The Committee expressed concern that without mandatory retirement some research universities would likely suffer both increased costs and limited flexibility to hire new faculty.

When examining the aging and career profile of current faculty, an additional factor provides for further uncertainty with regard to faculty seniority and mandatory retirement issues—a rapidly changing academic labor market. Schuster (1990a) predicts a more active job

market after the mid-1990s. His forecast is based on the expected widespread retirement of faculty hired in the 1960s and the increase in college enrollments predicted by demographers. He believes that competition will become intense for quality faculty within the next few years, creating a situation far more fluid and dynamic than experienced in the academic marketplace for some time.

Schuster (1990a) dramatically calls attention to the interconnectedness of these critical issues as leading to a "bipolar" faculty—simultaneous employment of large cohorts of younger and older faculty—that will pose extraordinary challenges to higher education well into the next century. Schuster believes that the imbalances that may result could adversely affect faculty performance, morale, and institutional quality.

Schuster (1990b) chastises the inadequate efforts of research universities with their "unparalleled repositories of knowledge about the management and development of human resources" (p. 14) in meeting the personal and professional development needs of their own faculty. Schuster believes that "campuses in general appear to have failed to take into adequate account the changing demographic and environmental factors that shape faculty careers" (p. 15). He encourages colleges and universities to pay more attention to the nature and amount of resources that will be needed to support all facets of faculty work: teaching, research, and service; the environmental factors that encourage the best integration of the three; and, the opportunity and reward structures that foster a willingness among faculty to improve both teaching and research skills. He calls for campus-based, faculty development programs to specifically target the personal and professional needs of both the most senior (experienced) and the most junior (inexperienced) faculty.

Finkelstein and Jemmott (1993) liken senior faculty to village elders of the past who "having attained status and stature in their villages by virtue of longevity, experience, and wisdom, played central roles in upholding traditions, socializing the young, and maintaining the culture of the village" (p. 95). Senior faculty as repositors of the campus mores, values, and culture have a unique role to play in the socialization of the next generation of faculty. Baldwin and Blackburn (1983) view faculty as versatile, human resources. Senior faculty,

those who have served their profession, their disciplines, and their institutions for many years should not be seen as any less so.

Purpose of the Study

Appropriate institutional responses to enhance the careers of senior faculty while expanding their retirement options are an increasingly important concern in higher education. Both faculty seniority and the end of mandatory retirement for tenured faculty have broad policy implications that will affect not only future decisions regarding faculty staffing needs, but also will call for innovative approaches to maintain a productive senior faculty as well as to provide for a dignified retirement.

Heretofore, there has been little empirical research on the scope or nature of the programmatic response to the growing cohort of senior faculty that cannot be forced to retire; nor on the academic policies needed to maintain a quality senior faculty during a time of diminishing supply and increasing demand for faculty (Western Interstate Commission for Higher Education, 1992). The purpose of this research study was to expand our knowledge of faculty development programs and policies at research universities and their implications for senior faculty career development and renewal.

Research Methodology

This descriptive study was carried out as a survey research project using an instrument developed by the researcher titled the *National Survey on Senior Faculty Renewal.*[1] The survey items were generated from four primary sources: (a) a thorough review of the literature on faculty development and renewal; (b) previous national surveys and reports on faculty development programs, faculty retirement projections, faculty supply and demand, faculty productivity and aging, and

[1]The National Survey on Senior Faculty Renewal consists of three sections. This article discusses the findings from Section A Program Initiatives. Two additional articles cover the results obtained from Section B Policy Initiatives (see Crawley, in press) and Section C Mandatory Retirement Issues (see Crawley, 1995). A copy of the survey instrument can be obtained from the author

76

mandatory retirement issues; (c) a brainstorming session and discussion with five coordinators/ directors of faculty development programs as part of a conl rence presentation on mandatory retirement and faculty seniority issues during a regional faculty development conference in 1991; and, (d) a pilot study during the Summer of 1992 with six coordinators/ directors of faculty development.

The study was conducted during the Winter of 1992-1993. The survey respondents were coordinators and directors of faculty development programs, and selected academic affairs administrators with faculty development responsibilities at their respective institutions. These survey respondents served as institutional informants representing each of the 104 research universities as classified by the Carnegie Foundation for the Advancement of Teaching (1987).

In the first section of the *National Survey on Senior Faculty Renewal*, survey respondents were asked to indicate by checking the appropriate box if each of 67 program initiatives was currently in use at their universities; and, if not in use, was future use planned by January 1, 1994. If the program initiative was neither currently in use, nor planned by January 1, 1994, respondents were asked to check the box labelled "neither." The survey respondents were also instructed that, to be considered currently in use, program initiatives should have been generally available to senior faculty at their institutions within the previous 12 months.

Because of the extended length of the survey, it was not feasible to request additional information from the respondents concerning their estimation of the use or effectiveness of these program initiatives. Also, information on the amount or type of funding and staffing available, needed, or anticipated was not requested. These questions should be asked and would be fertile ground for future research.

Eighty-one completed surveys were returned. The survey response rate was 77.9%. Of the 81 surveys returned, 80 (98.8%) of the surveys were satisfactorily completed and used for data analysis. Table 1 presents descriptive data on selected institutional variables for the population of research universities surveyed ($N=104$) and for the surveys used in analysis ($N=80$).

TABLE I
Description of the Survey Population of Research Universities and Survey Used by Selected Institutional Variables

Institutional Variable	Survey Population (N=104)		Surveys Used for Analysis (N=80)	
	n	%	*n*	%
University Control				
Public	71	68.3	60	75.0
Private	33	31.7	20	25.0
Classification				
Research (1)	70	67.3	52	65.0
Research (2)	34	32.7	28	35.0
Geographical Region				
Northeast	27	26.0	20	25.0
North Central	22	21.2	16	20.0
South	31	28.8	24	30.0
West	24	23.1	20	25.0
Director/Coordinator for Faculty/Instructional Development	67	64.4	58	72.5

Note. Northeast includes CT, MA, NJ, NY, PA, RI; North Central-IA, IL, IN, KS, MI, MN, MO, NE, OH, WI; South-AL, DC, DE, FL, GA, KY, LA, MD, MS, NC, OK, SC, TN, TX, VA, WV; West-AZ, CA, CO, HI, NM, OR, UT, WA, WY.

Research Findings and Analysis

In order to facilitate the analysis of the data, the 67 program initiatives were grouped into six categories: (a) Faculty Career Development and Redirection, (b) Faculty Grants and Awards, (c) Faculty Collaboration and Collegiality, (d) Faculty In-Service Education, (e) Expert Faculty Consultation and Assistance, and (f) Senior Faculty Retirement. These six categories reflect Wheeler and Schuster's (1990) call for an enhanced definition of faculty development which integrates various aspects of the individual faculty career within the framework of organizational expectations.

78

TABLE II
Availability of Program Initiatives Related to Faculty Career Development and Redirection at Research Universities ($N=80^a$)

Program Initiative	Currently in Use		Future Use Planned		Neither	
	n	%	n	%	n	%
unpaid leaves for personal/ professional reasons	78	97.0	1	1.3	1	1.3
professional leaves/ sabbaticals for research/ scholarly pursuits (with at least halfsalary)	73	92.4	0	0.0	6	7.6
release time/teaching load reduction for research/scholarship	71	89.9	0	0.0	8	10.1
academic opportunities in international settings	67	83.8	0	0.0	13	3.8
professional leaves/ sabbaticals for faculty/ instructional development projects (with at least half-salary)	61	76.3	2	2.5	17	21.3
summer employment/stipends for research projects	61	76.3	0	0.0	19	23.8
release time/teaching load reduction for course/ curriculum development	58	73.4	3	3.8	18	22.8
special quasi-administrative assignments/projects to direct on behalf of the university	58	72.5	2	2.5	19	24.4
summer employment/stipends for faculty/instructional development projects	50	63.3	5	6.3	24	30.4
faculty exchanges with other academic institutions	47	58.8	2	2.5	31	38.8
faculty/employee exchanges with institutions outside academe (e.g., business/ industry)	31	38.8	0	0.0	49	61.3
professional development growth/creativity con tracts/plans	28	35.9	3	3.8	47	60.3
inhouse academic/adminis trative internships	25	32.5	2	2.6	50	64.9
internships/shortterm employment opportunities with institutions outside academe	19	24.4	0	0.0	59	75.6
retraining/respecialization for new academic areas	12	15.2	3	3.8	64	81.0

[a]Total N's for each item may vary slightly due to missing data.

Faculty Career Development and Redirection

The program category of faculty career development and redirection consists of 15 initiatives. Table 2 lists those program initiatives

which are currently in use and planned at research universities that expand the career options of faculty. The most frequently reported faculty development initiative in this category was *unpaid leaves for personal/professional reasons* (97.5%). This finding was not surprising given that such leaves require little in the way of additional cost to the institution and are relatively easy to administer. Likewise, not unexpected was the finding that traditional program initiatives which support scholarly pursuits were consistently more available to senior faculty than those which support instructional efforts. For example, 76.3% of the survey respondents reported that *summer employment/stipends for research projects* were currently available at their research universities, whereas only 63.3% of the survey respondents reported that *summer employment/stipends for faculty/instructional development projects* were currently available at their research universities.

A similar pattern prevailed when comparing *release time/ teaching load reduction for research/scholarship (89.9%) with release time/teaching load reduction for course/curriculum development (73.4%)*, and *professional leaves/sabbaticals for research/scholarly pursuits (with at least half-salary) (92.4%)* with *professional leaves/sabbaticals for faculty/instructional development projects (with at least half-salary) (76.3%)*. However, the six program initiatives, whether primarily in support of teaching or of research, were reported as currently available at a substantial majority of these research universities.

Although these survey findings suggest that a majority of research universities support their senior faculty in their teaching and research roles, additional findings suggest that program initiatives which attempt to enhance senior faculty careers by either expanding career options or by creating new roles and responsibilities are more limited. Only three of the eight program initiatives that promote senior faculty renewal, *academic opportunities in international settings* (83.8%), *special quasi-administrative assignments/projects to direct on behalf of the university* (72.5%), and *faculty exchanges with other academic institutions* (58.8%) were reported as being currently available at a majority of the research universities.

80

The remaining five program initiatives were reported as currently available at only a minority of research universities with little prospect of any substantially planned increase in their use: *faculty/employee exchanges with institutions outside academe* (e.g. business/industry) (38.8%), *professional development growth/creativity contracts/plans* (35.9%), *in-house academic/ administrative internships* (32.5%), *internships/short-term employment opportunities with institutions outside academe* (24.4%), *and retraining/respecialization for new academic areas* (15.2%).

Faculty Grants and Awards

The program category of faculty grants and awards includes 11 initiatives. These program initiatives support or reward faculty, often monetarily, in their tripartite academic responsibilities of teaching, research, and service. As shown in Table 3, 10 of the 11 program initiatives were currently offered by more than half of the research universities responding. Not surprisingly, the traditional approach of rewarding long and scholarly careers through *endowed chairs/distinguished professorships* (98.8%) achieved the highest percentage of current use.

As with the prior category of program initiatives, those initiatives which support research were reported as generally more available to senior faculty than those initiatives which support teaching. For example, *research funds/grants to pursue scholarly interests* were currently available at 92.4% of the responding research universities, whereas *faculty/instructional development funds/grants to enhance teaching/develop courses* were available at 78.8% of the responding research universities. Likewise, *travel funds/grants to attend conferences/programs to enhance research skills/scholarship* were currently available at 86.3% of research universities responding, whereas *travel funds/grants to attend conferences/programs to enhance teaching/leadership skills* were currently available at 73.4% of research universities responding.

TABLE III
Availability of Program Initiatives Related to Faculty
Grants and Awards at Research Universities ($N=80$[a])

Program Initiative	Currently in Use		Future Use Planned		Neither	
	n	%	n	%	n	%
endowed chairs, distinguished professorships	79	98.8	1	1.3	0	0.0
travel funds/grants to attend professional conferences in the discipline/field	77	96.3	0	0.0	3	3.8
institutional awards/honors for teaching excellence	77	96.3	0	0.0	3	3.8
research funds/grants to pursue scholarly interests	73	92.4	0	0.0	6	7.3
institutional awards/honors for research excellence	70	88.6	0	0.0	9	11.4
travel funds/grants to attend conferences/ programs to enhance research skills/ scholarship	69	86.3	1	1.3	10	12.5
institutional awards/honors for service/leadership	65	83.3	1	1.3	12	15.4
faculty/instructional development funds/grants to enhance teaching/ develop courses	63	78.8	4	5.0	13	16.3
travel funds/grants to attend conferences/ programs to enhance teaching/ leadership skills	58	73.4	1	1.3	20	25.3
incentives/support to conduct scholarship related teaching (e.g., classroom research)	45	57.0	8	10.1	26	32.9
re-entry incentives/support to facilitate return to undergraduate teaching	18	23.4	5	6.5	54	70.1

[a]Total *N*'s for each item may vary slightly due to missing data.

The ascendancy of the academic discipline at research universities, as part and parcel of the academic culture, was apparent in the high level of support for *travel funds/grants to attend professional conferences in the discipline/field* (96.3%) which outdistanced all similar funds available in support of improving either teaching or research skills. However, with regard to the current availability of institutional awards/honors for research, teaching, and service, the findings proved to be counter-intuitive. The availability of institutional awards/honors for teaching excellence (96.3%) was greater than

82

both *institutional awards/honors for research excellence* (88.6%) and *institutional awards/honors for service/leadership* (83.3%).

Another unexpected finding was that 57% of the survey respondents reported a program initiative currently in use to provide senior faculty incentives/support to conduct scholarship related to teaching (e.g., classroom research). An additional 10.1% of the respondents indicated that such incentives were to be made available by January 1, 1994.

Although teaching and service may not have parity in terms of recognition and rewards with research at most research universities, all program initiatives within this category which support or reward teaching and service were currently available at a majority of the research universities responding, except one. The one exception was *re-entry incentives/support to facilitate senior faculty return to undergraduate teaching* (23.4%).

Faculty Collaboration and Collegiality

The lack of opportunities for faculty collaboration in the contemporary research university has been the lament of many academics (Astin & Baldwin, 1991). The research findings, however, indicate that the availability of collaborative opportunities for senior faculty at research universities, as presented in Table 4, is quite substantial. Eleven of the 12 program initiatives from the category of faculty collaboration and collegiality were currently available by half or more of the research universities participating in the study.

Survey findings indicated only small percentage variations among the following initiatives: *interdisciplinary/collaborative research/scholarly opportunities* (89.7%), *interdisciplinary/ collaborative teaching/curricular opportunities* (85.0%), and *leadership opportunities as part of university governance structure* (84.8%). Each of these three program initiatives represents an important faculty activity that closely parallels the traditional teaching, research, and service paradigm of expected faculty roles and responsibilities within the academic community. Furthermore, given the high percentage of the responding research universities that provide *opportunities for involvement in graduate teaching assistants training/orientation*

(91.3%), and *mentoring opportunities with junior faculty* (81.3%), there appears to be a growing recognition of the need to recruit and to prepare the next generation of faculty members.

TABLE IV
Availability of Program Initiatives Related to Faculty Collaboration and Collegiality at Research Universities

Program Initiative	Currently in Use		Future Use Planned		Neither	
	n	%	n	%	n	%
opportunities for involvement in graduate teaching assistants training/ orientation	73	91.3	2	2.5	5	6.3
opportunities for the interchange of ideas with visiting scholars/experts	72	90.0	1	1.3	7	8.8
interdisciplinary/ collaborative research/ scholarly opportunities	70	89.7	0	0.0	8	10.3
interdisciplinary/ collaborative teaching/ curricular opportunities	68	85.0	1	1.3	11	13.8
leadership opportunities as part of university govomance structure ·	67	84.8	0	0.0	12	15.2
mentoring opportunities with junior faculty	65	81.3	6	7.5	9	11.3
university-wide/inter departmental lecturing opportunities	62	80.5	1	1.3	14	18.2
incentives for student faculty research/ colleagueship	53	68.8	4	5.2	20	26.0
in-house publication opportunities on teaching/ scholarly efforts (e.g., monographs/ newsletters)	53	66.3	3	3.8	24	30.0
opportunities to present in-service educational programs to fellow faculty	52	65.8	2	2.5	25	31.6
consulting opportunities within the university	44	58.7	0	0.0	31	41.3
networking/interest groups to discuss shared issues/ concerns	33	41.3	3	3.8	44	55.0

[a]Total *N*'s for each item may vary slightly due to missing data.

Other avenues for faculty collaboration reported to be currently available to senior faculty at a majority of the responding research universities included *opportunities for the interchange of ideas with visiting scholars/experts* (90.0%), *university-wide/interdepartmental*

84

lecturing opportunities (80.5%), *incentives for student-faculty re-search/colleagueship* (68.8%), *in-house publication opportunities on teaching/scholarly efforts (e.g., monographs/newsletters)* (66.3%), *opportunities to present in-service educational programs to fellow faculty* (65.8%), *and consulting opportunities within the university* (58.7%). The only program initiative within this category reported as currently not in use by a majority of research universities was *network-ing/interest groups to discuss shared issues/concerns* (41.3%).

Faculty Inservice Education

The program category of faculty in-service education includes eight initiatives. Table 5 outlines the current and future use of in-house educational activities which promote the personal and professional development of faculty at research universities.

Workshops are among the most common in-service activities sponsored through faculty development offices (Erickson, 1986). The findings of this study show that *workshops/seminars on teaching effectiveness/instructional issues* (85%) had the highest percentage of availability as an in-service activity at research universities, closely followed by *pre-retirement education/ planning* (84.6%), a program initiative of particular importance to senior faculty nearing retirement, and *health/wellness related workshops/activities* (73.1%), a program initiative which has been found increasingly important in maintaining the vitality of senior faculty (North, 1991). In addition, survey respondents reported a somewhat lower percentage of research universities currently making available a *library/resource room containing edu-cational materials on faculty/instructional development* (67.5%) and *workshops/seminars to strengthen research skills/scholarly writing for publication* (55.1%).

There appears to be less interest in providing *organizational/lead-ership development workshops/training* (51.9%) and *personal/career development workshops/seminars* (48.1%). These two findings may reflect Baldwin's (1984, p. 51) concern that senior faculty may be "overlooked for future career development opportunities" given that they are nearing the traditional retirement age.

TABLE V
Availability of Program Initiatives Related to Faculty
In-Service Education at Research Universities

Program Initiative	Currently in Use		Future Use Planned		Neither	
	n	%	n	%	n	%
workshops/seminars on teaching effectiveness/ instructional issues	68	85.0	7	8.8	5	6.3
preretirement education/ planning	66	84.6	2	2.6	10	12.8
health/wellness related workshops/activities	57	73.1	2	2.6	19	24.4
library/resource room containing educational materials on faculty/ instructional development	54	67.5	11	13.8	15	18.8
workshops/seminars to strengthen research skills/ scholarly writing for publication	43	55.1	4	5.1	31	39.7
organizational/leadership development workshops/ training	41	51.9	6	7.6	32	40.5
personal/career development workshops/seminars	37	48.1	4	5.2	36	46.8
workshops on legal/career implications of eliminating mandatory retirement for tenured faculty	12	15.8	1	1.3	63	82.9

*Total *N*'s for each item may vary slightly due to missing data.

There was even less interest shown in offering *workshops on the legal/career implications of eliminating mandatory retirement for tenured faculty*. Only 15.8% of the survey respondents indicated that their universities had offered such workshops in the previous 12 months, and only one additional respondent reporting such workshops being planned by January 1, 1994.

Expert Faculty Consultation and Assistance

The program category of expert faculty consultation and assistance contains 12 initiatives. Table 6 outlines the current and future use of in-house faculty consultants at research universities. These consultants provide face-to-face assistance to faculty on a broad range of personal and professional concerns.

86

TABLE VI
Availability of Program Initiatives Related to Expert Faculty Consultation and Assistance at Research Universities

Program Initiative	Currently in Use		Future Use Planned		Neither	
	n	%	n	%	n	%
employee assistance counseling for substance abuse/personal problems that impair job performance	70	89.7	0	0.0	8	10.3
expert assistance on obtaining externally sponsored fellowships/grants	67	84.8	2	2.5	10	12.7
individual teaching consultation/evaluation by peer/expert for developmental purposes	61	76.3	11	13.8	8	10.0
expert consultation on using instructional technologies/media development	58	72.5	9	11.3	13	16.3
expert assistance on the marketing of research/ technological innovations	49	63.6	3	3.9	25	32.5
expert consultation on course/curriculum development	48	60.0	7	8.8	25	31.3
expert consultation on improving research skills/ scholarly writing for publication	38	49.4	4	5.2	35	45.5
expert consultation on developing professional dossier/teaching portfolio	36	45.6	15	19.0	28	35.4
expert career consultation on personal/professional goals	16	20.8	1	1.3	60	77.9
expert assistance on securing external consultancies	12	16.0	0	0.0	63	84.0
outplacement assistance to explore nonacademic work opportunities with guarantee of return	8	11.1	1	1 4	63	87.5
outplacement assistance when leaving academe	8	11.1	1	1.4	63	87.5

[a]Total N's for each item may vary slightly due to missing data.

Surprisingly, given its recent emergence in the faculty develop-
ment literature (Hosokawa, 1990), *employee assistance counseling for
substance abuse/personal problems that impair job performance* was
currently available at 89.7% of the research universities participating
in the study. Long-standing, more traditional consultation services,
were also in use by a high percentage of the responding research

universities: *expert assistance on obtaining externally sponsored fellowships/grants* (84.8%), *individual teaching consultation/evaluation by peer/expert for developmental purposes* (76.3%), *expert consultation on using instructional technologies/media development* (72.5%), *expert assistance on marketing of research/technological innovations* (63.6%), and *expert consultation on course/curriculum development* (60%). Two additional program initiatives in this category, *expert consultation on developing a professional dossier/teaching portfolio and expert consultation on improving research skills/scholarly writing for publication,* do achieve majority status, 64.6% and 54.6% respectively, when you add in those research universities that plan to make available such consulting services by January 1, 1994.

The extremely low availability of the remaining four initiatives, *expert career consultation on personal/professional goals* (20.8%), *expert assistance on securing external consultancies* (16.0%), *outplacement assistance to explore non-academic work opportunities with guarantee of return* (11.1%), and *out-placement assistance when leaving academe* (11.1%) may indicate a failure at most of the responding research universities to provide expert assistance to their senior faculty for the purpose of career reexamination. This seems to be particularly the case with regard to expanding career options for senior faculty outside of academe.

Senior Faculty Retirement

The program category of senior faculty retirement, as presented in Table 7, contains nine initiatives which foster preand postretirement options and opportunities for latecareer faculty. Not having a mandatory retirement age for tenured faculty members appears to have brought home to most research universities the importance of expanding their post-retirement opportunities for senior faculty. Currently, various post-retirement opportunities were in use by a high percentage of research universities participating in this study: *post-retirement privileges (e.g., office space)* (92.4%), *post-retirement contract employment for specific tasks/projects* (84.8%), *post-retirement volunteer service/leadership opportunities* (74.4%), *post-retirement*

employment opportunities without the loss of benefits (66.2%), and *a post-retirement faculty association/organization* (64.6%).

TABLE VII
Availability of Program Initiatives Related to Senior
Faculty Retirement at Research Universities

Program Initiative	Currently in Use		Future Use Planned		Neither	
	n	%	n	%	n	%
post-retirement privileges (e.g., office space)	73	92.4	1	1.3	5	6.3
post-retirement contract employment for specific tasks/projects	67	84.8	2	2.5	10	12.7
phased/partial retirement options	64	83.1	2	2.6	11	14.5
post-retirement volunteer service/leadership opportunities	58	74.4	2	2.6	18	23.1
early retirement incentive options	57	73.1	7	9.0	14	17.9
post-retirement employment opportunities without the loss of benefits	49	66.2	3	4.1	22	29.7
post-retirement faculty association/organization	51	64.6	3	3.8	25	31.6
post-retirement support to continue professional/ scholarly activities (e.g., special projects fund)	36	47.4	2	2.6	38	50.0
post-retirement center/ senior academy for life long learning	16	20.3	3	3.8	60	75.9

[a]Total N's for each item may vary slightly due to missing data.

The lure of *early retirement incentive options* as a means of conserving faculty positions remains high among the research universities surveyed, as well. Almost three-quarters (73.1%) of responding research universities currently make such options available to their senior faculty. In addition, 83.1% of the research universities reported offering *phased/partial retirement options* which permit faculty to move more gradually into retirement. Only two post-retirement opportunities were not currently provided by a majority of research universities participating in the study: *post-retirement support to continue professional/scholarly activities (e.g., special projects fund* (47.4%), and a *post-retirement center/senior academy for lifelong learning* (20.3%).

Discussion

By most accounts, until very recently the attention to teaching at research universities had been one of benign neglect (Centra, 1993). However, a powerful movement apparently is underway at many research universities to restore teaching to its rightful place in partnership with research. Several survey findings lend empirical evidence to this dramatic shift in the ground rules defining what it means to be an academic at research universities.

First, the establishment of a means for documenting and evaluating teaching effectiveness using teaching portfolios is gaining increasing acceptance at a majority of the research universities surveyed. Previous research by Seldin (1993) reported an increase since 1988 in the number of four-year institutions using teaching portfolios from 10 to 400, out of more than 600 institutions, or two-thirds of institutions surveyed. In this survey, the number of research universities which were currently using teaching portfolios, or were planning on using them by 1994, approached a similar proportion. Teaching portfolios provide a way of documenting teaching effectiveness that opens the classroom door onto one's teaching and, as an added benefit, encourages a view of teaching as a scholarly activity (Seldin, 1991).

Second, the increase in the percentage of research universities providing individual consultation to improve teaching for developmental purposes is additional evidence of such a movement. Previous research indicated that approximately 60% of public and private universities in 1985 provided instructional consultation assistance (Erickson, 1986). When this survey was conducted in the Winter of 1992-93, over three-quarters of the respondents reported that their universities provided such assistance. If you add those respondents who indicated that their universities plan to have such assistance available by 1994, the percentage increases dramatically to 90%. Long regarded as a mainstay of many faculty development programs (Lewis & Povlacs, 1988), the practice of face-to-face consultation to improve teaching effectiveness has apparently become a permanent fixture at most research universities.

Third, the survey results show that more research universities are providing incentives for preparing faculty in the scholarship of teach-

90

ing as recommended by Boyer (1990). For example, nearly 70% of responding research universities reported having, or planning to have by 1994, programs to provide senior faculty incentives/support to conduct scholarship related to teaching.

Furthermore, program initiatives which support instructional or curricular efforts were reported as being available at a higher percentage than previous research findings on the availability of the same or similar faculty development practices during the 1970s and 1980s (Centra, 1976; Erickson, 1986; Kurfiss & Boice, 1990). Likewise, the popularity of traditional faculty grants and awards remains high. Taken as a group, nearly 80% of the survey respondents said their research universities offered these program initiatives to their senior faculty: a higher percentage than any other category of program initiatives. In addition, within the program category of faculty in-service education, workshops/ seminars on teaching effectiveness and related instructional issues continue to enjoy high popularity. Over 90% of the responding research institutions currently have, or plan to have by the beginning of 1994, such workshops/seminars on their campuses.

Teaching awards remain a mainstay of many faculty development programs as a means of fostering teaching improvement even though their effectiveness in doing so has been questioned (Centra, 1993). However, as Centra concedes, teaching awards do have "symbolic value" (p. 13): they signal to important internal and external constituencies an institution's commitment to teaching in the face of the research imperative. This may explain why the availability of teaching awards on an institutional level outdistanced research awards.

Although there is an apparent increase in the efforts made by research universities in support of senior faculty as scholarly teachers, the findings suggest that faculty development approaches that are targeted to enhance senior faculty careers by creating new roles and responsibilities remain more limited. There still appears to be present on the vast majority of research campuses the "one career, one life" imperative for faculty, thereby discouraging career re-examination or expansion on their part. For example, retraining/respecialization for new academic areas was reported as currently available at less than one in seven research universities.

Moreover, programs that focus on career assessment and planning, such as professional growth contracting and career consulting assistance, were found to be currently available at a limited number of research universities. Opportunities for in-house academic internships and short-term employment opportunities outside academe were available at less than one in three of the responding research universities. Such career opportunities can help a senior faculty member to gradually phase into retirement or into another career after formal retirement from academe.

Nearly three-quarters of the research universities reported that they provided some form of early or phased retirement program. However, the use of early retirement options, once considered the mainstay of encouraging faculty turnover in times of retrenchment, is not without its critics. Chronister (1990) believes that incentive early retirement options "based solely on strategies that facilitate the turnover of faculty may be viewed as shortsighted and counterproductive in the long term" (p. 159). He cites research findings that suggest that "colleges and universities are losing faculty members who could have continued to make significant contributions to institutional vitality" (p. 159).

Of considerable importance to senior faculty nearing retirement was the finding that many research universities have expanded their post-retirement opportunities including providing support for scholarly and service activities. Such programs make the retirement years more attractive as a career destination for senior faculty as well as providing opportunities for retired faculty to make constructive contributions to their university, their profession, and to society in general.

Somewhat unexpected was the little interest in offering workshops on the legal/career implications of eliminating mandatory retirement for tenured faculty. Given the possibility of legal action and the need for selecting from various retirement incentive programs, such workshops could prove useful in providing adequate career direction for senior faculty while avoiding potential age discrimination litigation against the institution (Craver, 1990).

Personal concerns such as substance abuse that may result in the need for professional counseling services is apparently being addressed by more research universities. Heretofore, personal counsel-

ing services were often considered outside the province of most faculty development programs conceptually and in practice (Centra, 1976; Erickson, 1986). In like manner, the research results clearly indicate an increased emphasis in retirement education and health and wellness related programming. Currently over three-quarters of survey respondents indicated that their universities provide such programs. These findings may indicate that personal development within a context of enhanced faculty development, as advocated by Wheeler and Schuster (1990), is becoming more of a reality as faculty development programs mature on research campuses.

Just as research universities appear to be more responsive to the "high touch" needs of their senior faculty, they likewise appear to be increasingly responsive to their "high tech" needs. Nearly three-quarters of the responding research universities currently provide expert consultation to their senior faculty on the use of technological innovations for instructional and scholarly pursuits. Computer anxiety is a common experience among many faculty, regardless of age. Also, it takes time for faculty to adjust to rapid changes brought about by technological innovations. Important to the acceptance by faculty of new technologies is the development of a support system that provides time and a safe environment for faculty to explore a wide range of new education and information technologies (Albright & Graf, 1992).

Research has shown that one of the key factors distinguishing faculty who remain vital throughout their careers is that vital faculty seek out collaborative activities with colleagues (Astin & Baldwin, 1991). Contrary to much of the published literature, an overwhelming majority of survey respondents reported that their institutions were making available collaborative opportunities for teaching, curricular, and research efforts.

An important collaborative opportunity, which is currently available at more than 80% of the research universities responding to this survey, is mentoring programs. Research has shown that both parties in a mentoring relationship can benefit from the experience (Boice, 1992). Junior faculty are helped in arranging needed supports and resources which are beneficial in establishing the base for further academic career success. Many senior faculty have found the mentoring experience to be an important time for rethinking and redirecting

their own careers and strengthening their sense of belonging and community. The need for developing minority and women faculty may be giving mentoring a new role as well (Blackwell, 1989; Johns-rud, 1994).

An additional collaborative opportunity available to senior faculty is in the training of the faculty of the future. As part of the reform movement in higher education to "resuscitate teaching" (Schuster, 1993, p. 29) and improve undergraduate education, graduate teaching assistant training programs have grown rapidly in the last 10 years. A large number of university campuses have their training programs in place, staffed and housed within faculty development offices or centers (Nyquist, Abbott, & Wulff, 1989). The survey results show that over 90% of research universities provide opportunities for senior faculty to be involved in the training of graduate teaching assistants.

One indicator of the health of faculty development on university campuses is the number of individuals designated as directors and coordinators of faculty or instructional development. As of the Winter of 1992-93, when this survey was conducted, 64.4% of research universities were found to have a person designated as the director or coordinator of faculty/ instructional development (see Table 1).

Exact comparison data to previous research on the percentages of campus centers with coordinators and directors of faculty or instructional development cannot be made because of different population parameters. However, in 1985, Erickson's (1986) study of four-year institutions had 44% indicating an on-campus person or unit for faculty development or instructional improvement. At research universities a similar percentage appeared to hold, as well. By the Winter of 1992-93, apparently a great deal of progress had been made in establishing faculty development programs and centers within the organizational structure of a substantial majority of research universities.

Summary

The survey findings lend rather dramatic evidence to a higher level of institutional support for senior faculty renewal on research campuses than heretofore measured. Also, the survey findings suggest that

more support is being provided to senior faculty for integrating their teaching and research roles, particularly now as an attitudinal shift toward rewarding and encouraging good teaching and improving undergraduate education is taking hold on a number of research campuses. Furthermore, there appears to be a renewed emphasis on community and collegiality as hallmarks of distinguished service and scholarship.

At research universities, senior faculty with their accumulated knowledge, experience, and seasoned wisdom are best prepared to contribute to this kind of integrated scholarship and service as part of a more multifaceted career. By providing program initiatives which have as their goal the integration of teaching, research, and service responsibilities for senior faculty, research universities are charting a new course for how the next generation of faculty will be assessed and rewarded for their work, as well.

According to Erikson's (1982) landmark theory of human development, the principle task of adult life is the quest for a sense of generativity—a need to produce something or contribute something that will outlive oneself, to leave a legacy. Faculty developers can assist senior faculty members in achieving their unique individual legacy by promoting risk-taking and role change as part of their continuing professional development. They can engage senior faculty in a challenging agenda in concert with broader institutional and societal goals through growth contracting and career reexamination. Vital and productive senior faculty are the life blood of any college or university. Faculty developers need to nurture and strengthen all those who sustain the academic enterprise that we know as higher education.

References

Albright, M. J., & Graf, D. L. (1992). Instructional technology and the faculty member. In M. J. Albright & D. L. Graf (Eds.), *New directions for teaching and learning. Teaching in the information age: The role of educational technology, No. 51* (pp. 7-15). San Francisco: Jossey-Bass.

Astin, A. E., & Baldwin, R. G. (1991). *Faculty collaboration Enhancing the quality of scholarship: ASHEERIC higher education report, No. 7* Washington, DC: Association for the Study of Higher Education.

Bader, J. E. (1988). "Uncapping" in higher education. A primer. *Educational Gerontology, 14,* 481-495.

Baldwin, R. J. (1984). The changing developmental needs of an aging professoriate. In C. M. Mehrotra (Ed.), *New directions for teaching and learning: Teaching and aging, No. 19* (pp. 45-56). San Francisco: Jossey-Bass.

Baldwin, R. J., & Blackburn, R. T. (Eds.). (1983). *New directions for institutional research: College faculty: Versatile human resources in a period of constraint, No. 40.* San Francisco: Jossey-Bass.

Blackwell, J. E. (1989). Mentoring: An action strategy for increasing minority faculty. *Academe, 75*(5), 814.

Boice, R. (1992). Lessons learned about mentoring. In M. D. Sorcinelli & A. E. Austin (Eds.), *New directions for teaching and learning: Developing new and junior faculty, No. 50* (pp. 51-61). San Francisco: Jossey-Bass.

Boyer, E. L. (1990). *Scholarship reconsidered: Priorities of the professoriate.* Princeton, NJ: The Carnegie Foundation for the Advancement of Teaching.

Carnegie Foundation for the Advancement of Teaching. (1987). *A classification of institutions of higher education.* Princeton, NJ: Author.

Centra, J. A. (1976). *Faculty development practices in U.S. colleges and universities* (Project Report, No. 76-30). Princeton: Educational Testing Service

Centra, J. A. (1993). *Reflective faculty evaluation: Enhancing teaching and determining faculty effectiveness.* San Francisco: Jossey-Bass.

Chronister, J. L. (1990). Designing options for early retirement. In J. H. Schuster, D. W. Wheeler, & Associates, *Enhancing faculty careers* (pp. 139-164). San Francisco: Jossey-Bass.

Craver, C. B. (1990). Implications of the elimination of mandatory retirement for professors. *Journal of College and University Law, 16*(3), 343-372.

Crawley, A. L. (1990). Meeting the challenge of an aging professoriate: An opportunity for leadership. *To Improve the Academy, 9,* 231-243.

Crawley, A. L. (1995). Senior Faculty and the end to mandatory retirement: Uncovering age-bias in academe, *Journal of Staff, Program and Organization Development, 13*(1), 19.

Crawley, A. L. (in press). Senior faculty renewal at research universities: Implications for academic personnel policies. *Innovative Higher Education., 20*(2).

El-Khawas, E. (1991). Senior faculty in academe: Active, committed to the teaching role, *Research Briefs, 2*(5).

Erickson, G. (1986). A survey of faculty development practices. *To Improve the Academy, 5,* 182-196.

Erikson, E. H. (1982). *The life cycle completed.* New York: W.W. Norton.

Finkelstein, M. J, & Jemmott, N. D. (1993) The senior faculty: Higher education's plentiful yet largely untapped resource. In M. J. Finkelstein & M. W. LaCelle-Peterson (Eds.), *New directions for teaching and learning. Developing senior faculty as teachers, No 55* (pp. 95-98). San Francisco: Jossey-Bass.

Franke (1993). Marking the end of mandatory retirement. *Academe, 9*(3), 88.

Hammond, P. B., & Morgan, H. P. (Eds.). (1991). *Ending mandatory retirement for tenured faculty: The consequences for higher education.* Washington, DC: Committee on Mandatory Retirement in Higher Education, National Research Council, National Academy Press.

Hosokawa, E. P. (1990). Adapting employee assistance programs for academic settings. In J. H. Schuster, D. W. Wheeler, & Associates, *Enhancing faculty careers* (pp. 123-138). San Francisco: Jossey-Bass.

Johnsrud, L. K. (1994). Enabling the success of junior faculty women through mentoring. In M. A. Wunsch (Ed.), *New directions for teaching and learning: Mentoring revisited: Making an impact on individuals and institutions, No. 57* (pp. 53-64). San Francisco: Jossey-Bass.

Kurfiss, J., & Boice, R. (1990). Current and desired faculty development practices among POD members. *To Improve the Academy, 9,* 73-82.

Lewis, K. G., & Povlacs (Eds.). (1988). Face to face: *A sourcebook of individual consult-ation techniques for faculty/ instructional developers.* Stillwater, OK: New Forums Press.

Lozier, G. G., & Dooris, M. J. (1991). *Faculty retirement projections beyond 1994.* Boulder, CO: Western Interstate Commission for Higher Education.

National Center for Educational Statistics (1990). *1988 National survey of postsecondary faculty.* Washington, DC: Office of Department Educational Research and Improve-ment. Washington, DC: United States Department of Education.

North, J. D. (1991). Faculty vitality: 1990 and beyond. *To Improve the Academy, 10,* 9-18.

Nyquist, J, Abbott, R. D., & Wulff, D. H. (Eds.). (1989). *New directions for teaching and learning: Teaching assistant training in the 1990s, No. 39.* San Francisco: Jossey-Bass.

Rice, E., & Finklestein, M. (1993). The senior faculty: A portrait and literature review. In M. J. Finkelstein & M. W. LaCellePeterson (Eds.), *New directions for teaching and learning: Developing senior faculty as teachers, No. 55* (pp. 7-21). San Francisco: Jossey-Bass.

Schuster, J. H. (1990a). Faculty issues in the 1990s: New realities, new opportunities. In L. W. Jones & F. A. Nowotny (Eds.), *New directions for higher education: An agenda for a new decade, No. 70* (pp. 33-41). San Francisco: Jossey-Bass.

Schuster, J. H. (1990b). The need for fresh approaches to faculty renewal. In J. H. Schuster, D. W. Wheeler, & Associates, *Enhancing faculty careers* (pp. 119). San Francisco: Jossey-Bass.

Schuster, J. H. (1993). Preparing the next generation of faculty. In L. Richlin (Ed.), *New directions for teaching and learning: Preparing faculty for new conceptions of scholarship, No. 54* (pp. 27-38). San Francisco: Jossey-Bass.

Seldin, P. (1991). *The teaching portfolio A practical guide to improved performance and promotion/tenure decisions.* Boston: Anker Publishing.

Seldin, P. (1993). How campuses evaluate professors, 1983 v. 1993. *AAHE Bulletin, 46*(2), 7-12.

Wheeler, D. W., & Schuster, J. H. (1990). Building comprehensive programs to enhance faculty development. In J. H. Schuster, D. W. Wheeler, & Associates, *Enhancing faculty careers* (pp. 275-297). San Francisco: Jossey-Bass.

Western Interstate Commission for Higher Education. (1992). *Bringing into focus the factors affecting faculty supply and demand.* Boulder, CO: Author

Teaching Improvement: Disciplinary Differences in Faculty Opinions

Lynnda J. Emery

Eastern Kentucky University

Improving teaching and learning at universities where faculty are rewarded primarily for research and scholarly activity is difficult. Faculty opinions about participating in teaching improvement activities at a research university were surveyed. This article presents survey results by college. Faculty opinions about incentives for participating in teaching improvement activities, promotion and tenure criteria, faculty development interests and outcomes for participating are included. Implications for faculty development are discussed.

It is difficult to improve teaching and learning, especially at research universities, when faculty rewards are for research and scholarly activity (Aitken & Sorcinelli, 1994; Diamond & Adam, 1993). Nevertheless, faculty development practices are becoming commonplace and refined at many institutions (Wright & O'Neil, 1994). Refinement of faculty development practices and targeting these practices to audiences who are most receptive may improve teaching and learning.

When discussing theories of faculty development, McKeachie (1991) expressed hope that, in the 1990's, more attention would be given to discipline-specific theories on teaching and learning. Likewise, Angelo (1989) suggested that recognizing faculty as teaching and learning experts in their disciplines and grouping faculty together

who share similar views may be an efficient way to promote improved teaching and learning.

Additionally, based on recent research findings, Armour, Fuhrmann, and Wergin (1990) created a profile of faculty by discipline to assist faculty developers. In the present study, an in-depth survey was conducted at the University of Arkansas to ascertain faculty opinions about the following aspects of instructional improvement: (1) the relative importance of promotion and tenure criteria, (2) outcomes of participating in instructional improvement activities, (3) incentives that would encourage them to participate, and (4) interests in faculty development practices. The purpose of this article is to examine disciplinary differences among faculty by college and distinguish those responses from the majority of the faculty.

Methodology

Data were collected using a 90-item questionnaire sent to a 50% random sample of faculty at the University of Arkansas, Fayetteville. Faculty members were selected using stratified random sampling by college and rank to provide subgroup representation. After two follow-up mailings, usable questionnaires were returned by 281 (70%) of the faculty. Because the rate of return was not 100%, the profiles of the questionnaire respondents and faculty as a whole by college and rank were examined.

As shown in Table 1, respondents were representative of the faculty as a whole by college and rank. Two-thirds (65.7%) of the respondents were tenured and 33.4% were nontenured. The age distribution of the questionnaire respondents was: 25-29 years (2.2%), 30-39 years (26.2%), 40-49 years (30.5%), 50-59 years (23.3%), and 60 and older (17.9%).

The survey instrument was based on the expectancy theory of motivation. Since 1964, this motivation theory and its revised versions have been used to explain employee motivation (Koontz, O'Donnell, & Weihrich, 1984; Pinder, 1984; Porter & Lawler, 1968; Vroom, 1964). In short, expectancy theory proposes that employees will be motivated by their expectancy that their actions will result in desired

100

Table 1 Respondents' Profile and University Faculty Profile by Percent		
Group	Questionnaire Respondents (N - 281)	University Faculty (N - 795)
Discipline/College		
Agriculture	18.5	16.0
Arts & Sciences	34.9	40.0
Education	18.2	14.3
Engineering	12.1	11.2
Professions	16.4	18.6
	100%	100%
Rank		
Professor	43.9	41.5
Associate Professor	23.8	25.7
Assistant Professor	18.9	20.4
Instructor	13.5	12.6
	100%	100%
Note. Professions includes Architecture, Business Administration, and Law. Total of 100% may include rounding.		

outcomes (Koontz et al.). This survey included major factors thought to influence faculty motivation to participate in instructional improvement activities. Those factors included the relative importance of promotion and tenure criteria, outcomes of participating in instructional improvement activities, incentives that would encourage them to participate, and their interests in faculty development practices. The questionnaire was developed from the literature and from a revision process using feedback from content experts. Content experts were faculty from the colleges and faculty development experts. The questionnaire was pilot tested prior to final revision.

Findings

The results from the faculty as a whole using the expectancy theory of motivation as a frame of reference were reported previously (Emery & Hammons, 1991). Reported here are the disciplinary differences by college which were explored using the chi square test of association with the .05 level designated as the reference for significant difference. These disciplinary differences are reported and contrasted with majority faculty opinions.

Promotion and Tenure Criteria

Table 2 contains a rank ordered list of the criteria by perceived importance in promotion and tenure decisions. Fifty percent or more of the faculty indicated that 8 of 16 criteria (from the Faculty Handbook) would be quite or extremely important for promotion and tenure. As expected, these criteria overwhelmingly pertained to research and scholarly activity. There were significant disciplinary differences in the top-ranked 4 of 8 of these criteria.

Evidence of research, either funded or unfunded, was ranked important by 96% of the agriculture faculty. In contrast, 78% of the education faculty perceived this as important. Likewise, agriculture faculty rated publication of articles and books (92%) and awards, including funding of research (84%), highest. Education faculty rated the importance of these criteria at 73% and 63%, respectively.

Evidence of performances, concerts, and other creative activities in the fine and performing arts was important to the 56% of the faculty who rated the item. It should be noted that differences by college were not examined because the item more directly related to arts and sciences and 64% (179) faculty marked the item "not applicable".

The eight criteria that were not considered important by a majority of the faculty pertained to teaching, service, and self-improvement. Faculty opinion was uniform except for disciplinary differences on one criterion. Evidence of service to the public through consulting or other activities in the area of academic or professional competence by the faculty member was important to 35% of the faculty. This criterion was more important to education (47%) faculty and less important to the professions (32%) faculty.

102

Table 2
Percent of Respondents Listing Promotion and Tenure Criteria as Important

Criterion	All Faculty	Discipline/College					
		Agri	A&S	Educ	Engr	Prof	x^2
Research, either funded or unfunded	86	96	86	78	79	91	26.41*
Publication of articles, books, other	82	92	82	73	79	88	26.82*
Awards, including funding of research	74	84	79	63	77	65	26.34*
Professional recognition, outside groups	74	64	81	78	62	75	24.32*
Papers at professional meetings	65	-	-	-	-		9.86
Performances, concerts	56	-	-	-	-	-	N/A
Directing student research projects	56	-	-	-	-	-	18.60
Technical reports on research projects	50	-	-	-	-	-	15.74
Innovation in teaching	44	-	-	-	-	-	13.37
Professional self-improvement	44	-	-	-	-	-	4.99
Teaching materials, course outlines, exams	43	-	-	-	-	-	13.59
Work in professional societies	41	-	-	-	-	-	13.12
Service to the public, consulting	35	37	29	47	35	32	21.71*
Service; public understanding of university	27	-	-	-	-	-	16.10
Participate in written or oral exams for honors or graduate students	25	-	-	-	-	-	12.93
Committee activities at the university	23	-	-	-	-	-	20.30

Note. Percents include extremely or quite important. Percents may include rounding.
Dashes indicate that data were not reported when no significant differences were detected.
p = .05; N = 281

Outcomes of Participation

A majority of faculty perceived that 3 of 8 outcomes would occur to some or a great extent if they participated in instructional improvement activities (see Table 3). Overal' faculty perceived that they would become more effective (71%), efficient (68%), and satisfied (63%) teachers. However, only a small percentage of faculty believed that their chances for extrinsic rewards like promotion (15%) and salary increase (14%) would improve. Additionally, 46% of the fac-

95

ulty indicated that participation in instructional improvement would cause them to sacrifice their scholarly activity.

TABLE 3
Percent of Respondents' Perceived Outcomes of Participation in Instructional Improvement

Outcome	All Faculty	Discipline/College					
		Agri	A&S	Educ	Engr	Prof	χ^2
Become a more effective teacher.	71	85	62	82	77	67	26.15*
Become a more efficient teacher.	68	-	-	-	-	-	16.08
Become more satisfied with teaching.	63	-	-	-	-	-	19.84
Sacrifice my scholarly activity.	46	44	46	28	62	59	25.02*
Chair would encourage participation.	37	-	-	-	-	-	12.73
Chances for promotion might improve.	15	-	-	-	-	-	8.97
Chances for salary increase might improve.	14	-	-	-	-	-	13.37
Colleagues might criticize participation.	13	-	-	-	-	-	7.53

Note. Percents include outcomes that would occur to some or a great extent. Percents include rounding.
Dashes indicate that data were not reported when no significant differences were detected.
$p = .05$; $N = 281$.

Significant disciplinary differences were found in two of these items. Agriculture (85%) and education (82%) faculty perceived more strongly that participation in instructional improvement might make them more effective teachers whereas arts and sciences (62%) faculty did not perceive this as strongly. Faculty also differed in their opinion on whether participation in instructional improvement would cause them to sacrifice their scholarly activity. Engineering (62%) faculty believed this outcome would occur more strongly than education (28%) faculty.

104

Incentives for Participation

As shown in Table 4, a majority of faculty indicated that 13 of 17 incentives would encourage their participation in instructional improvement activities to some or a great extent. Predictably, salary increment (88%), promotion (76%), and tenure (72%) were valued incentives. Additionally, incentives related to instruction and instructional improvement were highly rated. For example, recognition for outstanding teaching (79%), paid released time for faculty development (77%), and a summer grant to improve a course (73%) were valued incentives.

Faculty opinions differed among disciplines in 6 of 13 of these incentives. Paid released time for faculty development ranged as a valuable incentive from 90% of the education faculty and to 67% of the agriculture faculty. Travel funds to attend conferences were valuable to 68% of the faculty overall. Education (86%) and arts and sciences (76%) attached more value to this incentive and engineering (50%) the least value.

One course load reduction was valued by 62% of the faculty overall with significant differences noted. Education (75%) and arts and sciences (67%) indicated most strongly that this incentive would encourage their participation. Agriculture (46%) attached less value to this incentive.

Four incentives were not viewed as valuable by a majority of the faculty. However, significant differences suggested that three of these incentives might be useful with specific groups. Faculty who attached more value to these incentives were: funds to obtain media and secretarial help (education 65%, arts and sciences 51%), return to industry or industry-education exchange (engineering 62%, education 49%), and opportunity to work with persons skilled in media use (agriculture 48%, education 35%).

Faculty Development Interests

Table 5 shows the percentage of faculty who indicated moderate or a great deal of interest in each instructional improvement area if time and resources were available. Although there was variation in faculty responses, over 50% of the faculty expressed interest in nine

topics. At least one-fourth of the faculty expressed interest in 35 of 38 topics.

Table 4
Percent of Respondents Supporting Incentives for Participation in Instructional Improvement

Incentive	All Faculty	Discipline/College					
		Agri	A&S	Educ	Engr	Prof	x^2
Salary increment	88	-	-	-	-	-	15.75
Recognition for outstanding teaching	79	-	-	-	-	-	13.31
Paid released time: faculty development	77	67	79	90	71	77	22.52*
Promotion in rank	76	-	-	-	-	-	12.08
Summer grant to improve a course	73	-	-	-	-	-	16.48
Tenure	72	-	-	-	-	-	15.39
Travel funds to attend conferences	68	60	76	86	50	58	25.36*
Funds to improve a course	66	-	-	-	-	-	11.16
Support & encouragement from the Chair	62	-	-	-	-		12.15
One course load reduction	62	46	67	75	59	62	24.20*
Support & encouragement from the Dean	58	-	-	-	-	-	10.08
Graduate assistant	56	-	-	-	-	-	16.35
Student assistant for 15 hours per week	55	-	-	-	-	-	12.18
Funds for media and secretarial help	47	46	51	65	35	32	27.74*
Faculty exchange with other universities	46	-	-	-	-	-	15.65
Return to industry/exchange program	35	29	23	49	62	42	34.58*
Work with person skilled in media use	35	48	31	35	35	29	21.57*

Note. Percents include incentives that would encourage participation to some or a great extent.
Dashes indicate that data were not reported when no significant differences were detected.
p = .05; N = 281.

Significant disciplinary differences by college were found in 12 of 38 instructional improvement areas. Two of these topics, strategies for student problem-solving (62%) and selection of effective instructional media (52%), also received majority faculty support. Interestingly, there was no other overlap. Ten faculty development practices did not receive majority faculty support; however, disciplinary differ-

106

ences suggested that these topics might be useful to specific groups. Examples of these instructional improvement interests were: using a personal computer for wordprocessing (education 63%, arts and sciences 59%), grading student performance (agriculture 52%), professional and personal development plan or growth contract (education 58%), group teaching strategies for seminars, labs (education 51%, agriculture 50%), writing test items (engineering 50%), constructing examinations (professions 43%), using a personal computer for student evaluation (education 55%), using telecommunication media (education 43%), teaching strategies for adult learners (education 37%), and teaching strategies for nontraditional students (education 47%).

Discussion and Implications

Research is more important than teaching vis-a-vis the reward structure of the university (Fairweather, 1994; Wright & O'Neil, 1994). The findings in this study also support the primacy of research in the university reward structure. For a number of faculty to engage in teaching improvement activities, incentives must be provided. If time and resources are available, faculty would participate in a variety of instructional improvement activities. Moreover, nearly three-fourths of the faculty speculate that their performance as a teacher would improve if they participated.

Recent efforts to create profiles of faculty by discipline (Armour, Fuhrmann, & Wergin, 1990) and examine disciplinary journals on pedagogy (Weimer, 1993) suggest that disciplines or colleges may be useful avenues to support faculty. The results here suggest that opinions about faculty development differ somewhat by discipline or college and merit this attention as well. Besides the nature of the disciplines making up each college, there may be other factors which contribute to the differences among colleges. These factors include different interpretations of promotion and tenure criteria by colleges, different current funding levels by colleges for incentives for participation in instructional development activities, and different existing skills by college faculty in areas in which faculty desire assistance or instruction.

Table 5
Percent of Respondents Interested in Instructional Improvement Areas

Instructional Improvement Area	All Faculty	Discipline/College					
		Agri	A&S	Educ	Engr	Prof	X2
Strategies for student motivation	72	-	-	-	-	-	16.71*
Valid, useful, timely student rating system	69	-	-	-	-	-	17.90
Strategies for student creativity	64	-	-	-	-	-	19.22
Strategies for student problem-solving	62	69	51	76	64	64	22.04*
Lecture delivery techniques	57	-	-	-	-	-	17.09
Strategies for student confidence	57	-	-	-	-	-	14.83
Use of transparencies, slides, videotapes	55	-	-	-	-	-	19.92
Expert classroom visitation and diagnosis	54	-	-	-	-	-	9.20
Selection of effective instructional media	52	67	54	61	35	34	25.94*
Group discussion techniques	48	-	-	-	-	-	18.46
Personal computer use for wordprocessing	48	33	59	63	32	39	28.11*
Planning course content	47	-	-	-	-	-	11.97
Faculty consult on course improvement	45	-	-	-	-	-	8.07
Strategies for teaching large classes	44	-	-	-	-	-	18.77
Strategies to promote value exploration	43	-	-	-	-	-	15.19
Critique of student written work	41	-	-	-	-	-	18.16
Grading student performance	40	52	30	37	47	46	23.37*
Strategies to guide theses & dissertations	40	-	-	-	-	-	20.53
Plan for professional and personal growth	37	33	36	58	35	27	24.43*
Strategies for group seminars and labs	36	50	32	51	32	18	27.22*
Videotaping and critique of teaching	36	-	-	-	-	-	14.12

Writing test items	36	42	28	25	50	48	29.48
Writing a course syllabus	35	-	-	-	-	-	10.99
Constructing examinations	35	44	28	28	41	48	23.51*
Strategies to guide independent study	34	-	-	-	-	.	18.95
Interdisciplinary teaching	34	-	-	-	-	-	16.50
Personal computer for student evaluation	33	15	34	55	29	30	30.75*
Use of telecommunication media	33	33	34	43	30	23	22.08*
Student advising and counseling	30	.	-	-	-	-	3.46
Preparing your own transparencies	30	-	-	-	-	-	8.95
Use of handouts, flipcharts	29	-	-	-	-	-	10.47
Select and write instructional objectives	29	-	-	-	-	-	18.13
Writing across the curriculum	28	-	-	-	-	-	17.78
Strategies for teaching adult learners	27	33	29	37	18	14	29.72*
Strategies for nontraditional students	26	25	28	47	12	14	27.52*
Team teaching	20	-	-	-	-	-	13.85
Using audiorecordings	17	-	-	-	-	-	17.58
Programmed instruction	16	-	-	-	-	-	10.37

Note. Percent indicating moderate or a great deal of interest. Percents include rounding. Dashes indicate that data were not reported when no significant differences were detected.
$p = .05$; $N = 281$.

Examination of faculty opinions by colleges may assist faculty developers to target resources and understand perspectives of these groups. Agriculture faculty express more strongly than others that evidence of research, publication of books and articles, and awards, including research proposals, are important in promotion and tenure decisions. Interestingly, they also indicate most strongly that they might become more effective teachers if they participate in instruc-tional improvement activities. Selecting instructional media and grad-ing student performance are of particular interest to agriculture faculty.

Arts and sciences faculty express more strongly than other groups that evidence of performances, concerts, and other creative activities and professional recognition by outside agencies, groups, or other individuals in the discipline are important in promotion and tenure decisions. They are second only to agriculture in describing the importance of research and awards like research proposal funding. A majority of arts and sciences faculty value supportive incentives like paid released time for professional development, travel funds to attend conferences, one course load reduction, and funds to obtain media and secretarial help. The usefulness of these incentives to encourage their participation in instructional improvement is second only to education.

Predictably, education faculty present the strongest interest in faculty development practices that were not of interest to a majority of the faculty. These include use of a personal computer for wordprocessing and student evaluation, teaching strategies for nontraditional students, group teaching strategies for seminars, use of telecommunication media, and a personal development plan. Education faculty express interest in paid released time for professional development, travel funds to attend conferences, one course load reduction, and funds to obtain media and secretarial help.

Engineering faculty indicate that return to industry or industry-education exchange is a useful incentive to encourage their participation in instructional improvement. They express particular interest in writing test items and grading student performance.

Faculty in professions which include architecture, business administration, and law strongly indicate that evidence of publication of books and articles is very important in promotion and tenure decisions. They are second only to agriculture in citing its importance. Faculty in professions report interest in writing test items, constructing examinations, and grading student performance.

Although these profiles of faculty are specific to one institution, there are implications for faculty developers at other institutions. The survey process can be used to study faculty attitudes toward instructional improvement on any campus where faculty are expected to teach and engage in scholarly activity. This may provide an indication of incentives to encourage participation in instructional improvement and identify areas of interest.

1 ⁕ 0

Examining faculty opinions as a whole and then by discipline or college is recommended. Specific incentives may be meaningful to faculty in one college eventhough they are not desirable to the faculty as a whole. Likewise, interest in instructional improvement areas may differ among colleges. This information may help faculty developers target their efforts and resources toward receptive faculty.

Further research is needed to determine if faculty opinions are similar on other campuses. This may contribute to creating profiles by disciplines or colleges to identify instructional improvement barriers, incentives, and interests of faculty.

References

Aitken, N. D., & Sorcinelli, M. D. (1994). Academic leaders and faculty developers: Creating an institutional culture that values teaching. *To Improve the Academy*, *13*, 63-77.

Angelo, T. A. (1989). Faculty development for learning: The promise of classroom research. *To Improve the Academy, 8,* 37-60.

Armour, R. A., Fuhrmann, B. S., & Wergin, J. F. (1990). Senior faculty career attitudes: Implications for faculty development. *To Improve the Academy, 9,* 217-230.

Diamond, R. M., & Adam, B. E. (1993). Recognizing faculty work: Reward systems for the year 2000. *New Directions for Teaching and Learning*, No. 80. San Francisco, CA: Jossey-Bass.

Emery, L. J., & Hammons. J O. (1991). Motivating faculty to participate in instructional improvement activities: A case study. *Journal of Staff, Program, & Organization Development, 9*(1), 15-27.

Fairweather, J. S. (1993). Faculty rewards reconsidered: The nature of tradeoffs. *Change, 25*(4), 44-47.

Koontz, H., O'Donnell, C., & Weihrich, H. (1984). *Management* (8th ed.). New York: McGraw-Hill.

McKeachie, W. J. (1991). What theories underlie the practice of faculty development? *To Improve the Academy, 10,* 3-8.

Pinder, C. C. (1984). *Work motivation: Theory, issues, and applications*. Glenview, IL: Scott-Foresman.

Porter, L., & Lawler, E. E. (1968). *Managerial attitudes and performance*. Homewood, IL: Dorsey Press.

Vroom, V. H. (1964). *Work and motivation*. New York: Wiley.

Weimer, M. (1993). The disciplinary journals on pedagogy. *Change, 25*(6), 44-51.

Wright, W. A., & O'Neil, M. C. (1994). Teaching improvement practices: New perspectives. *To Improve the Academy, 13,* 5-37.

Section II

Faculty Collaboration and Collegiality

Several of the articles in the first section refer to the need for faculty developers to provide more opportunities for collegial activities for faculty members, and in his keynote speech William Plater identified collaboration as an important theme for higher education in the 21st century.* The authors of the four articles in this section provide models of faculty collaboration to achieve particular development outcomes.

A specialized form of faculty collaboration, peer coaching, is the focus of Kate Kinsella's article. Peer coaching is a structured activity that requires careful selection and training of the coaching partners. She reviews the background of the coaching process and outlines two models of peer coaching as a method of achieving teaching improvement and meeting the challenge of teaching an increasingly diverse student population.

"Reflective partnerships" is the theme of Roy Killen's essay on faculty collaboration. Although teachers often reflect on their practices, this reflection may be much more useful if carried out with a partner. Killen outlines a set of practices and techniques that two faculty members might use to help each other improve their teaching, including classroom observation and conferencing. Mentoring is a special form of faculty collaboration between experienced professors and new faculty members. Richard Nichols and Beverley Amick suggest that "instructional mentoring" can provide many positive outcomes for both partners in the mentoring relationship. Like peer

coaching, however, mentoring requires careful selection and training of the mentors. Nichols and Amick review the literature on mentoring and provide specific guidelines for developing a mentoring program and the outline of training sessions for the mentors.

The first three articles in this section focus on dyadic partnerships, but faculty collaboration can also be promoted in larger groups, as the authors of the last article suggest. James Wangberg, Jane Nelson, and Thomas Dunn describe a faculty colloquium designed to foster colle- giality and promote inter-faculty dialogue. They describe the plan- ning, funding, and evaluation of this intensive, three-day event and suggest ways for others to replicate the colloquium on other campuses.

*Plater, W. (1954, October). *Future work: Faculty time in the 21st Century*. Keynote speech presented at the annual meeting of the Professional and Organizational Development Network, Portland, OR.

$1 \ ? \ 3$

Peers Coaching Teaching: Colleagues Supporting Professional Growth Across the Disciplines

Kate Kinsella

San Francisco State University

Peer coaching is a highly effective way to encourage professors to talk about teaching in a purposeful manner and to venture from traditional academic practices. However, peer coaching is more complex than it appears at first glance. This article provides background on the coaching process, a description of two basic peer coaching models, and guidelines for selecting and training coaches.

In a culturally pluralistic society such as the United States, it seems reasonable to expect educators across the curriculum to actively seek knowledge and instructional practices relevant to working effectively with *all* students. Today's university faculty members are charged with the rather formidable responsibility of serving a student population that differs strikingly from that of 20 years ago, when many faculty were beginning their teaching careers or in the midst of their own undergraduate education. Discipline-specific graduate coursework and teaching fellowships have failed to prepare faculty for the multifaceted challenges of understanding and responding to the richer and more complex array of learners who comprise today's classes. Across the nation, the professoriate has yet to grasp the implications of the student population's diversity of gender, age, cultural and

linguistic heritage, learning styles, job and family responsibilities, and secondary school preparation.

Most college faculty members teach the way they were taught. Others fashion their instruction after a particularly inspirational professor-mentor, one who promoted both curricular excitement and scholastic achievement for the mentee because the two shared compatible learning and teaching style preferences. Faculty members who lack formal training in methodology and teach pretty much based on how *they* learn best, frequently are unaware of alternative classroom practices which may be better suited to the instructional needs and strengths of the more diverse student body. Yet, the creation of a truly democratic teaching/learning environment in the modern multicultural classroom depends on the willingness of instructors in every field, first to understand their own teaching and learning preferences, and then to face the likelihood that the majority of their students may prefer to acquire knowledge and skills in other ways. This realization ultimately warrants a sincere willingness to develop a more flexible and responsive repertoire of pedagogical practices.

Professional Development for the Modern Multicultural Classroom

The extensive findings about the development, socialization, and schooling of linguistically and culturally heterogeneous student populations suggest many practical and promising instructional alternatives. Some of the innovative alternatives heralded by advocates of inclusive pedagogy are cooperative learning activities, classroom assessment techniques, "learning-to-learn" development across the curriculum, and multimodal presentations of information which enhance curricular access for students with varied perceptual strengths. Not surprisingly, however, successful implementation of innovative instructional approaches typically requires more than a simple fine tuning of a college instructor's existing attitudes, knowledge and skills. It necessitates initial reflection and critical examination of underlying issues of present-day educational access and equity, classroom roles and relationships, ownership of knowledge, and power and privilege in the academy.

Professional enhancement of this nature and magnitude requires that faculty have access to applicable resources and training while involving them in the creation and validation of their own knowledge. Additionally, dedicated educators must be provided with the time and support necessary to fit new learning theories and instructional practices to their unique philosophical premises, disciplines, and classroom conditions.

Clearly, the achievement of a truly pluralistic instructional environment involves large-scale, complex, sustained organizational transformation. Current professional development opportunities addressing diversity and inclusion within higher education are largely inadequate, though well-intended, efforts to affect significant, long-lasting changes. This should give both instructors and administrators cause for genuine concern. Occasional departmental workshops or campuswide addresses by noted scholars, despite the credibility or charisma of the featured speaker, do little to promote the complex insights or sustained commitment and effort which translate into reflective and responsive instructional transformation. Annual conferences in specific subject matter fall equally short of addressing the professor's needs for relevant and ongoing learning about discipline-specific, learner-centered pedagogy.

Instructional Experimentation and Collegial Support

Few faculty members can implement an instructional innovation with noteworthy success simply on the basis of an inspirational journal article or a stimulating teaching conference presentation. In most cases, instructors need considerable exposure to the major tenets of a new approach and illustrative modeling, along with substantive time for classroom application. An equally vital aspect of this process of mutual adaptation, trial and experimentation is the opportunity for classroom practitioners to do detailed and continuing analyses of their teaching in a context that is supportive, non-evaluative, and intellectually stimulating. Instructors working in heterogeneous classrooms need to become comfortable with trying the unfamiliar, sharing successes, and openly seeking suggestions in times of disappointment.

This willingness and ability to take risks to teach more effectively, and to consistently monitor and adjust goals and strategies, can only be fostered within a trusting, collaborative environment.

Active teacher-scholars need access to a variety of opportunities for peer support in their efforts to question and explore new ideas and practices. However, collegiality among faculty members entails a great deal more than congeniality or similarity in discipline focus; it includes mutual respect, validation, assistance, and connection on a professional level. Unfortunately, few universities have strong structures to support the collegiality and experimentation so vital to professional growth and renewal. Frequently, the sociology of a university or a particular department discourages colleagues from soliciting help or offering assistance to fellow instructors. The prevailing milieu of many institutions actually fosters isolation not interaction, and independence not team-orientation. Professors too often work alone in their classrooms and offices, and struggle independently with instructional decisions and dilemmas. Novice and veteran professors alike may feel that to actively seek advice on curriculum, instruction or classroom management is admitting a lack of competence and a potential threat to their professional reputation and status within their department. Centra (1993) points out the discrepancy between the willingness of faculty to avail themselves of peer feedback on a draft of a research article or grant proposal and hesitancy about asking for a classroom visit to offer feedback on course curriculum and instruction. He attributes this in part to the widespread belief among faculty members that teaching is highly personal and subjective, while standards of quality research and scholarship are well established and objective. Consequently, professorial autonomy in the classroom is sustained and prized, while collegial assistance is resisted. Another unfortunate result is that critical decisions about teaching and learning are likely to stem exclusively from the professor's solitary reflection rather than from mutually enriching dialogue with informed, trusted, and respected classroom practitioners.

It is ironic that in an era in which such great emphasis is being placed on *learner-centered* participatory methodology, grounded in the premise that dialogue and collaborative construction of knowledge fosters both intellectual and personal growth, that relatively little

importance has been attributed to structured opportunities for *educators* to converse, collaborate, and contribute to the instructional knowledge base of their fields. This is particularly alarming because most faculty have had little or no exposure to the extensive body of scholarship about adult teaching and learning. Considering the complexities of effectively teaching the range of diverse college learners, it is imperative for universities to create structures for continuous pedagogical improvement, collegiality, experimentation, and support.

Peer Coaching

Peer coaching is a highly effective way to encourage professors to talk about teaching in a purposeful manner and to venture away from traditionally sanctioned academic practices. Peer coaching is a structured, formative process by which trained faculty voluntarily assist each other in enhancing their teaching repertoires within an atmosphere of collegial trust and candor through: a) development of individual instructional improvement goals and clear observation criteria; b) reciprocal, focused, non-evaluative classroom observations; and c) prompt, constructive feedback on those observations.

But like many other educational innovations, successful peer coaching is more complex than it appears at first glance. Peer coaching is an instructor-to-instructor interaction aimed at facilitating reflective, responsive classroom practices while mitigating the psychological isolation that can so often characterize the university workplace. In order to achieve these goals, faculty need assistance in order to communicate and work effectively with colleagues of different genders, ages, disciplines, cultures, and philosophical orientations (just as they need to understand how to reach varied students). Instructors who have rarely opened their classroom doors to observers are apt to approach the coaching process with understandable trepidation.

It is imperative, therefore, that trust and program integrity be established from the onset if peer coaching of teaching is to be widely accepted. Careful consideration should be given to several factors: a) the cultivation of both faculty and administrative support; b) the nature and extent of the training provided in classroom observation procedures and consultation skills; b) the provision of additional training

opportunities in new instructional practices; and d) any logistical or financial constraints.

Formative Coaching versus Summative Evaluation

An initial goal in enlisting voluntary faculty participation in a peer coaching program is clarification between *summative* evaluation conducted for administrative decisions and *formative* evaluation designed to improve instruction. A national leader in coaching program design and implementation, Showers (1985) reminds faculty and administrators that the goals of coaching and evaluation practice are antithetical and should be kept separate. Other proponents of peer coaching (Cogan, 1973; Garmston, 1987; Joyce & Showers, 1982; Skoog, 1980) maintain that successful programs can be established only in an atmosphere of mutual trust, confidentiality and support, where colleagues feel it is safe to experiment, fail, reflect, solicit help, revise, and return to the classroom to try again. Nothing could be farther from this atmosphere than is the practice of traditional classroom observation and instructor evaluation. Formal, required faculty evaluation for promotion and tenure purposes typically implies summative judgment by an administrator or senior faculty member about an individual's total professional performance. Given the power imbalance and the anxiety-provoking judgmental aspect inherent to this relationship, it is predictable that faculty would feel vulnerable opening their classroom doors for scrutiny of their instructional practices and reticent to solicit follow-up advice. Further, untenured faculty members are placed in an awkward position if teaching suggestions are, in fact, offered by senior observer. Even suggestions provided by mentors do not necessarily promote optimal self-reflective practice or relevant instructional modification. Coaching, on the other hand, implies formative assistance by a peer in a professional development process, and provides an alternative means for instructional support and goal setting among colleagues.

119

The Coaching Process

Although various coaching models exist, partners or teams typi-
cally work together through a nonjudgmental process which includes
the following stages: a) pre-observation planning conference with
establishment of observation criteria; b) classroom observation and
collection of data; c) post-observation reflecting conference with data
analysis, and formation of instructional goals with subsequent obser-
vation criteria. Individual coaching program partners are directly
involved in determining when and how often the observations will
take place, under what conditions the observations will be conducted,
and what specific instructional data the visiting coach will record.

During the *pre-observation conference,* coaching relationships
are shaped, educational philosophies and approaches are shared,
ground rules are established, and observation goals are set. Instructors
make explicit for their peer observers: a) relevant background infor-
mation about the course; b) the intended purpose of the lesson; c)
expected student outcomes and behaviors; d) planned teaching behav-
iors and strategies; e) any special concerns about the lesson; f) logis-
tical arrangements and ground rules for the observation; and g) the
desired focus for the observation. It is useful for each coaching partner
to complete a pre-observation form during this conference to record
all pertinent information for the mutual upcoming classroom visits
(See Table 1). Individual instructors have specific preferences regard-
ing observation date and length, observers' seating arrangements,
participation in classroom activities and interaction with students, and
use of recording equipment.

Decidedly the most challenging aspect at this stage for most
partners is establishing clear and limited observation priorities and
productive data gathering procedures. Because many college teachers
are not aware of how they teach and what effect their instructional
practices have on students, it is not surprising that coaching novices
initially find it difficult to decide what is most important in their
professional development and to try to operationalize those goals. The
collegial duo must put their heads together to determine what objective
and descriptive data can be recorded to address the observed partner's
concerns. It is not at all fair or helpful for a prospective observer to

have a coaching partner evade this individual goal articulation and simply state: "Just come to my class and give me your general impressions of whatever you see." The end result is predictably counter-productive. The observed instructor may easily end up either with an overwhelming litany of arbitrary feedback, or very general, impractical comments.

Some instructors find their observations and conferences to be more focused and beneficial if they share common criteria than if they examine completely different aspects of teaching. Many novice coaches find it particularly useful at this stage to have a summary sheet of observable behaviors for specific instructional approaches. An observation form (see, for example, Table 2) that focuses on major tenets of the selected teaching goal is extremely useful. Another strong suggestion is that partners select no more than five observation criteria per session. Otherwise, the observations will lack focus and the follow-up conference lack substantive data.

During the actual *classroom observation*, the peer observer records descriptive data, but does not interpret or evaluate the classroom action. Unlike a summative evaluator, the coach focuses exclusively on the instructional elements previously identified by the instructional partner. Multiple data gathering procedures exist, including record keeping on an observation instrument, audiotaping, and videotaping. Educational researchers have generated a variety of observation instruments which can facilitate data collection during classroom observations, depending on the nature of the instructional behaviors and goals specified by the teacher partner (e.g., Good & Brophy, 1984; Braskamp & Ory, 1994; Centra, 1993; Seldin, 1984).

The most logical and manageable observation instrument for teaching improvement would be one which outlines the target changes. A focused observation form can be distributed and discussed during a departmental or institutional training session and would serve as a summary of the major tenets of the new instructional approach. Taking descriptive notes on the observation instrument improves the quality and extent of data a partner can share after a visit. However, to relieve any residual apprehension about peer observations being used for performance reviews, any and all data gathered during the

121

course of the coaching sessions must become exclusively the property of the observed instructor.

As soon as possible after the classroom visit, the coaching pair needs to find an uninterrupted and adequate time to meet for a *post-conference*. During this follow-up session the two colleagues reconstruct the details of the observed session, discussing what actually happened during the lesson as opposed to what may have been planned. Particularly during this initial summary of impressions and recall of data, it is crucial that the coach refrain from making any value judgments about the effectiveness of the teaching strategies observed. Rather than offering advice, the observer facilitates the partner's recollection of instructional decisions and student reactions through specific coaching consultation skills, particularly paraphrasing and asking non-threatening questions. Questions such as "Is that what you expected to happen?" or "How would you do that differently?" prompt the teacher to reflect on the lesson, recalling actual teacher and student behaviors. When offering this feedback, the observer focuses on elements of the instructional delivery established in the pre-observation conference, and grounds this feedback in concrete data recorded during the class session. An enabling coach provides additional feedback on the lesson only if the colleague openly solicits this information. Peer coaches provide specific, solicited, limited, constructive feedback on what they see rather than what they feel.

After analyzing the data and identifying any critical incidents or patterns, the partners summarize their mutual learnings. The observations and follow-up reflection sessions are grounded on the notion that the observers are as likely to glean valuable insights about their own teaching practices when visiting a colleague's class as when they open their classroom doors to caring coaches. To close this post-observation session, the coach might ask "What do you plan to do differently or similarly in our next class observation session?" The observed teacher ultimately decides upon the focus for the subsequent classroom visit, directly stating the aspects of curriculum or instructional delivery which should serve as follow-up observation priorities. Again, the coach can greatly facilitate this final step by making sure that the items of focus are limited, clearly articulated, and actually observable.

Peer Coaching Models

The two most prevalent coaching models are *technical coaching* and *challenge coaching*. The *technical coaching* model stems from the work of Joyce and Showers (1982) and has been widely used in elementary and high schools to provide a structure for the follow up that is essential for mastering complex teaching methods and curricular reforms. This model pairs teachers with each other, or with consultants, and provides training in using an assessment form designed to capture the key components of a new teaching method. The coaching partners use this form during classroom observations to record the presence or absence of specific behaviors and to later provide focused, nonevaluative feedback. Garmston (1987) highlights the multiple benefits of techn'cal coaching when offered as a complement to quality training in new instructional practices: enhanced collegiality, increased professional dialogue, creation of a shared pedagogical vocabulary, and maximum transfer of training. Sparks (1986? or 83?) adds that peer coaching in conjunction with instructional development provides critical rehearsal of learning, often yielding more demonstrable results than expert consultant observation.

Collegial coaching, most often conducted by pairs of instructors, concentrates on individual areas the observed teacher wishes to improve. This coaching approach, exemplified by Costa and Garmston (1994), leads colleagues to reflect together on personally relevant issues of teaching and learning. It encourages instructors to develop the habit of self-initiated reflection about their professional practices. The observed instructor's priority, rather than an instructional approach introduced in a professional development session determines the coaching focus. The major goals of collegial coaching are to establish collegial trust and open communication, increase pedagogical dialogue, and facilitate reflective practice, rather than to facilitate implementation of specific instructional strategies.

Since a variety of coaching models exist, it is crucial that any faculty group seeking to establish an effective program first determine exactly what it hopes to accomplish through the observation-feedback cycle. No single coaching program model can meet the needs and goals of every faculty group in an institution. Nonetheless, to promote

maximum instructional improvement, while creating a collegial work environment and promoting professional reflection and dialogue, it would seem beneficial to implement an eclectic initial coaching program borrowing from both the *technical* and *collegial* coaching models. Ideally, a group of voluntary participants in a coaching program should be given the opportunity to identify some mutual objectives for instructional improvement. They would then receive comprehensive training in the goals and process of coaching, accompanied by concrete strategies to promote their objectives. They then would select a coaching partner to mutually observe class sessions and collect objective data on these specific new teaching behaviors, utilizing a manageable data collection and feedback form.

Training Coaches

Training in coaching is an essential condition for a program to flourish and be clearly disassociated from traditional evaluation. Effective training takes place before observers first visit a classroom and includes follow-up training while the program is under way. The critical need for adequate and appropriate training of peers as classroom observers and instructional consultants has been indicated by a large number of researchers (e.g., Joyce & Showers, 1982; Sweeney & Grasha, 1979; Weimer, 1990). Although on the surface it appears that observing another instructor conduct a class is a relatively simple, straightforward process, faculty members who participate in coaching programs are generally astonished by how difficult it is to be objective and faithful to a partner's requested observation criteria when recording data and conferencing. Faculty who have received little more than judgmental comments on their own teaching find it challenging at first to provide supportive reactions rather than quick-fix critiques or descriptions of how they conduct their own classes. Although faculty always will experience a certain degree of discomfort when being observed, it is important for them to be solidly assured that the procedures used for data collection and reporting are fair, accurate and confidential.

Instructors in a coaching program need to view other participants as sensitive and competent colleagues with whom they can openly

share their insecurities and frustrations. Training in coaching must, therefore, empower faculty members by helping them identify practices that impede movement toward collegiality and by equipping them with an extended repertoire of consultation skills. Among these skills, training in descriptive classroom data gathering is fundamental. Delivering and receiving prompt, detailed, nonevaluative feedback is equally vital. A peer coach must have collected adequate relevant data on the colleague's pre-established target strategies and behaviors during the classroom observation. The coaching partner must then be ready to praise the observed colleague's efforts step-by-step, while giving specific, nonthreatening feedback which is grounded in the observation data. A supportive coach must also know how to ask nonjudgmental questions that help the partner to analyze and evaluate instructional decisions, and that prompt reflection and improvement in teaching performance.

Cohen and McKeachie (1980) emphasize that colleagues should provide feedback only on those teaching effectiveness criteria that they are in the best position to observe and credibly assess. Unless a coaching partner possesses some knowledge and skill in the area, the quality of the feedback is likely to be vague and of questionable validity. Again, coaching program administrators can facilitate the process of establishing reasonable observation criteria by ensuring that faculty use a feedback form which synthesizes target behaviors. Instructors need to have a common vocabulary for discussing teaching and learning processes, as well as a framework for selecting instructional goals that are personally significant. During the coaching training session, instructors greatly benefit from practice using consultation skills and giving focused constructive feedback. The coaching group can work together to establish clear observation criteria before viewing videotaped lesson segments, then facilitate roleplays in which participants provide facilitative feedback to the observed instructor. This crucial observation practice helps minimize any residual reticence about being evaluated, rather than assisted, by a peer coach.

125

Selecting Coaching Partners

On a practical basis, most coaching should be performed by pairs of active classroom instructors working together to broaden their teaching repertoires. In their daily practice they are logistically and psychically closer to each other than to administrators or faculty development specialists, and, if provided with effective, incremental training in new instructional practices and coaching techniques, they are in an ideal position to carry out all coaching functions. Further, by placing the major responsibility for coaching with professional peers, status and power differentials are minimized, thereby creating a more trusting, responsible, and collaborative atmosphere.

To help reduce anxiety, instructors definitely should be allowed to select their coaching partners, or to form teams of four colleagues who rotate observing each other. Instructor partnerships may be formed by similarity in teaching context or may vary considerably in experience, content area and level. The main ingredients for successful coaching relationships are mutual trust and respect. Nonetheless, there is at least one decided advantage to cross-disciplinary pairings. As members of instructional support teams structured across departments, courses or grade levels, colleagues become more aware of their common resources and challenges. Also, they tend to focus their observations and ensuing discussions on new instructional practices and broader educational issues, rather than primarily on course content or departmental dilemmas.

Summary and Conclusions

The necessity for increasing reflective practice and instructional improvement to respond to the changing context of college teaching and learning is more often met by the resourcefulness and responsibility of individual educators, than a commitment of a university or department. Unless individuals and institutions strive to create more supportive contexts in which faculty can learn about and from their teaching, only lip service can be paid to efforts to promote diversity in our classrooms. Peer coaching is a formative evaluation procedure which continues to demonstrate its potential for faculty growth, reju-

venation and empowerment conducive to the creation of more demo-
cratic and humane academic environments.

References

Braskamp, L., & Ory, J. (1994). *Assessing faculty work*. San Francisco-Jossey-Bass.

Centra, J. (1993). *Reflective faculty evaluation*. San Francisco: Jossey-Bass.

Cogan, M. L. (1973). *Clinical supervision*. Boston: Houghton Mifflin.

Cohen, P., & McKeachie, W. (1980). The role of colleagues in the evaluation of college
   teaching. *Improving College and University Teaching*, 28(4), 147-154.

Costa, A., & Garmston, R. (1994). *Cognitive coaching: A foundation for renaissance
   schools*. Norwood, MA: Christopher-Gordon.

Garmston, R. J. (1987). How administrators support peer coaching. *Educational Leader-
   ship*, 44(5), 18-27.

Good, T., & Brophy, J. D. (1984). *Looking in classrooms*. Cambridge, MA: Harper & Row.

Guskey, T. R. (1986). Staff development and the process of teacher change. *Educational
   Researcher*, 15(5), 5-12.

Joyce, B., & Showers, B. (1982). The coaching of teaching. *Educational Leadership*, 40(1),
   4-10.

Showers, B. (1985). Teachers coaching teachers. *Educational Leadership*, 42(7), 43-49.

Seldin, P. (1984). *Changing practices in faculty evaluation*. San Francisco: Jossey-Bass.

Skoog, G. (1980). Improving college teaching through peer observation. *Journal of
   Teacher Education*, 31(2), 23-26.

Sparks, G. (1983). Synthesis of research on staff development. *Educational Leadership*,
   41(3), 67-74.

Sweeney, J., & Grasha, A. (1979). Improving teaching through faculty development triads.
   Educational Technology, 19(2), 54-57.

Weimer, M. (1990). *Improving college teaching*. San Francisco: Jossey-Bass.

127

Table 1

Sample Pre-Observation Conference Form

Instructor _____ Peer Coach_____

1.Observation Logistics:

a.class observation date _____

b.classroom location _____

c.beginning time _____ending time _____

d.relationship of observer to students: detached ____ involved ____

e.seating arrangement for observer: anywhere ____ assigned ____

2.Class Background:

a.subject area _____

b.level (lower or upper division, graduate) _____

c. type (lecture, seminar, lab, lecture/discussion, activity) _____

d.number of students _____

e.description of student population _____

3.Lesson Description:

a.learning objectives of the lesson:

b.planned teaching behaviors and strategies:

c.any concerns about the lesson:

4.Specific Areas for Observation Focus:

a.

b.

c.

d.

5.Post-Observation Conference:

a. place _____ b. date _____ c. time _____

Table 2

Sample Peer Coaching Form (For Group Work)
Group Work Design and Implementation

Instructor_____ Peer Coach _____
Class _____ Location _____ Date _____

Directions: Collect descriptive data on the specific aspects of effective classroom group work design and implementation which your coaching partner has asked you to focus on during this observation. Write concrete examples, comments, or questions which you would like to be sure to discuss in your post-observation conference.

1. Selected an activity which clearly lent itself to task-based, active collaboration.

2. Related the activity to previous lessons and previous related activities.

3. Made explicit the purpose, procedures, and expected outcome of the group activity.

4. Broke a more complicated task into manageable, clearly-delineated steps.

5. Gave clear oral instructions for the activity, accompanied by a visual aid; wrote the goals, time frame, and procedures on a handout, an overhead transparency, or the chalkboard.

6. Modeled the task or a part of the task, and checked to see if all students understood the instructions before placing them in groups.

7. Established a clear and adequate time frame for students to successfully complete all parts of the task.

8. Explained the various group member roles and specific responsibilities associated with each role for completion of the particular assignment.

9. Appeared to have a clear rationale for small-group formations.

10. Encouraged cooperation, mutual support, and development of group accomplishment.

11. Took an active, facilitative role while the small groups were in progress by providing feedback and guidance, and getting students back on track.

12. Saved adequate time to process the completed small-group activity as a unified class, clarifying what was learned and validating what was accomplished.

13. Incorporated listening and responding tasks for students to complete during individual group reports to facilitate task processing and ensure active listening and accountability.

14. Provided feedback to students on their prosocial skills and academic accomplishments during and/or after completion of the small-group activity.

15. Asked students to evaluate their individual and/or small-group's performance by means of a form, quickwrite, or journal entry.

16. Made sure that students saw the connection between what was generated, practiced, or accomplished during the small-group activity and any follow-up individual assignment.

Instructional Goals for Future Observations:

1.
2.
3.
4.

Improving Teaching Through Reflective Partnerships

Roy Killen

University of Newcastle

The purpose of this paper is to explain how both experienced and inexperienced faculty can improve their teaching and their students' learning through a systematic process of reflecting on their day-to-day teaching by collaborating with a "reflective partner." The suggestions are based on the author's experiences as a teacher, teacher educator and faculty developer, and on the belief that good teachers are those who help students to learn and to achieve their full potential as individuals. The reflective teaching techniques in this paper have a strong focus on the technical aspects of teaching. However, the techniques also provide faculty with opportunities to reflect on broader issues such as the beliefs that guide their teaching practices. By following the suggestions in this paper, faculty can identify their teaching strengths and limitations, develop the confidence to experiment with new teaching strategies to overcome these limitations, and gain a better understanding of all aspects of their teaching.

What is reflective teaching?

Educational literature contains numerous references to the idea that teachers ought to be reflective about their teaching. Terms such as reflective teaching, reflection on teaching, reflection in action, critical reflection, and reflectivity are frequently used to label the concept of teacher reflection (e.g., Zeichner & Liston, 1987; Ross, 1989; Martinez, 1990; Van Manen, 1991; Onosko, 1992). These terms all refer

to the general notion of teachers thinking about their teaching, although different authors place different emphases on how that thought should be encouraged and directed, and what its focus and ultimate purpose should be. Most writing in this area seems to be based either directly or indirectly on the work of Dewey (1933), or on some of the better-known modern writers on the topic such as Van Manen (1977), Zeichner (1981-82, 1983, 1987), Schön (1987), and Cruickshank (1987). The suggestions that these writers make all have as their general aim "the development of teachers who have the skills and dispositions to continually inquire into their own teaching practice and into the contexts in which their teaching is embedded" (Zeichner, 1987, p.565).

The various viewpoints on reflection can be distinguished by the approaches that they take to four issues: the process of reflection, the content or focus of reflection, the preconditions of reflection, and the product of reflection. The variations can, in many cases, be traced to the different philosophical bases for the approaches. For example, the work of philosophers of practical action such as Gauthrie (1963) has been applied by curriculum theorists such as Van Manen (1977) to produce the notion that teaching should be viewed as a series of practical problems, requiring deliberation and action for their solution. In contrast, the work of writers such as Habermas (1974) has encouraged a critical science concept of reflection as a process for becoming aware of the influence of societal and ideological constraints on teaching practice, and of gaining control over those influences. From a practical viewpoint, reflection on teaching occurs when teachers take time to think about what they are doing, why they are doing it, and the consequences that their teaching has for students. Reflective teachers accept that their teaching practices, and the motives for those practices, should be questioned, and then actively pursue ways to improve their teaching.

Teachers can reflect in many different ways and at a number of different levels. For example, at a very basic level, they might think about what works in their classroom to maintain order; at another level, teachers might become concerned with the goals they are trying to achieve; at a more complex level, teachers might think about issues beyond the classroom, so that social issues such as equity and eman-

132

cipation can inform the way they view their classroom practices. Zeichner and Liston (1987) suggest that teachers can employ several different kinds of criteria when reflecting. When using technical criteria, teachers concentrate on how they can apply their knowledge to achieve a given set of objectives. When using what Zeichner and Liston call educational criteria, teachers consider how the contexts in which they teach influence teaching and learning, and they consider the value of different educational goals. When using ethical criteria, teachers think about the moral and ethical aspects of teaching and education.

If teaching is taken for granted it becomes mechanical and ineffective. As teachers engage in thinking about their past actions, their current situation, and their future intentions, their teaching ceases to be routine and becomes reflective. By definition, reflective teachers think critically about all their teaching practices and accept that what happens in their classrooms should be questioned and, if necessary, changed. This does not mean that reflection is concerned just with teaching techniques. It does mean that all aspects of teaching, including the teacher's attitudes, beliefs, behaviors and perceptions should be open to review. Indeed, as Noffke and Brennan (1988) suggest, the real choice for teachers is not so much whether or not to be reflective, but rather what to reflect upon.

Why should teachers reflect?

The benefits of reflection are considerable and tangible. For example, Korthagen and Wubbels (1991) provide evidence that reflective teachers have better interpersonal relationships with students than other teachers, and that they experience a higher level of job satisfaction. They also suggest that reflective teachers have strong feelings of security and self-efficacy, can talk and write readily about their experiences, and are more likely than non-reflective teachers to allow their students to learn by investigating and structuring things for themselves. The literature suggests several other reasons why teachers should be encouraged to be reflective. Some of these reasons have a sociological basis (Zeichner, 1992), while others clearly attempt to link reflection with teacher effectiveness in a technical or behaviorist

way, that is, they suggest that through reflection teachers can improve their teaching and their students' learning (Cruickshank, 1987; Troyer, 1988; Killen, 1991). Others relate teacher reflection to measurable student or classroom factors such as thoughtfulness (Onosko, 1992). Whatever the prime motive for reflection, it is likely that reflective teachers will devote more time and effort to critical review and analysis of their teaching, and of their students' learning, than will teachers who are not reflective (Walker, et al., 1992). As a result, they are likely to have greater interest in self-improvement, have a greater interest in data on their teaching behavior, have higher self-esteem, make greater efforts to encourage their students to be reflective and to think critically, and believe that they have more power to influence student learning significantly (Nolan & Huber, 1989).

How can faculty reflect?

The literature contains many suggestions about ways in which teachers can be encouraged to reflect on teaching, learning, and education. These strategies include the use of portfolios (Cole, 1991; Seldin, 1991), inquiry-oriented supervision (Ruddick & Sigsworth, 1985; Zeichner & Liston, 1987), cross-cultural teaching experiences (Vall & Tennison, 1992), metaphors (Marshall, 1990; Hoffman, 1994), reflectivity training (Troyer, 1988), journal writing (Walker, 1985; Holly, 1989), action research (Lind, 1984; Zeichner & Liston, 1987), modified action research (Hanna, 1986; Gore & Ziechner, 1991), ethnographic studies (Gitlin & Teitlebaum, 1983), collaboration (Shapiro, 1991), case studies (Hill, 1986), microteaching (Winitzky & Arends, 1991), and Reflective Teaching lessons (Cruickshank, 1987; Killen & Killen, 1992). These techniques for reflection could be grouped into what Garman (1984, 1986) refers to as processes of "reflection on action" and "reflection through recollection". In order for a teacher to reflect on action, segments of their teaching must be recorded as "stable data" so that they can be analyzed and interpreted at a later time. This recording might be on audio or video tape, or it could be verbatim data recorded by an observer. For reflection through recollection, a teacher simply recalls significant events and records them in a journal, or other suitable format, for further consid-

134

eration. The techniques have one thing in common - they all encourage teachers to think about their teaching experiences and the effects that their teaching is having on students.

The Reflective Partnership Procedure

It is possible for faculty to learn a lot about their teaching by reflecting on it independently. This reflection can be enhanced if an audio or video recording is made of some lessons, and if a journal of teaching experiences is kept. However, there is a limit to how much you can learn from self-analysis. The benefits of reflection can be greatly enhanced if the process involves a sharing of ideas with a colleague. This basic idea is not new, and there are many references in the literature to faculty dyads, faculty triads, and various forms of mentoring (e.g., Kurth, 1994; Harnish & Wild, 1994). The reflective teaching procedure described here is intended as a cooperative effort between two faculty members (referred to as *reflective partners*), who are able to share their teaching experiences by observing each other teach and by discussing their interpretations of each other's actions and intentions. The approach is based on the author's research into ways of helping faculty to learn from their own teaching. The *reflective partnership* technique helps faculty to engage in both reflection through recollection (remembering and discussing what happens in their classroom) and reflection on action (reflection stimulated by an audio or video tape of their teaching). This reflection helps faculty in a number of ways: perhaps the most important outcome is that involvement in this form of reflection helps faculty to realize that all aspects of their teaching should be open to question and review.

The faculty who form reflective partnerships will need to feel comfortable discussing things that happen in their classrooms, so they will need to develop a mutual trust and respect that will allow them to discuss issues in greater detail than they might through casual conversations. The cooperation and sharing of ideas starts with the reflective partners agreeing to observe each other teach. During the initial observations, it is important that the partners do not attempt to judge each other; they should simply observe and become familiar with the classroom, students, and general teaching style of their partner, and

establish a common frame of reference for their later discussions. When each of the faculty is familiar with the general teaching style and classroom environment of their partner, they then select lessons in which they will make more formal observations as part of the reflection process.

For the purpose of the following explanation, the teacher who p zsents the first lesson will be referred to as the *presenter*, the other teacher will be referred to as the *observer*. The procedure starts with the presenter independently planning his or her first lesson, making decisions about what teaching techniques and resources to use, how to deal with individual student differences, how to show students the relevance of what they are learning, and all the other usual planning decisions.

The presenter then teaches the lesson with the observer watching but not participating in the lesson. During the lesson, the observer should mak notes of what he or she saw (e.g., what the presenter did, how the students reacted, what things seemed to help students to learn, what things seemed to hinder student learning, and so on) in order to facilitate the post-lesson discussions. If it is convenient, the lesson can be videotaped to further assist the faculty with their later reflections.

Reflection on the lesson will be more productive if, towards the end of the lesson, the presenter seeks comments from students on what they think they learned and how they felt about the lesson. In some instances (such as with small classes), this feedback can be obtained through an informal discussion about the lesson. With larger classes, it is often more useful to get more formal feedback by using a written evaluation form. This can be as simple as asking the students to write down what they thought were the most important things they learned in the lesson, or how much of the lesson they thought they understood. They could also be asked to make a list of the things that the teacher did that helped them to understand the lesson, a id another list of things that the teacher did that confused them. There will be other occasions where students can be asked to rate various aspects of a lesson on a tightly structured rating form. Examples of two suitable questionnaires are given in Appendices A and B.

As soon as possible after the lesson, the reflective partners should meet to discuss the lesson and compare their views of *what* happened

and *why* it happened. A logical start to this discussion is for the presenter to describe how he or she planned the lesson, including such things as how they decided exactly what to teach and how to teach it, what assumptions they made about students' prior knowledge and how those assumptions influenced their planning, what basic beliefs about teaching and learning influenced their decisions, how much time they spent planning the lesson, what they wanted students to achieve, how and when they planned to assess what students had learned, and anything else that they thought influenced their planning. The purpose of this discussion on planning is to focus each teacher's attention on how and why they decide what to do in their classrooms, and the effects that this planning has on their teaching. Appendix C provides a list of questions that reflective partners can use to prompt their reflection.

The next phase of the reflection focuses on the presentation of the lesson, on the students' reactions to it, and on how the presenter reacted to unpredictable events in the lesson. The purpose of this phase of the reflection is to encourage the presenter to think about questions such as: What happened? Why did it happen? What could I have done differently? How did the students react to the lesson? This is likely to be a difficult phase, particularly in the early stages of reflective partnering, because initially the faculty may feel uncomfortable about discussing what happened in their lessons. To reduce the stress, the presenter can start by describing the strategies they used, explaining what they did and how effective they thought it was. It is important here for the faculty to reflect on how they felt during the lesson (e.g., confident, enthusiastic, frustrated), and to discuss how they thought their students felt (e.g., confused, bored, interested). During this discussion, the observer can offer comments to their reflective partner, based on their observations of what the presenter did and how students reacted during the lesson. These comments should be descriptive, not judgmental. The purpose of the joint reflection is not to find fault with what the presenter did, it is to help each teacher consider, in depth, issues that they might otherwise overlook. For example, a teacher who says "I felt really good about today's lesson" might be prompted to think further by a reflective partner asking a question such as "Did everything in the lesson happen the way you had planned it?" or "What

do you think made the difference between today's lesson and your lesson last Tuesday?" Neither of these questions has a judgmental focus, yet each can be a prompt for useful reflection. "The key to successful reflection is in guiding participants away from being defensive to taking ownership of what they can reasonable change" (Rallis, 1994, p.265).

If the lesson was videotaped (or audio taped), the faculty can refer to these tapes to remind them of important things that happened in the lesson, to reveal to them things about which they were not aware, and to help them analyze the effectiveness of the teaching strategies that were used. The discussion stimulated by the videotape can focus on specific things such as how the lesson was introduced, how a particular concept was explained, or how the students were organized for an activity. The videotape can also convey a general impression about the lesson; were the students enthusiastic, did the teacher appear confident, was the lesson well organized? Appendix D contains some questions that teachers can use individually, or with a partner, to stimulate reflection on videotaped lessons.

After they have discussed the lesson from the point of view of the presenter and the observer, the reflective partners should consider the students' perspective on the lesson. Often, lecturers and students have quite different perspectives on teaching and learning (Killen, 1994; Rallis, 1994), and the comments they make can help to identify aspects of the lessons that the students found satisfying and aspects that may have caused them some concern. Particular attention should be paid to any comments that the students make that suggest they were having difficulty learning.

After considering the views of the presenter, the observer and the students, the reflective partners should make a brief summary of the strengths and weaknesses of the lesson and set targets for improvement so that the presenter will have some specific goals for improvement in his or her next lesson. If the reflective partners identify some problem or difficulty that they cannot solve, it may be appropriate for them to seek help from another source. This might involve discussing a difficult problem with another teacher or with a faculty developer, or it might mean searching for guidance in books or journals in the library. It will be very helpful for the faculty to keep a journal or diary

138

of information that summarizes the processes and outcomes of their efforts to improve their teaching. This record will provide a valuable source of information that the faculty can review in the future, and it will also provide strong evidence of their commitment to self-improvement.

Once the reflective partners agree that they have learned as much as they can from analyzing the lesson, they can then agree on a time for the next reflective lesso: (when they will change roles and the observer will become the presenter). The reflective process is then repeated. When the reflective partners teach similar subjects they should try to observe each other teaching similar topics in those subjects. This will provide an extra dimension to their reflection because it will allow them to compare very specific aspect of their teaching as well as reflecting on general issues. It will be productive to continue the sharing of experiences and ideas for at least six lessons (three presented by each partner) over a period of two to four weeks. At that time, the partners may decide that it will be beneficial to change reflective partners.

When faculty first engage in this guided reflection, they should select lessons for which the content is very clearly defined, that is, lessons for which they have very clear objectives and for which the scope of content, and the required depth of treatment of that content, can be easily stated. This clarity is needed so that the faculty will be able to easily compare what they did in each lesson and why they did it. It is easy for faculty from the same subject area to help each other reflect on their teaching because they have a common understanding of the content that is being taught. However, the reflective partners should not restrict their reflections to discussions of content. They should focus on how and why the content was taught, what the students learned, how the lesson could be made more interesting, and so on. As the faculty get more skilled in describing and analyzing what happens in their classrooms, they will be able to reflect more easily on lessons for which the content or objectives may not be so clearly defined. They will also soon realize that their reflection needs to go beyond the technical aspects of teaching and that they need to consider broader issues such as the value of what they are teaching, the hidden messages

they are conveying, and their explicit and implicit expectations of students.

As faculty become accustomed to reflecting on their teaching and sharing ideas about teaching with their colleagues, they can benefit from forming a reflective partnership with someone who teachers in a different subject area. This cross-subject cooperation adds several new dimensions to reflection. First, it makes it easier for the partners to focus their attention on the teaching strategies that are being used, rather than on the fine details of the content. Second, it may allow the observer to provide feedback from the perspective of a naive learner. Third, it reduces the stress on the presenter as they will not be worried about defending the particular interpretation that they are placing on the content. Finally, it exposes faculty to teaching approaches that they might never see in their own subject area.

Conclusion

Whatever techniques faculty use to stimulate and guide their reflection, they will become more aware of their strengths and limitations as a teacher. With this increased awareness, they will realize that many things they do help students to learn, and that some things they do are not very helpful. They will then be in a better position to plan to improve their teaching.

This paper has raised a number of issues about reflection, and provided some guidance for faculty who are willing to cooperate with a colleague in their quest to improve their teaching. If faculty reflect carefully on all aspects of their teaching they can: better understand what is happening in their classrooms; see how their teaching is influenced by factors such as their beliefs about teaching, social norms, traditions, and politics; view their lessons from the perspective of their students; question what they are teaching and why they are teaching it; question how they teach; improve relationships between faculty and their students; and, improve student learning. Of these reasons for reflecting, the last is clearly the most important.

References

Cole, D. J. (1991). Developing reflection in educational course work via the professional portfolio. *Gateways to Teacher Education, 4*(1), 1-12.

Cruickshank, D. R. (1987). *Reflective Teaching: The preparation of students of teaching.* Reston, VA: Association of Teacher Educators.

Dewey, J. (1933). *How we think.* Boston: D. C. Heath.

Garman, N. B. (1984). *Stable data and clinical supervision.* A paper presented at the Annual Conference of the Association of Teacher Educators, New Orleans.

Garman, N. B. (1986). Reflection, the heart of clinical supervision: A modern rationale for professional practice. *Journal of Curriculum and Supervision, 2*(1), 1-24.

Gauthrie, D. P. (1963). *Practical reasoning.* Oxford: Oxford University Press.

Gitlin, A. & Teitlebaum, K. (1983). Linking theory and practice: The use of ethnographic methodology by prospective teachers. *Journal of Education for Teaching, 9*(3), 225-234.

Gore, J. M. & Zeichner, K. M. (1991). Action research and reflective teaching in preservice teacher education: A case study from the United States. *Teaching and Teacher Education, 7*(2), 119-136.

Habermas, J. (1974). *Theory and practice.* London: Heinemann.

Hanna, W. (1986). Improving student teacher effectiveness through action research projects. *Action in Teacher Education, 8*(3), 51-56.

Harnish, D. & Wild, L.A. (1994). Mentoring strategies for faculty development. Studies in Higher Education, 19(2), 191-201.

Hill, S. (1986). Language education and field experiences. *Journal of Teacher Education, 37*(3), 56-59.

Hoffman, D. (1994). Metaphors of teaching: Uncovering hidden instructional values. *To Improve the Academy,* 13, 109-120.

Killen, R. (1991). Modifying the clarity behaviours of experienced teachers through structured feedback. *The South Pacific Journal of Teacher Education, 19*(2), 103-115. Killen, R. (1994). Differences between students' and lecturers' perceptions of factors influencing students' academic success at university. *Higher Education Research and Development,* 13(2), 199-212.

Killen, R. & Killen, A. (1992). Faculty development through reflective teaching. *The Journal of Staff, Program, and Organizational Development, 10*(2), 69-74.

Korthagen, F. A. & Wubbles, T. (1991). *Characteristics of reflective practitioners: Towards an operationalization of the concept of reflection.* A paper presented at the Annual Meeting of the American Educational Research Association, Chicago.

Kurth, R. J. (1994). Using faculty peers to improve instruction in diversified college classrooms. Paper presented at the Annual Meeting of the American Educational Research Association, New Orleans.

Marshall, H. H. (1990). Metaphor as an instructional tool in encouraging student teacher reflection. *Theory into Practice, 29*(2), 128-132.

Martinez, K. (1990). Critical reflections on critical reflection in teacher education. *The Journal of Teaching Practice*, 10(2), 20-28.

Noffke, S. E. & Brennan, M. (1988). *The dimensions of reflection: A conceptual and contextual analysis.* A paper presented at the Annual Meeting of the American Educational Research Association, New Orleans, April.

Nolan, J. F. & Huber, T. (1989). Nurturing the reflective practitioner through instructional supervision: A review of the literature. *Journal of Curriculum and Supervision*, 4(2), 126-145.

Onosko, J. J. (1992). Exploring the thinking of thoughtful teachers. *Educational Leadership*, 49(7), 40-43.

Rallis, H. (1994). Creating teaching and learning partnerships with students: Helping faculty listen to student voices. *To Improve the Academy*, 13, 255-268.

Ross, D. D. (1989). First steps in developing a reflective approach. *Journal of Teacher Education*, 40(2), 22-30.

Ruddick, J. & Sigsworth, A. (1985). Partnership supervision. In D. Hopkins & K. Reed (Eds.), *Rethinking teacher education*. London: Croom Helm.

Schön, D. A. (1987). *Educating the reflective practitioner: Toward a design for teaching and learning in the professions.* San Francisco: Josey-Bass.

Seldin, P. (1991). *The teaching portfolio: A practical guide to improved performance and promotion/tenure decisions.* Bolton, MA: Anker Publishing Company.

Shapiro, B. L. (1991). A collaborative approach to help novice science teachers reflect on changes in their construction of the role of science teacher. *Alberta Journal of Educational Research*, 37(2), 19-32.

Troyer, M. B. (1988). *The effects of Reflective Teaching and a supplemental theoretical component on preservice teachers' reflectivity in analyzing classroom teaching situations.* Unpublished doctoral dissertation, The Ohio State University, Columbus, Ohio.

Vall, N. G. & Tennison, J. M. (1992). International student teaching: Stimulus for developing reflective teachers. *Action in Teacher Education*, 13(4), 31-36.

Van Manen, M. (1977). Linking ways of knowing with ways of being practical. *Curriculum Inquiry*, 6, 205-228.

Van Manen, M. (1991). Reflectivity and the pedagogical moment: The normativity of pedagogical thinking and acting. *Journal of Curriculum Studies*, 23(6), 507-536.

Walker, D. (1985). Writing and reflection. In D. Boud, R. Keogh & D. Walker (Eds.), *Reflection: Turning learning into experience*. London: Kogan Page.

Walker, T. J., Adamsky, R. A., Brower, E. B. & Hart, K. (1992). The reflective teacher: An outcome of program VITAL. *Journal of Industrial Teacher Education*, 29(2), 23-34.

Winitzky, N. & Arends, R. (1991). Translating research into practice: The effects of various forms of training and clinical experience on preservice students' knowledge, skill, and reflectiveness. *Journal of Teacher Education*, 42(1), 52-65.

142

Zeichner, K. M. (1981-82). Reflective teaching and field-based experience in teacher education. *Interchange*, *12*(4), 1-22.

Zeichner, K. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education*, *34*(3), 3-9.

Zeichner, K. (1987). Preparing reflective teachers: An overview of instructional strategies which have been employed in preservice teacher education. *International Journal of Educational Research*, *11*(5), 565-575.

Zeichner, K. (1992). *Connecting genuine teacher development to the struggle for social justice. Issue Paper 92-1.* East Lansing, MI: National Center for Research on Teacher Learning. ERIC Document ED344881.

Zeichner, K., & Liston, D. (1987). Teaching student teachers to reflect. *Harvard Educational Review*, *57*(1), 23-48.

APPENDIX A

A Simple Questionnaire for Obtaining Feedback from Students

Students can be asked to answer these questions at the end of a lesson.

1. Please circle a number to indicate how much of *this lesson* you think you understood?

    0   1   2   3   4   5   6   7   8   9   10

    Nothing   Everything

2. In this lesson what things did the teacher do to make it easy for you to understand the lesson content?

    _____
    _____
    _____
    _____
    _____
    _____
    _____

3. In this lesson what things did the teacher do that confused you or made it difficult for you to understand the lesson content?

    _____
    _____
    _____
    _____
    _____
    _____
    _____

141

Appendix B

Lesson Evaluation

Please think about what the teacher did in this lesson and place ticks in the boxes to indicate how much you agree or disagree with each statement.

```
                                      Agree strongly  5
                                           Agree  4
                      Neither agree nor disagree   3
                                       Disagree  2
                      Disagree strongly      1
```

In this lesson the teacher	1	2	3	4	5
1. Was we organized					
2. Was confident					
3. Was enthusiastic					
4. Appeared to know a lot about the subject					
5. Told students what the lesson objectives were					
6. Did not go too fast					
7. Did not go too slow					
8. Explained the meanings of words that I did not understand					
9. Made the information easy for me to understand					
10. Presented the lesson in steps that I could follow					
11. Spoke clearly					
12. Made it easy for me to see what was important in the lesson					
13. Made the lesson interesting					
14. Used suitable examples to explain main points					
15. Encouraged students to ask questions					
16. Gave satisfactory answers to students' questions					
17. Made me think for myself					
18. Encouraged students to be involved in the lesson					
19. Used the whiteboard or blackboard effectively					
20. Used the overhead projector effectively					
21. Gave me time to think about new information					
22. Asked questions to check students' understanding					
23. Gave a useful summary of the main points of the lesson					

Appendix C

Questions that Reflective Partners Can Use to Stimulate Reflection

When reflective partners are comparing their lessons, they can each other questions such as the following:

1. Did the lesson proceed in the way you had planned it? Why?
2. Did your students react to the lesson in the way you thought they would?
3. What specific things did you do to help the students understand difficult parts of the lesson?
4. Did you do anything that confused the students or made it difficult for them to understand the lesson?
5. How did the students react to your lesson?
6. During the lesson, did you feel confident and enthusiastic? Why?
7. What did you do in the lesson to allow for individual differences in students' learning styles or abilities?
8. Do you think your students learned all that you wanted them to learn in this lesson? What brings you to that conclusion?
9. What did you do in the lesson to make students feel that they had some control over what they were learning?
10. What did you do to encourage the students to participate actively in the lesson?
11. Did anything in this lesson reinfc ~e or contradict your beliefs about teaching or learning?
12. What did you learn about teaching i.om this lesson?
13. What did you learn about student learning from this lesson?
14. What are the positive features of this class?
15. What problems need to be addressed in this class?
16. What social norms were reinforced by your lesson?
17. What was there in your lesson that reflects the hidden curriculum?
18. What targets (for improvement) have you set yourself for this class, and are they realistic?
19. If you were to teach the lesson again tomorrow, what would you do differently? Why?

Appendix D

Questions to Assist in Self-analysis of Teaching

The main reason for making an audio recording or videorecording of your lesson is to help you see how you appear to your students. By listening to the audiotape or viewing the videotape several times, you should be able to identify your major strengths as a teacher, and the aspects of your presentation that need to be improved. When reviewing your tape, ask yourself the following questions:

1. Did I appear to be interested in what I was teaching?
2. Did I appear to be enthusiastic about what I was teaching?
3. Did I appear to be well organized?
4. Did the students know what I wanted and them to learn and why?
5. Did I have any mannerisms that might annoy students?
6. Did I maintain eye contact with as many students as possible?
7. Were my verbal and non-verbal messages consistent?
8. Was my presentation fluent but well paced, with appropriate pauses and variations? Did I use inflections, volume, and emphasis to convey variations in meaning, or was my voice monotonous?
9. Did the students have to strain to hear me?
10. Was my voice friendly and pleasant?
11. What did I do to help the students understand the structure of the information I was presenting?
12. Did I vary my presentation to make it interesting?
13. Did I walk around unnecessarily or remain frozen in the one spot?
14. Could the students see clearly all the materials I used to visually support my presentation?
15. Was my teaching style authoritarian, democratic, or friendly? How did the students react to this style?
16. What sort of questions did the students ask me?
17. Which students participated most in the lesson? Why?
18. What can I do to improve the image that I project to my students?

The Case for Instructional Mentoring

Richard J. Nichols

Kean College of New Jersey

Beverley T. Amick

Kean College of New Jersey

Mentoring to enhance instructor performance in the classroom is the focus of this article. It is directed toward faculty developers conducting or developing a mentoring program, and toward individuals about to enter a mentor-mentee relationship. The article provides a look at mentoring in general, concentrates on what is required of the mentor and the mentee in order to develop teaching talent, and makes a case for the importance of mentor training. A suggested mentor training seminar concludes the article.

Mentoring is an idea that can be traced back to the ancient Greeks where Homer reports in the *Odyssey* that Odysseus left his son Telemechus in Mentor's care (Siegmann, 1987). Howey (1988) comments that historically the term mentor implied someone who was responsible for educating a young charge while acting as counselor and confidant much like Mentor did. Informal and formal mentoring takes place in the professions, in business, and in educational settings. Recently, institutions of higher education have begun to institute formal mentoring programs for new and returning faculty.

Over the years, the view of mentoring has broadened considerably. This is particularly true of the range of responsibilities assumed when mentoring. For example, Shea (1992) has developed a check list of twenty things that mentors may be called upon to do; while others

have written about the varied functions and roles mentors may per-
form. Challenging, coaching, and dialoging are seen as mentor func-
tions by Blackwell (1989). Luna and Cullen (1992) see it as
sponsorship, networking, and role modeling as well as the develop-
ment of the individual. Similarly, mentoring is viewed as being a
comprehensive endeavor by Freudenthal and DiGiogio (1989) who
include teaching, research, and service components in a mentoring
program. Other functions are likely to include serving as a trusted
colleague, developer, symbolizer of experience, coach/supervisor,
and anthropologist (Head, Reiman, and Thies-Sprinthall, 1992). The
way mentors perform these functions and the emphasis given to each
will vary according to an organization's purposes and needs. Educa-
tional institutions concerned with providing high quality instruction,
which translates into assuring that the novice instructor is pedagogi-
cally knowledgeable and practiced, will want to give emphasis to each
of these functions as crucial to the process; but particular emphasis
should be given to the functions of developer, symbolizer of experi-
ence, and coach/supervisor; for it is in the performance of these
functions that the traditional primary mentor may have the most
impact on the enhancement of the novice's instructional knowledge
and skill—the focus of this article.

Further, this article will argue that the training of mentors is vital
to the success of a mentoring program, and that such training must
include a focus on teaching. Teaching is a major concern for new and
non-tenured faculty. Boice (1990) found that both mentors and men-
tees were uncomfortable discussing teaching; yet it was one of the
major topics discussed by mentors and mentees. A similar finding is
reported by Holmes (1988) who found that teaching was the topic most
frequently discussed by mentors and mentees.

The majority of faculty in higher education have received training
in their disciplines, but not in instructional strategies. Therefore, those
faculty selected as mentors need training in instructional strategies to
prepare them to be successful mentors of instruction. This need is
supported by Boice and Turner (1989) who found at the end of the
first year of their mentoring project that more structure and encour-
agement were needed in order for mentors to observe mentee's teach-
ing. In fact, Boice (1992) had to provide checklists and structure the

observational role for the mentors so that they could discuss the act of teaching in a helpful manner with their mentees. Wunsch (1994), also, supports the idea of training mentors and mentees. Carter (1988, p.214) has written that "Learning to teach should be thought of as an intellectual activity" and when mentors perform the functions of developers, symbolizers of experience, and coach/supervisors of novice instructors they encourage such intellectual activity. As developers, mentors encourage their novices to engage in self-analysis of technical, affective, and critical dimensions of teaching; as symbolizers of experience, mentors assist their novices in building a language of teaching and in interpreting experience; as coach/supervisors mentors can provide cycles of assistance for the novice within a clinical supervision model of teaching (Head, et al. 1992).

Giving emphasis to the functions of developer, symbolizer of experience, and coach/supervisor, each of which directly supports instructional enhancement, points up the fact that coaching in and of itself is not enough for real instructional improvement, while at the same time such emphasis supports a point made by Glickman (1990a) that mentoring is more than a budding relationship of social support. For Glickman, mentoring is a relationship between experienced and novice faculty that inquires about and strengthens instructional competence. He writes: "In its fullest sense [mentoring] is a process that says to people coming into teaching that observing, meeting, discussing, and making informed decisions about teaching and learning is a professional work." (p. viii)

Accepting Glickman's concept of mentoring as a process to inquire about and strengthen instructional competence leads to the question of what is needed to make such a process work. What are the characteristics and skills the mentor and mentee must bring to a process focusing on instruction?

Desirable Mentor Characteristics and Skills

There are many areas in which mentors must be knowledgeable, and there are a variety of mentoring skills to be mastered. Instructional mentors need a training program to prepare them for the mentoring role. They need to understand their responsibilities as well as those of

the mentee. In addition, they need to acquire and/or develop the skills involved in mentoring. Mentors need to be knowledgeable about adult learning and development to work effectively with proteges. Mid-career individuals who are known as good teachers are those who are likely to be selected to serve as instructional mentors. These individuals are at a point in their lives where they are reappraising their professional career and accomplishments and readjusting their goals. The mentee, on the other hand, is generally a young adult, new to teaching, who is being initiated into the institution and who is trying to meet his/her professional objectives (Head et. al. 1992). Jackson and Simpson (1994) argue for mentoring junior faculty who have not had any full-time teaching experience as a way to help them reach their teaching effectiveness goals. The mentor must be aware of the differences in orientation and stages of development in order to effectively guide the mentee.

Knowledge of curriculum and the resources of the institution is another essential for the mentor. The mentor needs to understand the relationship between general education and major requirements as well as the relationship of specific courses to each of these. The mentor is responsible for helping the protege understand how the courses he/she is assigned fit into the curriculum structure. A responsibility of the mentor is to familiarize the protege with the instructional resources available. These include library, audiovisual, technological, student learning assistance programs, and faculty professional development opportunities.

The third area of expertise needed by instructional mentors is a knowledge of teaching strategies and techniques. Not only will the mentor be called upon to discuss the dynamics of teaching, but he/she will be asked to observe the mentee's class or the mentee may ask to visit the mentor's class to observe a particular strategy which the mentor will model. Frequently, new instructors come prepared to imitate the teaching behavior of their professors, and this may have been largely lecture. With the diversification of the student body in many colleges and universities, it is necessary for the instructional mentor to have knowledge of and the ability to guide the mentee in the use of a variety of strategies such as discussion, cooperative groups, small groups, and case studies.

Student assessment is a fourth area in which mentors need to be prepared to guide the mentees. Over the years, the mentors have developed a variety of strategies for assessing student progress. Some of these are formal while others are informal. The new faculty member knows only the formal techniques that have been experienced as a student. The senior faculty member needs to be consciously aware of the techniques, both formal and informal, that are used in his/her classes and to share these with his/her protege. These can be techniques for assessing student knowledge of content, skills, attitudes, and/or values. An informal assessment approach, for example, might be something as simple as a review question based on the last class, which is placed on the board. Upon entering the room, students jot down their individual responses to the question. These responses may be collected, shared with a peer, briefly discussed in the whole class setting, or used in any combination of these three ways.

The fifth area of knowledge and skills needed by the mentor is that of modeling. Not only will the mentor model instructional strategies, but he/she will model conferencing skills with students and colleagues as well.

Supporting Skills of Mentors

In addition to the five areas of expertise discussed above, instructional mentors need skills in planning, observing, and conferencing. A training program for instructional mentors needs to focus on these three aggregates of skills.

First year faculty need guidance in planning for teaching. Boice (1990) found that new faculty spent an average of 23.5 hours a week preparing lectures and many received mediocre student ratings. Instructional mentors can help their proteges with class planning. They can discuss issues such as who are the learners and what prior knowledge do they bring to the course. New faculty can be guided in the development of a semester plan and then in the development of plans for specific class sessions. Helping the mentee understand the dynamic nature of the act of teaching and then the planning process for teaching is a key mentor function. Consideration needs to be given to helping the new instructor clarify and articulate the objectives for

class sessions. Then helping him/her determine the content and the best instructional procedure to achieve the objectives follows naturally. At this point timing may be an issue and an instructional mentor can assist with the development of this skill. The final step is for the mentor to help the mentee with procedures for assessing student learning.

In order to help new instructors, it is necessary for the instructional mentor to observe them teaching. Due to the dynamic nature of classroom interactions, observers need a framework for viewing what is happening in the class. Instructional mentors can be prepared to observe from a variety of vantage points, to determine a focus for each observation, and to report objectively to the mentee on their observations. Hyman (1986) suggests a variety of reasons for observing. These range from observing to know what is happening in the protege's classroom, to observing to create dissonance and facilitate change. The key to successful observation is being clear about the reason for the observation, the specific aspects to be observed, and being objective in the observation.

The third set of skills mentors need are those of conferencing. After observing, the mentor will need to have a conference with the mentee about what the mentor focused on in the class. With preparation, mentors can learn conferencing skills that allow them to be objective about what they have seen and to report to the protege on the specifics of the observation. The language used should be descriptive rather than judgmental. The mentor can make statements such as, "There were 20 women and 15 men in the class." "Eight men and two women spoke during the first thirty minutes of the class discussion." These are descriptive statements. Each statement tells the instructor exactly what transpired in the class with no indication of whether this is good or bad. This type of conference allows for the focus to be placed on teaching skills, student behavior, professional knowledge and planning.

Desirable Mentee Characteristics and Skills

To this point the discussion has focused on the role of the mentor and what he/she must bring to the mentoring process. However, two

people are involved—the mentor and the mentee—and for the process to be a success the mentee must also contribute. Cunningham (1994), writing on mentoring for professional development in general, has suggested that in successful mentoring relationships the mentee brings to the relationship a desire to learn, interest in people, orientation toward a goal, conceptual ability, initiative, ability to be introspective, and assertiveness.

In an educational setting the following, slightly more specific set of characteristics and skills is deemed desirable for the novice instructor in the mentee's role: (1) knowledge of academic discipline, (2) desire to improve pedagogical knowledge and skills, (3) interest in students, (4) conceptual ability, (5) conferencing skills, (6) ability to be introspective, (7) assertiveness.

The relationship of knowledge of academic discipline and the desire to improve pedagogical knowledge and skills and their importance to the instructional process is summed up in a quotation from Northrop Frye cited in Schoenfeld and Magnan (1994): he says, "A teacher who is not a scholar is soon going to be out of touch with his own subject, and a scholar who is not a teacher is soon going to be out of touch with the world." (p. 162)

When the mentee is lacking in knowledge of his/her academic discipline and has little desire to improve his/her pedagogical knowledge and skills, whatever mentoring takes place is almost certainly doomed to fail. If, however, these two characteristics are present and are accompanied by an interest in students - who they are and how their learning can be facilitated - foundations for mentee contributions help form a successful mentoring experience.

For the mentoring experience to be truly successful, however, the remaining desirable mentee characteristics and skills of conceptual ability, conferencing skills, ability to be introspective, and assertiveness must also be present. The first of these, conceptual ability, has been discussed by Glickman (1990b). He categorizes how a mentee in each of three levels of abstract thinking is likely to respond to a given situation. Glickman notes, for example, that the mentee with a low level of abstract thinking will demonstrate confusion about a situation, will not know what can be done, will ask to be shown, and will use habitual responses to varying situations. The individual with

149

a high level of abstract thinking, on the other hand, will define the situation by drawing relationships between several sources of information, can relate the information to a change in instructional practice, may generate many alternative responses, and can evaluate the consequences of each response and choose the most likely to succeed. Obviously the individual who comes to the mentoring process with a high level of abstract thinking will make the mentor's work easier.

Conferencing skills are also crucial to a successful experience, and this is a set of skills that can be developed during the process if the mentor and the mentee will devote some time to such skill development. To help the mentee get the most from a conference following an observed teaching performance, Hyman (1986) has developed a list of things a mentor should review with a mentee. They are guidelines for receiving feedback in a helpful, meaningful way and include such things as: focusing on what is being said rather than how it is said; focusing on feedback as a learning tool rather than as criticism; focusing on accepting the information and suggestions offered rather than defending what you did; focusing on seeking specific, concrete suggestions regarding your performance rather than abstractions about your approach or attitude; focusing on clarifying what's been said to you rather than passively absorbing a lecture from someone; checking the feedback you received from a person by summarizing the main points for both of you.

The items on the Hyman list are particularly pertinent for instructional improvement, and in dealing with them, the two final items on the desirable mentee characteristics and skills list, introspection and assertiveness, come into play. The ability to be introspective and to reflect on the information provided on one's teaching during a conference is particularly useful in the mentee's determining what's working, what's not working as well as it might, and what might be done about it; while assertiveness is a characteristic that can be very useful in the conference itself, especially when seeking specific concrete suggestions and arifications from the mentor. If the mentor and the mentee are working in a supportive environment and enter the relationship with all the characteristics and skills previously listed, a successful experience is assured.

155

Matching Mentor and Mentee

A review of the literature on mentoring shows a concern about matching mentors and mentees. Luna and Cullen (1992) argue that new female faculty should be mentored by other females. Luna and Cullen feel this is critical because of the issue of balancing family and work. These authors also argue for same-race mentoring relationships. In a program where senior tenured women faculty were matched with junior women faculty, Wunsch and Johnsrud (1992) found the pairings were most successful in related disciplines or where there were common personal interests. Matches in the same department or in completely unrelated disciplines were not as successful. In an extensive study, Boice (1990) found that mentoring was effective in an institution of higher education. Contrary to the position of Luna and Cullen (1992), Boice (1990), in his research on mentoring, found that sex and ethnicity were not critical factors in the success of the mentoring relationship. In addition, in the same study, Boice (1990) found that mentors and mentees from different departments were as successful as the pairs from the same department. While the results of Wunsch and Johnsrud's (1992) work and Boice's (1990) work show some contradictions, they do agree on the need for providing training for the mentors. A key factor in a successful mentoring relationship seems to be the process used in mentoring rather than who the mentor and mentee are. This is why training is an important component of mentoring programs (DeJong, Hartman, and Fisher-Hoult, 1990).

Summary and Conclusion

Three major points have been the focus of this article: (1) a mentoring process focusing on instructional competence offers an effective means for developing teaching talent; (2) a mentor concerned with enhancing instructional performance may be called upon to perform a variety of functions, particularly the functions of developer, symbolizer of experience, and coach/supervisor; (3) faculty who become mentors often have had little experience in performing the functions of developer, symbolizer of experience, and coach/supervisor, and a training program for mentors which focuses upon the

knowledge and skills needed to successfully perform each of these functions may be of considerable value.

Belief in the value of such training has lead to the development and presentation of a mentoring seminar which addresses the mentor's role, adult and professional development, planning, observation techniques, and conferencing techniques. The objectives of the seminar are as follows:

Participants will:

A. understand the mentor's and the mentee's role within the context of a professional development program;
B. know and understand current theories of adult and professional development and their relationship to the mentoring process;
C. know and understand the types and functions of planning and ways to assist mentees in the development of plans;
D. demonstrate knowledge of observational techniques and skills in observing mentees:
E. demonstrate knowledge of conferencing strategies and skills in employing these strategies, particularly in providing descriptive feedback.

For each objective a module has been developed which may be delivered in 1½ to 2½ hours. Active learning strategies such as group discussion, role playing, simulations, group problem solving, and case studies are used as the dominant forms of instruction in presenting these modules which deal with the following topics:

A. The Mentor's Role

    1. Overview of mentoring within a professional development program
    2. The mentor's functions
    3. Skills and characteristics needed for effective mentoring
        a. Mentor
        b. Mentee
    4. Support vs. evaluation
B. Adult and Professional Development

1. Beliefs/behavior continuum for mentors
2. Prior learning of mentees
3. Learning stages
4. Developmental complexity
    a. Mentee
    b. Mentor
5. From coach to consultant to colleague

C. Planning
    1. Mentee's developmental stage and planning
    2. The functions of planning
    3. Types of plans
    4. Planning models
    5. Pre-planning decisions
    6. Plans and subsequent teaching actions

D. Observations
    1. Planning models and observations
    2. Indicators of effective teaching
       a. Direct
       b. Indirect
    3. Observation of the mentee
       a. Why one looks
       b. What one looks for
       c. How to look
    4. Five types of mentoring statement processes

E. Conferencing
    1. Mentoring statement processes and conferencing
    2. Three types of conferences
    3. Developmental conferencing strategies
    4. Communication skills: listening, using descriptive language
    5. Soliciting and offering alternative instructional techniques and strategies
    6. Helping the mentee to develop conferencing skills

This seminar has served to enhance mentors' knowledge and skills, which in turn enhances their work with their mentees, which then enhances the mentees' instructional performances. From this it is concluded that when two adults—a trained and experienced faculty

member and a novice instructor—understand themselves and each other and work in a supportive environment which emphasizes quality instruction, positive results will show in the classroom.

References

Blackwell, J.E. (1989). Mentoring: An action strategy for increasing minority faculty. *Academe*, 75 (5), 8-14.

Boice, R. (1992). Lessons learned about mentoring. In M.D. Sorcinelli & A.E. Austin (Eds.), *New Directions for Teaching and Learning: Developing New and Junior Faculty, No. 50*, (pp. 51-61). San Francisco: Jossey-Bass.

Boice, R. (1990). Mentoring new faculty: A program for implementation. *The Journal of Staff, Program and Organizational Development*, 8 (3), 143-163.

Boice, R. and Turner, J.L. (1989). The fipse-csuld mentoring project for new faculty. *To Improve the Academy*, 8 117-139.

Carter, K. (1988). Using cases to frame mentor-novice conversations about teaching. *Theory Into Practice*, 27, 214-222.

Cunningham, J.B. (1994) Using mentoring for professional development. In J.W. Pfeiffer (Ed.), *The 1994 annual: Developing human resources*, (pp. 227-241). San Diego: Pfeiffer & Co.

DeJong, C., Hartman, M. and Fisher-Hoult, J. (1994). Mentoring new faculty. *The Journal of Staff, Program and Organization Development*, 12 (1), 41-49.

Freudenthal, N.R. and DiGiogio, J. (1989). New faculty mentoring: the institution as mentor. *The Journal of Staff, Program and Organization Development*, 7 (2), 67-72.

Glickman, C. (1990a). In T. Bey and C.T. Holmes (Eds.), *Mentoring: Developing successful new teachers*, (pp. VII-VIII). Reston, VA.: Association of Teacher Educators.

Glickman, C. (1990b). *Supervision of instruction: A developmental approach* (2nd ed.). Boston: Allyn and Bacon.

Head, F., Reiman, A., and Thies-Sprinthall, L. (1992). The reality of mentoring: Complexity in its process and function. In T. Bey and C.T. Holmes (Eds.), *Mentoring: Contemporary Principles and Issues*, (pp. 5-24). Reston, VA: Association of Teacher Educators.

Holmes, S. (1988). New faculty mentoring: Benefits to the mentor. *The Journal of Staff, Program and Organization Development*, 6 (1), 17-20.

Howey, K. (1988) Mentor-teachers as inquiring professionals. *Theory Into Practice*, 27, 209-213.

Hyman, R. (1986). *School administrator's faculty supervision handbook*. Englewood Cliffs, N.J.: Prentice-Hall, Inc.

Jackson, W.K. and Simpson, R.D. (1994). Mentoring new faculty for teaching and research. In M.A. Wunsch (Ed.), *New directions in teaching and learning: Mentoring revisited: Making an impact on individuals and institutions, No. 57*, (pp. 65-72). San Francisco: Jossey-Bass.

159

Luna, G. and Cullen, D.L. (1992). Mentoring women and minorities: Application to higher education. *The Journal of Staff, Program and Organization Development, 10* (3), 133-139.

Schoenfeld, A.C. and Magnan, R. (1994). *Mentor in a manual: Climbing the academic ladder to tenure.* (2nd ed.) Madison, WI: Magna Publications, Inc.

Shea, G. (1992). *Mentoring: A practical guide.* Menlo Park, CA: Crisp Publications, Inc.

Seigmann, K.B. (Ed.) (1987). *Benet's readers encyclopedia.* (3rd ed.) New York: Harper Collins Publishers, Inc.

Wunsch, M.A. (1994). Developing mentoring programs: Major themes and issues. In M.A. Wunsch (Ed.) *New directions in teaching and learning: Mentoring revisited: Making an impact on individuals and institutions. No. 57* (pp. 27-34). San Francisco: Jossey-Bass.

Wunsch, M.A. and Johnsrud, L.K. (1992). Breaking barriers: Mentoring junior faculty women for professional development and retention. *To Improve and Academy, 11,* 175-188.

A Special Colloquium on Teaching Excellence to Foster Collegiality and Enhance Teaching at a Research University

James K. Wangberg

University of Wyoming

Jane V. Nelson

University of Wyoming

Thomas G. Dunn

University of Wyoming

This article describes an annual three-day colloquium on teaching sponsored by the Center for Teaching Excellence (CTE) at the University of Wyoming. Deans and directors nominate participants for the colloquium. Plenary and concurrent sessions are led by a mix of external and internal speakers and panelists. Participants find the greatest benefit to be the collegiality fostered by the event. Consistent support from the president, provost, and deans makes the colloquium highly visible and helps to enhance teaching throughout the university.

Although the task of reinforcing the institutional teaching mission and strengthening collegiality among faculty members is common to many campuses, it presents a special challenge to research universi-

ties. Whatever their missions, campuses often need to develop, maintain, or enhance the commitment to teaching.

Wyoming has the distinction of being the only state with a single four-year baccalaureate degree granting institution: the University of Wyoming. As a Carnegie II research university, UW's mission strongly emphasizes research, extension, and service. However, its long-standing principal priority is a firm commitment to excellence in undergraduate education.

This article summarizes how the special Colloquium on Teaching Excellence was developed at the University of Wyoming to foster collegiality and enhance its teaching mission. A colloquium of this type could be replicated at other colleges and universities to meet similar needs.

Colloquium History and Philosophy

The concept for a teaching colloquium at the University of Wyoming arose from a one-day training session on teaching developed for graduate assistants by an ad hoc group of faculty. Its success resulted in an expanded five-day session offered to the faculty at large in May, 1986. This teaching colloquium was very well-received by the participants, but financial constraints precluded its continuation. In 1990 the idea was revived with the creation of the Center for Teaching Excellence (CTE). One of the first of CTE's ventures was the Colloquium on Teaching Excellence, now in its fifth year.

The CTE's colloquium has aimed to reinforce the university's teaching commitment, to provide greater faculty development opportunities in teaching, and to recognize excellent and dedicated teaching faculty. The colloquium bears a dual charge: to offer an outstanding professional development opportunity for all members of the teaching community (Weimer, 1991) and to provide an annual event that confers a level of prestige on the participants. Hence, outstanding teachers may be selected as participants in order to recognize their achievements and to reward them with a meaningful professional development activity. Individuals having some difficulties in teaching, but with the desire and dedication to make improvements, may also be involved. The colloquium is specially designed to increase

162

collegiality among teachers in all disciplines and strengthen the overall academic community.

Colloquium Structure and Format

The three-day colloquium takes place on the University of Wyoming campus in Laramie during the third week of May each year, two weeks after the university commencement but prior to the first summer session. Apart from a few intersession courses, no classes are being taught at the time. Most faculty, including those with nine-month appointments, remain on campus for the May interim between spring semester and summer activities.

To ensure small and highly interactive sessions, participation in the colloquium is limited to 65-75 faculty (approximately 10% of the total faculty), nominated by their academic deans and directors. The number of participants from each college or school is proportional to the size of their academic units. The deans and directors use their own criteria for selection, and their nominations produce a satisfactory mix: junior and senior faculty members, people recognized for outstanding teaching, and those who are experiencing some difficulties with teaching. All nominees express an interest in teaching improvement. A few "at large" nominations permit some flexibility in accommodating special circumstances.

The colloquium program is designed for intensive and interactive learning. (See Appendix A for a sample program.) Each of the three-day sessions begins at 8:00 am and concludes by 5:00 pm. Program sessions are punctuated by morning and afternoon breaks, where refreshments are provided, and by lunch, which is also provided. Department chairs, deans, directors, vice presidents, trustees, key donors, legislators, and the University president are invited to attend a special reception at the end of the colloquium's first day, with colloquium participants and their spouses or friends. A typical colloquium is scheduled for Monday, Tuesday, and Thursday. First year participants recommended that we schedule the Wednesday break as a respite from such an intensive program. The unscheduled day provides time for informal gatherings, follow-up on inspirational ideas, and some introspection before embarking on new topics and

new speakers on the final day. Time for informal contacts is an important element in such conferences (Sorcinelli & Price, 1990).

The colloquium sessions are led by a variety of internal and external speakers, panelists, workshop leaders, and facilitators. Each year, one or two external speakers of national stature and reputation are invited as keynote speakers and facilitators for follow-up workshops. The external speakers receive stipends. UW faculty and other members of the university's academic community lead the majority of colloquium sessions. They are invited by the CTE to participate, usually without remuneration; and they contribute because of a sincere interest in serving the university and interacting with colleagues. In some years the budget has permitted a $100 honorarium for internal speakers.

On the opening morning of the colloquium, after welcomes and introductions, an external speaker introduces the keynote theme in a plenary session. In the afternoon, this speaker leads some workshop sessions to establish the interactive nature of the colloquium. For the second and third days, the daily format usually incudes an opening session for the entire group and one or two common group sessions at other times in the day. The majority of the day is arranged around a menu of concurrent sessions. Most of these sessions are repeated once, but because of the diversity of offerings, participants cannot attend every session. Dividing the whole group into smaller sessions of 8-20 participants promotes active discussion in a workshop-like setting.

The colloquium theme differs each year, and there are always new seminar titles and workshop activities. Some topics are repeated or expanded from previous colloquia due to continued relevance and popularity. As advocated by Sorcinelli and Price (1990), the offerings attempt to cover a range of learning experiences. Popular themes include the following:

cooperative and active learning	teaching large classes
assessing learning	diversity
effective use of discussion	teaching and the Internet
distance learning	multimedia and instruction
involving students in teaching	exemplary classrooms
classroom research and assessment	teaching freshmen

164

technology in the classroom
application of Myers-Briggs
personality indicators
student and faculty expectations
in the classroom
writing and math across the curriculum

legal issues
teaching problem solving
and critical thinking
teaching styles

The cost of the colloquium has ranged from $5000-10,000 per year, depending on the number of external speakers and their fees. Costs are covered by the CTE operating budget (state appropriations) and from extramural grants. Participants pay no registration costs or fees and there are no costs to the colleges or academic units they represent. The CTE provides all participants with a program notebook, speakers' materials, and one or two books related to college teaching or learning, such as Sheila Tobias's *They're Not Dumb, They're Different* (1990), *147 Practical Tips for Teaching Professors* (1990), and *Quick Hits: Successful Strategies by Award Winning Teachers* (1994). Door prizes are awarded to participants throughout the colloquium. At the end of the colloquium participants receive a certificate documenting their participation.

Fostering Collegiality

Through formal evaluations and informal comments the participants consistently applaud the colloquium and reveal the many ways it benefits them professionally. While recognizing the valure of the speakers and topics, they find the most beneficial aspect of the colloquium to be the way in which it fosters collegiality. Many confess that they rarely get to know people outside of their own departments, not to mention their schools or colleges, therefore they find the opportunity to interact with faculty from all disciplines to be highly stimulating and rewarding, an outcome that is consistent with others' findings (Lamber et al., 1993). They discover affinities in their teaching that they did not anticipate or consider as possibilities, and they make commitments to stay in contact. This capacity of the colloquium to foster collegiality is the principal reason why colloquia programs

now have longer interactive sessions and more lengthy breaks. Faculty value most the time they can talk with each other.

By design, the colloquium creates multiple opportunities to foster collegiality. Limited registration and orchestrated attendance in con- current sessions helps achieve this objective. Facilitators, speakers, and panel moderators who understand active learning and discussion strategies further promote a collegial environment. Other strategies encourage people to mix and to enjoy each other's company. For example, participants arrive on time to sessions for the pleasure and humor of watching each other win door prizes. At lunch the first day, participants are surprised by prearranged place settings that seat them with faculty from other departments and colleges. After this first assigned seating, it is no longer necessary to prevent self segregation by discipline; the participants continue discussions with their new colleagues or actively make more acquaintances. Even after the col- loquium has ended, the CTE continues to promote collegiality by including colloquium participants on an e-mail list and providing them with special and advanced notifications and invitations to other teach- ing events. Past colloquium attendees may be asked to participate in future colloquia as seminar speakers or facilitators, so many of the contacts that are made through the colloquia continue to be cultivated.

Evaluation of Participants' Experiences

Every colloquium and all speakers and topics are formally evalu- ated by participants and colloquium organizers, and such evaluations are often useful in generating or improving follow-up activities (Sor- cinelli & Price, 1990). Participants are asked to rate, on a 1-5 scale, both the effectiveness and the usefulness of the plenary sessions and the concurrent presentations/workshops. They also evaluate the col- loquium in general on such issues as its length, the time of year that it is offered, the mix of speakers, and the material presented (see Appendix B for a sample evaluation form). The ratings reflect overall satisfaction with the colloquium, which participants express in testi- monials such as the following:

166

"I have learned to be more creative."

"I have benefitted personally by knowing that there are many at the University of Wyoming who know we can and need to do better teaching."

"I felt renewed enthusiasm for my teaching."

"It was very informative to hear and experience different teaching techniques."

". . . provided a rare opportunity to exchange ideas with colleagues across the university."

". . . inspired me. . ."

". . . made me realize that there was a supportive community of faculty who were interested in improving teaching at the university."

". . . energizing. . ."

"I was able to interact with faculty from the university as well as the community colleges."

". . . improved my teaching. . ."

"I have learned a lot of teaching skills."

"Also helpful was the opportunity to meet with successful teachers about their tactics and methods."

"Attending the CTE colloquium . . . last spring made me realize that my own colleagues have much to teach me about good teaching. . ."

This intensive teaching colloquium has proved its benefits on our campus. For three full days, ten percent of the university's faculty engage in intense conversations about teaching. Afterwards, many confess that they haven't devoted that much time or thought, either independently or with others, to the broad aspects of teaching during an entire year. They are rejuvenated and stimulated.

Enhancing Recognition of Teaching

Considerable planning goes into the colloquium to ensure its overall quality and to create the perception that it is a premier university event. The colloquium aims to highlight the importance of under-

graduate education. The close involvement of academic deans, directors, and the provost gives the colloquium credibility and underscores institutional commitment.

Dean and director involvement began with their unanimous endorsement of the colloquium concept and has been sustained by their annual selection of faculty participants. They cooperate by forwarding nominations to the CTE to fill their college or school allotments, and many seek additional at-large nominations. Initially, some deans rewarded their faculty with small stipends for their participation, but the deans have discovered that their recognition and endorsement of the event and the benefits to the participants are adequate rewards.

Commitment to the colloquium by the president and the provost has also reinforced the institution's recognition of teaching. Each year the provost and/or the president have been colloquium speakers. The president and provost always attend some of the sessions and join participants at the reception or during the luncheons. Their visibility underscores the university's commitment to teaching. Attendance at the reception and at occasional sessions by deans and directors strengthens this message, as do reception invitations to trustees, significant university donors, and the department heads. Media releases about the colloquium in university publications and newspapers, and radio interviews also enhance this message.

Quality meals, excellent program materials, free books, certificates awarded at the conclusion, and a thoroughly professional atmosphere further promote the colloquium as a premier event in recognition of teaching faculty. In fact, it is a rare professional development opportunity for faculty since it is provided at no cost to the registrants. Evidence of the colloquium's success is also contributed to a greater desire on the part of faculty to be participants in the event. After four colloquia, many faculty members ask how they can be involved and, in some cases, colleges have created waiting lists of individuals looking forward to their invitations.

Opportunities for Change and Growth

Because of its success, the CTE will continue to sponsor this annual colloquium, but at the same time, we expect that the colloquium

168

will not only evolve but also help to generate other opportunities for professional development in teaching. One recent change in the colloquium has been greater outreach to faculty members from other state institutions. Last year, for the first time, the CTE invited each president of Wyoming's five community colleges to send a faculty member to the colloquium. Many responded to the invitation and all of them appreciated the opportunity to connect with the university in a teaching conference. The objectives were to recognize and involve the entire higher education community in the state and to broaden dialogue among colleagues at the university and the community colleges. To expand this dialogue, the 1995 colloquium included community college faculty as program organizers and as panelists. Involving community college faculty has increased communication and also created significant goodwill between the institutions.

In addition, the colloquium's visibility is helping to create comparable events in colleges, schools, and departments. Several participants have expressed interest in using colloquium themes in teaching workshops in their units or developing teaching workshops based on colloquium topics. Faculty members have also asked the CTE to remove the ceiling on colloquium attendance. Because increasing attendance would alter the workshop setting, colloquium organizers are considering other options, such as sponsoring another multi-day event in the month-long interim between fall and spring semesters.

The colloquium's success has also generated greater opportunities for donor support and extramural funding. Extramural funding for the colloquium itself has increased, and the CTE has also gained larger grants for other programs because of the colloquium. The companies providing support for these activities (US WEST and the Chicago and NorthWestern Transportation Company) are prominently recognized in all published materials and news releases, and they are acknowledged in correspondence and annual reports. Sponsorship by one corporation can be a catalyst for sponsorship by others who invest in education or want their name associated with teaching excellence.

Opportunities for Others

This colloquium has worked well in our institution, campus culture, and state setting, but other campuses may wish to modify the design to make it relevant for them. Not every university has an adequate budget or support for such an undertaking. The cost of the colloquium could be significantly reduced while preserving the important elements of the program ' 1 a variety of ways. Using local faculty members instead of external speakers would yield major savings, and recognizing excellent faculty within one's own institution may well compensate for the lack of a nationally-known outside speaker (Sorcinelli & Price, 1990; Weimer, 1991). The length of the colloquium might be reduced or even limited to a single day. Savings could also be gained through less expensive meals and more modest accommodations for receptions. One could also seek greater extramural funding and more external sponsors for the colloquium. An expensive colloquium price tag is not a prerequisite for success in fostering collegiality and enhancing teaching, so these and other strategies (see Whitcomb, 1986) may help overcome low budgets.

Conclusion

The University of Wyoming CTE sponsors many teaching events throughout the year, including brown-bag seminars, a year-long series of colloquia for new faculty, a small grants program for travel and curriculum innovation, the development of exemplary classrooms, and assistance to individual teachers. Among these projects, the annual three-day colloquium is the premier event. Planning for such a major undertaking starts well over a year in advance, and the weeks directly preceding the event can seem impossibly full, but the results always justify the effort. Almost all faculty who attend gain new colleagues and a renewed or heightened interest in teaching. Many participants continue to attend CTE activities through the year, and some have made significant changes in their teaching styles. All evidence indicates that this colloquium is fulfilling the goals of fostering collegiality and enhancing teaching at a research university.

References

Bender, E., Dunn, M., Kendall, B., Larson, C., & Wilkes. P. (Eds.). *Quick hits: Successful Strategies by award winning teachers.* Bloomington, IN: Indiana University Press.

Lamber, J., Ardizzone, T., Dworkin, T., Guskin, S., Olsen, D., Parnell, P., & Thelen, D. (1993). A "community of scholars?": Conversations among mid career faculty at a public research university. *To Improve the Academy, 12,* 13-26.

Mangan, B. (Ed.). *147 practical tips for teaching professors.* Madison, WI: Magna Publications.

Sorcinelli, M.D., & Price, K.H. (1990). State-wide faculty development conference promotes vitality. *To Improve the Academy, 9,* 101-110.

Tobias, S. (1990). *They're not dumb, they're different: Stalking the second tier.* Tucson, AZ: Research Corporation.

Weimer, M. (1991). *Improving college teaching.* San Francisco: Jossey-Bass.

Whitcomb, S.W. (1986). When funds won't stretch: Faculty and organizational development projects for miniscule budgets. *To Improve the Academy, 5,* 84-92.

Appendix A

5th Annual Colloquium on Teaching Excellence
May 22, 23, and 25, 1995
From Teaching Excellence to Learning Excellence

Monday, May 22

9:30-10:00	Registration/Refreshments, southeast entrance of classroom building
10:00-10:10	Welcome, Terry Roark, CR 202
10:10-10:15	Introduction of Keynote Speaker, Jim Wangberg
10:15-11:45	Keynote Address, "Through the lens of learning: how experiencing learning changes our teaching," Stephen Brookfield, CR 202.
11:45-12:00	Move to the Wyoming Union dining room for lunch.
12:00-1:15	Lunch/get acquainted.
1:15-1:30	Move to CR 202.
1:30-3:00	Workshop, "Becoming a critically reflective teacher," S. Brookfield, CR 202.
3:00-3:30	Break - SE entrance CR bldg.
3:30-4:45	Workshop continued
4:45-5:00	Move to the Foundation House for Reception.
5:00-6:30	Wine and Cheese Reception in the UW Foundation House

172

Tuesday, May 23
  Perspectives on the Ecology and Cultures of Learning

8:30   The UW campus as a total learning environment,
          Jim Hurst (Moderator Wangberg), CR 202
9:00   Student panel - What makes a difference in my
          learning (Moderator Wangberg), CR 202
10:15   Break
10:45   Faculty panel - What makes a difference in my teaching
          and my students learning:
                  Moderator Jean Schaefer
                  Bruce Richardson, UW/CC
                  Mercedes Aguirre-Batty, Sheridan College
                  Maggi Murdock, UW/CC (for distance
                      education perspective)
                  Doug Bonett, Statistics—UW (for UW perspective
                      on new technologies)
11:45   Move to Wyoming Union Dining Room for lunch.
12:00   Lunch
1:00   Move to afternoon sessions
1:15   The Best Learning Environments and Exemplary
          Classrooms: Dreams and Designs (Moderator Wangberg)
1:45   Cohort Group Break out Sessions
          (cohorts to be determined in advance based on colloquium
           participant list, and not strictly defined by discipline)
          Cohort Facilitators:
                  Jim McClurg
                  Warrie Means
                  Jane Nelson
                  Andrea Reeve
                  Jean Schaefer
3:00   Break
3:30   Resume cohort sessions
5:00   End

Thursday, May 25

8:00   Coffee and Orientation to Concurrent Sessions
        Motivating Students
        Concurrent Sessions: choose to attend one of the following.
8:15   Session A: Creative approaches to instruction as a motivator,
        Michael Day (Moderator Landra Rezabek)
        Session B: Humor and enthusiasm as a motivator, Ron
        Beiswenger (Moderator Ric Hoogestraat)
        Session C: Grades as a motivator: "crossfire" Peter Huntoon
        and Robert Jenkins (Moderator Warrie Means)
9:00   Repeat Sessions A, B, C.
9:45 - 10:15   Break
10:15   Session D: Motivational issues in the diverse classroom,
        Judith Antell and Ni Coker (Moderator Jan Beeken)
        Session E: Special activities as a motivator, Mary Burman
        (Moderator Andrea Reeve)
        Session F: Internships as a motivator, Jo Chytka and Nancy
        Muecke (Moderator Amy Slack)
11:00   Repeat Sessions D, E, F.
11:45   Cohort meetings to finalize exemplary classroom proposals
12:30   Lunch
1:30   Cohort 1 presentation (10 min.) and reactions (5 min.) (Mod-
        erator Wangberg)
1:45   Cohort 2 presentation/reaction
2:00   Cohort 3 presentation/reaction
2:15   Cohort 4 presentation/reaction
2:30   Cohort 5 presentation/reaction
2:45   Colloquium Wrap up and Evaluation (Moderator Wangberg)

Appendix B

EVALUATION
4th Annual Colloquium on Teaching Excellence
"Discovering Balanced Approaches to Teaching and Learning"

The Colloquium you are attending has been organized by the UW Center for Teaching Excellence and is supported in part by educational grants from the Chicago and NorthWestern Transportation Company and U S WEST. Your opinions about the effectiveness and usefulness of the Colloquium and ideas for improvement will help us in planning next year's Colloquium. You are encouraged to fill in your evaluation at the completion of each session. You will have time to finish your evaluation before you leave on Thursday. Thank you.

The first section of the questionnaire asks questions about the effectiveness and usefulness of the various presentations. Please indicate your opinion using the following scale:

EFFECTIVENESS:

1. Very effective
2. Effective, but could have been better
3. Average
4. Not effective
5. I did not attend this presentation

USEFULNESS:

1. Very useful, I intend to apply the ideas and materials from this presentation as soon as possible.
2. Useful, however, I won't be able to use all of the material in my classes.
3. This material was useful, but not applicable to courses I teach.
4. Not useful.
5. I did not attend this presentation.

171

Effectiveness: 1. Very effective 2. Effective 3. Average 4. Not effective 5. Did not attend

Usefulness 1. Very useful 2. Useful 3. Useful, not applicable 4. Not useful 5. Did not attend

Plenary Presentations

1. Keynote Address, Len Barron, "Walking Lightly . . . A Portrait of Einstein."

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

2. Workshop, Len Barron, "Thoughtfulness and Fun"

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

3. Workshop, Thom Edgar and Ray Jacquot, "Myers-Briggs Type Inventory: Understanding Interactions Between Faculty and Students"

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

4. Provost Karnig, "Historical Trends"

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

5. University of Wyoming Teaching Award Winners Panel "Balancing Teaching, Research, and Service: Keeping All the Balls in the Air"

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

Comments:

176

Concurrent Presentations/workshops

6. Mary Ann Harlow, Karen Lange, Sally Scott, Paula Wolfe, "Teaching Tools Available on the Internet"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

7. Charlotte Farr, Barbara Hakes, Landra Rezabek, Karen Weibel, "Lessons Learned from Distance Teaching: On Campus Implications"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

8. Ritchie Boyd, "Computing Tools for Instruction"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

9. Andy Bryson, "Media Tools for Instruction"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

10. Mary Ann Harlow, Karen Lange, Sally Scott, Paula Wolfe, "Teaching Tools Available on the Internet - Hands-On Session"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

11. Charlotte Farr, Barbara Hakes, Landra Rezabek, Karen Weibel, "Lessons Learned from Distance Teaching: On Campus Implications Hands-On Session"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

12. Ritchie Boyd, "Computing Tools for Instruction Hands-On Session"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

13. Andy Bryson, "Media Tools for Instruction Hands-On Session"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

14. Len Barron, "On The Pleasure of Growing Older"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

15. CTE Resource Room
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

16. Michael Enos, Andrea Reeve, Sue Yarbrough, "Involving Students in Teaching Experiences"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

17. Ron Canterna, "Cooperative and Collaborative Learning"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

18. Robert Kitchin, Charles Ksir, Michael Parker, "Managing Large Classes"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

19. Don Warder, "Graduate Assistant Teacher Training"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

20. Laura Bennett, Dolores Cardona, Chris Primus, "Working with Diverse Student Populations"
    Effectiveness   1   2   3   4   5
    Usefulness   1   2   3   4   5

21. Rod Lang, "The Legal Issues Related to Teaching"
    Effectiveness   1   2   3   4   5

Usefulness	1	2	3	4	5

22. Donna Whitson, "Assessing Learning"

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

23. Leonard Asimow, "Teaching Quantitative Reasoning Across the Curriculum"

Effectiveness	1	2	3	4	5
Usefulness	1	2	3	4	5

Comments:

The Colloquium in General:

Appropriateness of time of year:
_____a. The present time was appropriate.
_____b. One of the following would be more appropriate:
   _____Just before the beginning of fall semester
   _____The week immediately following commencement
   _____At the end of summer session
   _____During Christmas break
   _____During spring break
   _____Other:_____

Colloquium length:
_____a. The length was about right
_____b. Too much information to assimilate in three days; Colloquium should be longer.

_____c. The Colloquium should be 5 days with one or two half-day recesses.

_____d. The Colloquium should be 4 days.

_____e. The Colloquium should be conducted during mornings for 5 days.

_____f. Other:_____

The Colloquium would be more effective if it were conducted at an off-campus site for 3 consecutive days and participants housed for two evenings:

Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	2	3	4	5

The mix of outside speakers and University of Wyoming presenters was:

_____a. Satisfactory.

_____b. I would have enjoyed hearing from more outside presenters.

_____c. I would have enjoyed hearing from more UW colleagues.

The amount of time allowed for interaction with fellow participants was:

_____a. Satisfactory

_____b. Insufficient

_____c. Too great

_____d. Lunch time provided ample time for interaction with colleagues.

The material presented during the Colloquium was in general:

_____a. Old material with which I am quite familiar.

_____b. A review of old material, but hadn't thought about for some time.

_____c. New material that I found interesting and useful.

_____d. New material that I probably won't often use.

_____e. Other:_____

1 ˙ ()

Would you recommend a similar Colloquium to your academic colleagues?
____a. Highly recommend
____b. Recommend
____c. Maybe, not sure
____d. Would not recommend
____e. No opinion

Please give us suggestions for topics for future Colloquia.

Additional comments you have about the Colloquium:

Section III

The Changing Student Constituency

William Plater suggests that 21st century college students will differ
from traditional students in many ways—they will be more diverse in
terms of class, race, gender, age, preparation, and expectations.*
These trends are already upon us, and the articles in this section
address different implications of that diversity for faculty develop-
ment programs.

In many ways, urban campuses reflect many of the trends that
Plater forecast for the 21st century, with very diverse student bodies
and a greater focus on community service. These campuses also tend
to have a high proportion of part-time, clinical, adjunct, and visiting
faculty. Debrah Jefferson and Susan Peverly suggest that this institu-
tional profile requires a new model of faculty development that more
closely matches the nature and mission of the urban campus.

Robert Dove's article is based on work he began after hearing
about Herman Blake's research on academic syndromes of minority
students at the 1980 POD Conference. Dove first developed a work-
shop for students to teach them about the syndromes and help them
develop ways to overcome the problems. He discovered that many
students share the syndromes, not just minorities, a conclusion that
was reinforced when he adapted the workshop for teachers. Teaching
faculty members about the syndromes helps them identify problems
more readily and provide appropriate aid for students who are at risk.

Many campuses are responding to the need to address diversity issues by changing academic policies and reforming curricula. But administrative initiatives will not help teachers cope with their anxieties about the subject and their perceived unreadiness to address these issues in the classroom. Although diversity training is often independent of faculty development programs, many of the issues involved are fundamentally teaching and learning issues, which suggests that faculty developers should play a larger role in this area. Matthew Ouellett and Mary Deane Sorcinelli describe a successful program they developed for their campus, funded jointly by their teaching center and the Graduate Student Senate. Their training program deals with diversity issues in the context of teaching and learning and provides an intensive experience for the faculty/TA teams who receive the training together. The authors identify problems they see with different aspects of diversity training and suggest ways that the program could be adapted for other campuses.

*Plater, W. (1995, May-June). Future work: Faculty time in the 21st Century. *Change, 27,* 22-23.

Faculty Development and Changing Environments of the Urban Campus

Debrah Jefferson

University of Illinois at Chicago

Susan Peverly

University of Illinois at Chicago

Literature about the urban campus indicates that traditional, full-time faculty who teach and engage in scholarly, creative work, or research may need to shift to more applied and community-oriented service programs. Hence, the role of faculty development is changing because the issues facing the urban university are changing. These changes are prompted by the unique growth and development within the neighborhood of urban-based campuses. Pressure from the communities to make the campuses more community oriented, along with growing concern for the nature and quality of instruction, help foster change. Campus administration concerns about the institution becoming a "good" neighbor by contributing to the community puts unique pressures on the faculty developer. The faculty developer is in a position to see campus changes which can affect instructional methods or styles such as increased numbers of minority or immigrant students and more part-time faculty. While these changes occur, the general faculty often remains relatively traditional in its attitudes about teaching.

Historical Perspective: Evolution of the Urban Campus

The physical location of a college campus has played an important role since the advent of higher education in the United States. Early U.S. universities and colleges were set in or near populated centers, but little attention was placed upon the impact of environment on the institutions or potential benefit of drawing faculty from the ranks of the local population. Concern was given to available land, establishing a physical plant for the institution, and teaching a liberal arts curriculum to an affluent student body. The nearby city afforded easy access to the campus for those classes of people sophisticated enough to appreciate and pay for higher learning.

When the federal government passed the Morrill Act of 1862 it prompted an unparalleled growth and degree programs in higher education. The Morrill Act created a new concept in higher education, which enabled each state to set aside land for the creation of colleges for agricultural and mechanical studies. The Act resulted in the merger of a liberal arts curriculum with that of the practical, agricultural, and technical sciences designed for the industrial or working classes. The new curriculum was aimed at preparing society for the awakening age of industry. Higher education evolved into an outlet that could pave the way for a new class of educated people.

Before 1900 there were few large cities in the U.S., and most of those were located in the East. Higher education had not evolved to the point that they examined the sociological or environmental impact of the city upon college campus. This also was partly because the university was perceived as a separate entity above and apart from the city. In 1900, only four of the largest cities in the U.S. had universities — all private: Columbia University in New York, the University of Chicago, Harvard University in Boston and the University of Pennsylvania in Philadelphia. Other communities were establishing private colleges, which generally recruited regionally or nationally for their students from the affluent classes. "At these institutions, scholarship and teaching rarely were concerned with the population and conditions of their host cities, and there was little sense of obligation to them"

$1 \cdot 5$

(Adamany, 1992). By 1900 most communities of size had begun some form of public or private institution of higher education.

In 1914 the Smith-Lever Act made another sweeping change in higher education. The Act provided an avenue for bringing applied research to the citizens of a state by creating cooperative extension service (CES) as an arm of the U.S. Department of Agriculture. CES staff were housed on the land-grant campus so that faculty could engage in service and teaching activities throughout the state. CES added a social responsibility or conscience to institutional missions.

Today's urban-based institutions often started as municipal colleges, private city colleges, or branch campuses (generally part of a state university system) (Berube, 1978). They ranged from two-year community colleges granting associate arts degrees to research-·riented universities granting doctoral and professional degrees. These urban campuses continue the change in higher education brought by the Morrill and the Smith-Lever acts because they often differ from the traditional liberal arts and the research models of higher education. Such institutions as Towson State (Baltimore), Northeastern Illinois (Chicago), University of Illinois at Chicago, University of Toledo, Old Dominion University (Norfolk, Va.) and Arizona State (Phoenix) are examples of the new urban campus (Kinnick and Ricks, 1990). These new urban-based institutions perceive themselves as the servants of society. They pay close attention to their funding constituency as well as the type of student they attract. In essence, they perceive themselves . ; "*of*" rather than simply "*in*" the city and they continue to play a major role in the future of urban America" (Adamany, 1992).

Faculty Development and the Urban Campus

The effect of the urban environment on the role of the faculty developer is receiving growing attention. During a session at the 1994 Professional and Organization Development (POD) in Higher Education national conference, faculty developers identified four primary areas which are affected by the urban environment in which they work. These areas are campus, mission, students, and faculty. Some of the areas delineating the campus as urban include:

a. *campus*: often a part of a multi-campus system; maintains a large physical plant; located within or in close proximity to a major metropolitan area; offers a variety of courses and degree programs; serving large numbers of students;
b. *mission*: generally possesses established traditions, which encompasses research, teaching, and service; values community involvement and service (out-reach oriented); fosters diversity;
c. *students*: primarily non-residential; often are first generation immigrants as well as college students; frequently enroll more women than men; often have older (freshmen over 23 years of age) or returning students; find students juggling family, work, and class schedules around outside responsibilities; include diverse ethnic, cultural or racial groups; and
d. *faculty:* often more diverse than non-urban campuses; many are non-resident of the campus community; many have part-time, adjunct, clinical, or visiting appointments; growing number of non-regular or non-tenure-track appointments over tenure-track creating a faculty hierarchy; and many have degrees from non-urban campuses.

The POD faculty developers who helped create this list of areas that delineate urban from non-urban campuses recognize how programming on an urban institution also affects the role of faculty development. The faculty developer is expected to help faculty whose teaching is no longer confined to the classroom. In the new era, developers must incorporate teaching and learning style differences between faculty and students as well as add technological aids to their repertoire to assist faculty immersed in the community.

Campus

The term *urban campus* evolved after World War II (Elliott, 1994). Population shifts called for more institutions to serve older, part-time, and financially independent students working in the city. The *urban campus* became an institution located in a city that grows to encompass it. An example is the University of Tennessee at Chattanooga, which was established as a teachers college or normal school

in 1886. It became an urban college when the city grew up around it.
Another example is Indiana University-Purdue University at Indian-
apolis, which is a branch of the state's two leading public universities.
Both of these campuses are a mixture of residential and commuter
students with faculty ranging from part-time to tenure-track. These
institutions perceive themselves as attracting state, national, and inter-
national students.

The *urban campus*, also may be located on the outskirts of a large
city and sees itself as distinct from the city while drawing heavily upon
the benefits derived from its location. An example is Lake Forest
College in Lake Forest, IL., which is a far north suburb of Chicago.
Sometimes this type of campus is called *periphery or urban corridor*
because of its suburban location. Research and service opportunities
are abundant in the city so the campuses are linked to the city. Many
of the students are drawn from the greater urban area and a large
percentage live on campus (examples include Northwestern Univer-
sity, George Mason University, Memphis State University, University
of Colorado-Denver).

Mission

Change is often a long and traumatic process for any individual.
When an entire campus is changing to become more socially conscious
and responsive to societal needs, it is often a slow process which
involves numerous individuals buying into the process. For most
universities, change moves at a slower pace than for the general
population. The fast-paced urban community wants higher education
to change now, not at its normal glacial pace (Hackney, 1994). Change
on the urban campus in terms of its commitment to meeting societal
needs is not new, it is just a renewed emphasis on and commitment to
service, community, and inclusiveness.

Change to meet societal demands does not affect all urban cam-
puses in the same way because not all campuses located in or near a
city can be easily defined as urban. Criteria such as student population,
residential versus commuter students, full- versus part-time faculty,
physical plant, as well as mission statement and commitment to the

community affect whether a campus sees itself as urban, or as Adamany (1992) says "of" the city.

How an institution sees itself, including faculty and students, in relationship to the environment and community affects its image as an urban campus. There is a symbiotic relationship between the city and the university because they feed upon each other (Elliott, 1994). This is a primary characteristic of the urban campus. The community in which the university is located often expects it to educate all who enroll as well as solve society's problems (Lindsay and Detmer, 1990). This is not a new concept, but reflects a newer understanding of the land-grant mission seen in the Morrill and Smith-Lever acts. The university is being transformed into an enclave offering opportunities both genders; welcoming all ethnic, racial and cultural groups; encouraging students with varying physical abilities; and promoting international environments in which both faculty and students learn and grow. An interconnectedness of study, learning, research, and service is evolving.

If a campus that is totally rooted in outreach or community-based programs is on one end of a continuum and another campus not perceiving its mission as encompassing city problems on the other end, a clearer image of today's range of urban campuses is seen (see Figure 1). The traditional campus, regardless of location is primarily concerned with teaching and/or research to improve the academy or the discipline. Today, most campuses are in the transitional zone. They provide some community programs such as health services through the medical schools and teaching hospitals (University Hospital and Clinics of the University of Illinois at Chicago). Some forge links with local schools such as Boston University managing the Chelsea, Massachusetts, public school system (Lindsay, 1990).

Corporate partnerships also become key factors for the urban campus. Its faculty as well as students forge close contacts within the corporate world as part of the campus educational program. George M.C. Fisher, ch..irman, president, and CEO of Eastman Kodak Company sums up the corporate world's vision of an urban university when he said, "It is from the colleges and universities in our global village that we can expect direction and expertise in sorting out the complexities of our fast changing world" (Fisher, 1995).

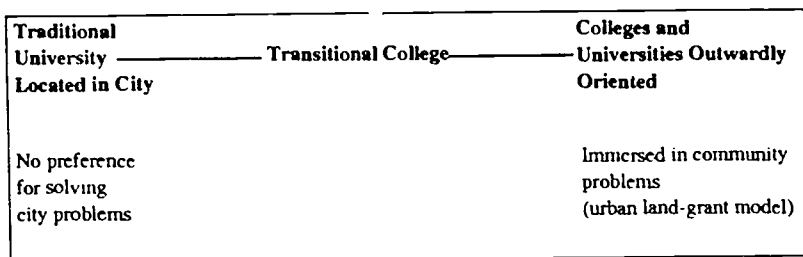| Traditional		Colleges and
University ——————— Transitional College———————		Universities Outwardly
Located in City		Oriented
No preference		Immersed in community
for solving		problems
city problems		(urban land-grant model)

Figure 1: Continuum for Urban Campuses.

Students

According to Elliott (1994) the new majority on the urban campus will draw most of its students from the surrounding urban-suburban area. Because of population shifts, the student pool will include larger numbers of young Hispanics and African-Americans than in the past. Because of economics large numbers of students are commuters and part-timers. They include women returning to the work force in need of training as well as mid-life men and women seeking new careers.

Many of these new students drop-in and drop-out of the institution. Often they work full-time supporting a family. Because of this enrollment pattern, it takes them longer than the traditional four-year period to complete an undergraduate degree program. They need classes that fit their work schedules so the campuses hold late afternoon, evening and/or weekend classes to accommodate the students. Some degree programs offer a special concentrated week-end curriculum so their students can continue working full-time while completing an advanced degree.

Elliott (1994) reports that over half the students enrolled on urban campuses are older than the normal 18 to 22 years. Often they begin college in their 30s or 40s. They may not take a linear approach to completing a degree or even seek a degree. They often seek specific skills to improve their job performance or to advance their careers. When Diner (1981) assumed his first teaching position at a city college in Washington, D.C., he encountered students intent on acquiring skills to take into the workforce, not just acquiring a degree for the educational experience of learning.

Student diversity is another major factor on the urban campus. At Miami-Dade Community College the diversity of students is about 23 % white; 19% African-American; 55% Hispanic; 2% Asian; and less than 1% Native-American. At Queens College in New York the diversity is equally dramatic. About 40% of the students are minorities and 45% are immigrants or children of immigrants (Elliott, 1994). On the twenty-campus California State University (CSU) system, with a fall 1990 enrollment of 369,000 students, the ethnic composition included: 64% white, 12% Asian, 6% African-American, 15% Latino and 1% Native-American. On some of the CSU campuses, over 70% of the students are over age 25.

These urban campus students often are academically competitive with non-urban campus students. Elliott reported that nearly 58 percent of the entering freshmen taking the ACT scored 20 or better on their composite scores. There are other students whose ACT scores indicate they could not hope to achieve a college degree, yet often they do. This indicates a wide variety of academic capabilities among the students attending urban campuses.

Faculty

While the students are increasingly older, women, part-time, and minority, the hiring practices for faculty may not follow the same pattern. There is more opportunity for diversity among faculty, yet that does not always ensure a diverse faculty. Faculty on the urban campus can be more diverse than its rural counterpart if search committees tapped into the readily available urban community. The urban campuses often are energized by the diversity which reflects the composition of the community. The city provides opportunity for two-person careers, broader racial, ethnic, or cultural experiences as well as social opportunities (Elliott, 1994). The city offers recruitment options for professionals to join the faculty as part-time, adjunct, visiting, or other non-tenure track instructors.

Scholarship and research have broadened in the urban environment beyond traditional applied and pure definitions of research. As society changes and the concept of scholarship broadens so has the ground for study, especially with a city at the institution's front door.

191

The faculty are what Elliott calls "asphalt intelligentsia." This is the university professor in the broader concept of scholar and teacher. This asphalt intelligentsia professorate often travel the highways of the city between a professional position and the campus or the campus and the city to do research or to another campus because of a part-time appointment.

While Elliott talks about the diversity among urban campus faculty and gives the impression that all arrive on campus prepared, meaning they are hired because of their knowledge in the discipline or field, Diner (1981) holds a differing opinion. He said, "nothing in my own experiences had prepared me for what I was to encounter."

The urban institution at which he taught included faculty with differing views on the purpose of faculty roles, students ranging from those seeking skills aimed at the job market to those with poor attention and attendance, but primarily they were not predominantly WASP or Euro-Jewish. Coming from a small, public liberal arts college and a private graduate school, Diner said, "I experienced cultural shock during the first weeks."

Implications for Faculty Development

Urban faculty present a new set of challenges for faculty development. Foremost is the increase in the hiring of adjunct professors, which affects how the campus perceives the urban faculty as well as the faculty's vision of its own role.

George Drops (1993) of National University in San Diego says if the current trend for hiring part-time faculty continues, before the 21st Century arrives, there will be more part-time instructors at U.S. colleges and universities than full-time. These part-time faculty are often drawn from the professional ranks of the nearby city. They may come with experience in teaching within their profession but this does not necessarily mean they "have the academic acculturation that is both assumed and integral to successful college teaching" (Kristensen & Moulton, 1993). This also is the belief of Stanley and Lumpkins (1992), who state that often the part-timers have "no background in pedagogy and little understanding of the needs of students, it is imperative to include such faculty in staff development efforts."

Because of this growing trend, there must be an accompanying mechanism for improving teaching as well as scholarly endeavor and involvement outside of the classroom (Gappa & Leslie, 1993).

What this mixture of faculty, students, and environment implies is a need for a faculty development organizational model suitable for the urban institution. Each urban institution is going through a life cycle that balances changes in mission and student population with community pressures for involvement and a quest for reforms in teaching. Each component demands a solution dependent upon an appropriate response that considers all constituencies in the mix.

Changes in the student population suggest a need to shift faculty focus from faculty centered teaching to student centered learning. The faculty developer can be the bridge between the two. Faculty developers build upon the external or environmental pressures pushing the campus to become more community-oriented. Their knowledge about teaching styles and learning styles and how they affect a teaching environment is an asset to the campus mission.

Part of a faculty developer's role is a bridge builder between the part-time faculty and the academic environment. Faculty developers are in a unique position to help reduce a sense of isolation and loneliness that often prevails among the non-regular faculty on the urban campus (Lamber, 1993). This is partly what Elliott interprets as an adjustment between perceptions and reality. The part-time faculty are a reality on the urban campus. On some campuses they may even equal the number of regular faculty. On other campuses they may teach more introductory level courses than regular or senior level faculty, so in essence they are perceived by the students as *the faculty*.

Teaching is essential for the future quality of urban life according to Adamany (1994). The urban campus prepares the students for participating in the economy, politics, and society of the city. Adamany uses Wayne State University to illustrate the impact of his words. Wayne State has 172,000 alumni, 112,000 of them still in the Detroit metropolitan area. They are a burgeoning resource in politics, society, and industry. In Detroit, over 75% of the pharmacists, 45% of the physicians, and 35% of the attorneys are Wayne State graduates.

Some of these alumni and others in the professions will eventually return to the urban campus as part-time faculty or clinical faculty or

adjunct faculty. Their experiences provide an avenue for students to receive practical application of classroom theories. One way for faculty developers to enhance the teaching ability of these potential part-time faculty is to provide them with an understanding and appreciation for the distinction between training and education (Drops, 1993). The part-timer arriving on campus needs to see the difference between in-service training as education in the work place and academic training which occurs in the college classroom.

The professional and instructional development experiences offered by faculty developers helps enhance the quality of teaching. The POD workshop participants identified issues that concern the urban faculty developer. These include each aspect of the four primary areas of campus, mission, students, and faculty, but go beyond them to encompass specifics such as transitional students and faculty, retention among faculty as well as students plus respect for students by faculty. Other concerns among faculty were low morale, lack of community, and a need for a safe environment. As indicated, faculty developers see the broader impact of the campus on the community rather then the individual departmental commitments.

Based upon the workshop discussion, participants concluded that faculty developers on the urban campus need administrative support as well as a faculty developer support group. The campus as well as professional support will enhance the faculty developer's ability to provide a list of needed programs for the urban campus faculty. The programs would go beyond the typical consultation or teaching supports. The ideal program would include some of the following components.

1. Offering new faculty orientation - informing faculty about the students, campus, and its mission; teaching; and their new community and city;

2. Implementing university-life course - informing faculty about teaching on an urban campus plus aspects of safety, travel, culture, and outreach activities;

3. Making teaching public - changing faculty perspectives about teaching from claiming ourselves as teachers to purveyors of information;

191

4. Linking research, teaching, and service - showing faculty relation-
    ships between research and teaching in and out of the classroom;
5. Linking the city and the institution - providing bridges between
    faculty and industry and the local schools or services in the
    community;
6. Linking across the campus - providing forums or activities in
    which faculty can meet and share similar or related interests with
    faculty from other units plus gaining an opportunity to meet one
    another;
7. Developing programs - helping create relationships between
    teaching, research, and outreach community service programs;
8. Valuing promotion and tenure of teaching faculty - helping create
    an atmosphere where teaching is shown as a quality venture;
9. Valuing risk taking - supporting faculty on the cutting edge of
    curriculum and faculty development;
10. Knowing students - helping faculty see, understand, and appreci-
    ate their students, and how this understanding affects their teach-
    ing.
11. Valuing part-time faculty - communicating consistently to all that
    part-time faculty are important to the institution.
12. Including part-time faculty - providing opportunities for part-time
    faculty to join others in faculty development programs and activi-
    ties.

In summary, in the urban setting, the role of faculty development
has expanded beyond teaching to provide assistance for those who
teach beyond the traditional classroom setting. This means addressing
teaching in a very broad arena. For the faculty developer to address
these complex teaching issues places additional strain and stress on
limited staff with small budgets. The issue also means the faculty
developer needs to gain more knowledge, support and collaboration
among urban colleagues.

References

Adamany, D. (1992, Spring). The university as urban citizen. *Educational Record*, 6-9.

Adamany, D. (1994, Spring). Sustaining university values while reinventing university
    commitments to our cities. *Teachers College Record* 95(3), 325-331.

Berube, M. (1978). *The Urban University in America.* Westpoint, CT: Greenwood.

Diner, Steve. (1981, September). Working on the Urban Campus. *Connections, 3* (4) ED 207 453

Drops, G. (1993). Integrating part-time faculty into the academic community. *To Improve the Academy, 12,* 27-37.

Elliott, P. G. (1994). *The Urban Campus: Educating the new majority for the new century.* American Council on Education Series on Higher Education. Phoenix, AZ: Oryx.

Fisher, G.M.C. (1995, January) *Investing in Illinois.* Newsletter of the University of Illinois Foundation, Issue 5.

Gappa, J.M., & Leslie, D.W. (1993). *The Invisible Faculty: Improving the Status of Part-Timers in Higher Education.* San Francisco, CA: Jossey-Bass.

Hackney, S. (1994, Spring). Toward a university system for the twenty-first century. *Teachers College Record, 95* (3), 311-323.

Kinnick, M. & Ricks, M. F. (1990). The urban public university in the United States: An analysis of change, 1977-1987. *Research in Higher Education, 31* (1). 15-38.

Kristensen, E.W., & Moulton, D.R. (1993). Challenges for faculty developers and department chairs: When faculty arrive from professional settings. *To Improve the Academy, 12,* 39-52.

Lamber, J., Ardizzone, T., Dworkin, T., Guskin, S., Olsen, D., Parnell, P., & Thelen, D. (1993). A 'community of scholars?': Conversations among mid-career faculty at a public research university. *To Improve the Academy, 12,* 13-26.

Lindsay, A. D. & Detmer, D. E. (1990, Fall). From the ivory tower to the unisearchity, *Educational Record.* 8-14.

Salemi, J. & Wolf, D. (1981, September). Working on the Urban Campus. *Connections, 3*(4) ED 207 453

Stanley, C. A. & Lumpkins, T. D. (1992). Instructional needs of part-time faculty: Implications for faculty development. *To Improve the Academy, 11.* 59-70.

Academic Syndromes Revisited

Robert R. Dove

Pittsburgh Technical Institute

This article describes a workshop designed for students and faculty that is based on Herman Blake's research on Academic Syndromes of Minority Students. Blake presented the results of his research at the 1980 POD Conference and what he had to say then has even broader applications now. The workshop explores the roles of Ultimate Doom, Getting Over and Alienation in the lives of our students. The author suggests that this workshop could be an integral part of an effective retention effort for many schools.

In October of 1980, I attended my first POD Conference and came away, as always, with information that was very useful. One particular presentation provided food for thought and a basis for continuous application and research. Herman Blake, then Provost of Oakes College, University of California at Santa Cruz, introduced a group of us to the results of 18 months of research on student "academic syndromes." I have presented the results of his research to the faculty at three different institutions during the past 14 years. I also developed a workshop for freshmen based on his comments and have presented it in more than 100 classes. My own research shows that what he had to say then has even broader applications now.

Background

Blake's research, done in the late 1970's, was based on interviews with ethnic minority college students through 18 months of their college experience at Oakes College. It grew out of Blake's desire to help the faculty deal with a 40-50% non-traditional student body. He stated, "there is nothing wrong with having confidence in your own background until it gets in the way. Being black still did not make us understand the experience of our students." (Blake, 1980) The analysis of 100 interviews with ethnic minority students revealed three major patterns of behavior, or syndromes, that greatly affected their ability to succeed in school. The three syndromes identified were Ultimate Doom, the Getting Over Pattern, and Alienation.

The students with Ultimate Doom felt that they would inevitability fail at something before they even began. They expected failure. They only wondered when it would come. Blake's research revealed that students with feelings of Ultimate Doom tended to make it a self-ful-filling prophecy. Whether it was Math or English or any course they had failed before, they convinced themselves that they weren't any good at that subject and proceeded to fail the class again. Ultimate Doom for some of these students meant that they were more anxious the closer they got to commencement. They couldn't accept success. Even if they did well through three years of college, they managed to fail during their final year.

The second syndrome identified was the Getting Over Pattern. Students who were into Getting Over tried to "beat the system." As a psychological defense against failure, they would do as little work as possible and try to impress the teacher with their intentions rather than their actions. If they didn't pass the course, they wouldn't feel like failures because they didn't invest very much of themselves in an effort to pass. Contrary to his original perceptions, Blake found that having ethnic minority faculty members did not eliminate students trying to "get over" on them. Each student was dealing with a fear of failure and this had nothing to do with racial identity.

Just as the student with feelings of Ultimate Doom seemed to focus on an "F" grade as an expectation, the "Getting Over" student seemed to focus on a "C" grade. Their goal was to do as little work as

possible to earn a "C." A strategy that worked so well in high school where the goal was to graduate, not necessarily to learn.

The third syndrome involved a sense of Alienation. As these ethnic minority students became more successful, they found themselves becoming alienated from their home communities and from themselves. "If I choose what I want to be, I cannot be what I was raised to be," was the way that Blake explained it. These students felt that they were being pushed by the school to expand and be open to change while, at the same time, they were being pulled by the people at home to return to old values. Ethnic minority women especially felt separated from the non-successful ethnic minority male.

The successful ethnic minority student often became alienated from family members, peers, community and self. Blake (1980) found that this type of Alienation leads to marginality. The marginal person is on the edge of two worlds but belongs to none. He is on the cutting edge. The student is moving away from the familiar to the unfamiliar. This becomes a strength and a basis for creativity. The transformation process becomes social with the impact of change and overcoming leading to constant marginality. Alienation means constantly being on the edge of discovery.

Workshop Format

When I returned to Duff's Business Institute where I was Academic Dean in 1980, I developed case studies based on three of our students who exhibited one or more academic syndromes. Then I developed a workshop to present to all of our Freshmen Seminar classes. The workshop consisted of the following:

1. An introduction to and discussion of the three academic syndromes.
2. Small group work with three case studies. Each group must come to consensus as they identify the syndromes in each case study, discuss their possible causes and recommend ways for a counselor to respond to the student in each case.
3. Class discussion of the findings of each group.

The case study format allowed students to discuss the syndromes without having to publicly admit to their own identification with them.

The small groups were instructed to not only identify the syndromes and their causes within each case, but also recommend solutions for the problems of the student in the case. When the class then reconvened to discuss each groups responses, everyone in the class had a number of suggestions as to how to overcome their own feelings concerning Ultimate Doom, the Getting Over Pattern, and Alienation.

During the next five years, I presented this workshop every quarter to our beginning freshmen; a total of approximately 2,500 students. I had originally titled my presentation, "Academic Syndromes of Minority Students," but soon discovered that this was a mistake. After each workshop a number of students would remain behind to discuss how one of the syndromes was a perfect description of how they felt. Many of them were not ethnic minority students.

I can still remember a white (non-Hispanic) adult female student describing how her boyfriend beat her every night after classes and how he had finally resorted to locking her in the bathroom so that she couldn't come to school that morning. She had managed to climb out the bathroom window and get to class on time but wasn't sure how she was going to deal with him when she got home. Our class discussion of Alienation and the self esteem problem that an unemployed, uneducated male might have with seeing his significant other experiencing success in school, helped her plan a workable approach to her problem.

Faculty Development

In addition to working with freshmen, I modified the workshop for use in faculty development programs. I presented a revised version to the faculty at Duff's so that they would better understand what some of their students were experiencing and to help arm them with intervention strategies. This was also part of an overall school effort to improve student retention rates. The faculty version wasn't very different from the student workshop. During the introductory discussion, faculty were asked to contribute specific examples of students they believed were exhibiting symptoms of the three syndromes. When it came time for the small groups to work on the case studies, they were able to speak from personal experience. Rather than have

them pretend to be school counselors, they were just asked to brain-storm what their responses as faculty should be for each case presented. The final large group discussion focused on specific suggestions for individual faculty dealing with students who exhibit symptoms of each syndrome.

The faculty confirmed for me what I had already discovered in the student workshops, that these academic syndromes applied to a large group of our students regardless of race, sex, age, or national origin. The faculty was also excited to have the opportunity to develop strategies to help students confront these problems in a proactive way rather than find many of these students dropping out of school for "personal problems."

Blake (1980) suggests three ways in which institutions can respond to these academic syndromes.

1. The academic program must respond to the developmental needs of students.
2. Faculty must nurture and recognize strengths in students that even the students may not be aware of.
3. Marginality must be seen as a basis for creativity. The cutting edge is the edge of discovery.

Current Research

During October and November 1994, I introduced these concepts to 114 students in five Success Skills classes (Freshmen Seminar) at Pittsburgh Technical Institute (PTI). I then surveyed each group to discover how many identified with each syndrome. The results were as follows:

114 total students were surveyed (15, or 13%, were ethnic minority students).

72 (63%) identified with at least one syndrome.

16 (14% of 114 and 22% of 72) identified with multiple syndromes.

12 identified with 2 syndromes.

4 identified with all 3 syndromes.

44 (39%) identified with some form of Alienation.

36 (32%) said that they were into Getting Over.

12 (8%) said that they had Ultimate Doom.

The five classes ranged from 21 to 26 students. The percent of students who identified with at least one syndrome by class was 76%, 74%, 62%, 57% and 50%. The mean was 63% of the students.

In January of 1995, I presented this workshop to another 51 freshmen (only 3 were ethnic minority students) with the following results:

36 (70%) identified with at least one syndrome.

8 (16% of 51 and 22% of 36) identified with two syndromes.

21 (41%) identified with some form of Alienation.

12 (24%) identified with Getting Over.

11 (22%) identified with Ultimate Doom.

The data show that students starting in the Winter term are more likely to have difficulties with Ultimate Doom than those who start in the Fall. While a higher percentage of students who start classes in the Fall are into Getting Over. One explanation for this could be that the Fall class consists mainly of students who have recently graduated from high school, while Winter starting classes often include students who have recently achieved their General Education Diploma or who have reluctantly decided to return to school.

During the Academic Syndromes' workshop for the faculty at PTI, I focused on the above statistics and delivered the following message:

> These statistics show that these three major academic syndromes effect a majority of our new students and they effect some classes to a much greater extent than others. By identifying these syndromes early in the first quarter and helping students cope with their negative consequences, we should be able to reduce the number of students who withdraw from PTI or who fail unnecessarily.

We have now institutionalized a three-step process that includes follow through by faculty. Step one: present the Academic Syndromes workshop to all incoming freshmen. Step two: collect data from freshmen (self reported and anonymous) indicating which syndromes they identify in themselves. Step three: meet with each department's faculty to discuss the prevalence of the syndromes in their freshmen class that quarter and brainstorm specific supportive responses for the faculty to employ.

This process has produced a student retention initiative by one department that is already showing signs of success. One Program Director compiled a list of problems that cause students to withdraw from school and then provided a list of possible solutions for each problem (school-based) for discussion with both faculty and students. After compiling fifty pages of solutions, she introduced a follow up discussion to the Academic Syndromes presentation in Freshman Seminar. The discussion covers many of the problems that cause students to drop out of school and empowers students with the solutions to those problems before they occur.

A number of faculty members have followed up on the student workshops by encouraging students to face their problems and deal with them. They tell students that rather than allow problems to grow to the point where they get too difficult and become potential reasons for leaving school, they need to be proactive in finding solutions. The faculty then steer individual students to the people who can help them with their problems.

Discussion

In 1984, Ellis provided the educational community with suggestions for developing a comprehensive plan for improving student retention. Included in his 30 suggestions were the following five:
- Identify potential dropouts.
- Make counseling available.
- Perform a climate check.
- Concentrate efforts on first-term students.
- Support warmth, friendliness and caring.

A first term workshop based on the three academic syndromes identified by Blake in the late '70's is an effective way to address some of the student retention issues in the '90's. Properly done, this workshop can help identify potential dropouts, provide counseling in a nonthreatening atmosphere, perform a climate check, focus on issues for first term students, and provide a caring atmosphere.

Once we realize that drop outs aren't the problem but dropping out is a solution that a student has implemented to solve a problem,

then we can become part of the solution rather than part of the problem. If one of our jobs as educators is to help students learn to problem solve, why not begin the problem solving process with problems that effect many of our students. I am proposing that academic syndromes are a good place to start.

References

Blake, H. (1980, October). Beyond institutional development. Paper presented at the 9th Annual Professional and Organizational Development Conference, Berkeley, CA.

Ellis, D. (1984). *Student retention strategies and teaching tech-niques: Excerpted from becoming a master student instructor's guide,* (4th ed.). Rapid City, SD: College Survival Inc.

Appendix A

Academic Syndromes

Case #1 Jim Wilson attends PTI while also working full-time as a porter after school. He is a good student when he is in class and does well on exams. Recently, he has been missing classes and comes late when he does finally appear for class. When confronted with his behavior by his teachers, he offers a variety of excuses. A call to his parents reveals that he is the first in his family to continue schooling beyond high school and that none of his friends have gone on to school after graduating from high school.

Case #2 Barbara works part-time as an administrative assistant while attending school. She arrives in class on time but never participates or completes homework assignments. She is attractive, charming, and makes an impressive appearance. When her teacher confronts her with her behavior, she states that she has no place to study because she lives at home with younger brothers and sisters who pester her all the time. She has no library in her area and no car available in the evening to travel across town to the library. Each day she speaks to her instructors about the problem and says that she will do better but the situation remains.

Case #3 Alice is a 27-year old mother of three. Her husband is a high school drop out and construction worker. He is generally a kind man; however, since Alice began doing well at PTI, her husband has become cruel and hostile. He refuses to baby-sit while she studies, criticizes everything she does, and continually calls her "stupid." Recently he threatened to beat her for spending too much time with the books. The baby-sitter refuses to come to the house and as a result, Alice is frequently late for class or does not come at all. She is becoming frustrated and depressed and can't seem to concentrate on school.

Appendix B

Academic Syndromes

Faculty Workshop
Directions

1. Choose a recorder for your group. This person will be responsible for recording the small group's reactions to the case problems and reporting the results to the large group at the end of this exercise.
2. Read each case and identify the syndrome or syndromes exhibited in the case. Identify the possible causes of the specific behaviors and suggest individual and institutional responses to each situation.
3. Discuss your thoughts concerning each case with your group. The recorder should note consensus and dissenting opinions concerning each case.
4. The recorder reports to the larger group identifying the group's consensus about the syndromes exhibited in each case, the possible causes of the specific behaviors, and suggested individual and institutional responses to each situation.
5. Individuals may bring up specific cases from their own classrooms for group discussion of possible responses.

Teaching and Learning in the Diverse Classroom: A Faculty and TA Partnership Program

Matthew L. Ouellett

University of Massachusetts Amherst

Mary Deane Sorcinelli

University of Massachusetts Amherst

On most campuses, diversity education and faculty development are separate initiatives. This article describes a new program that successfully combines the two functions by building on methods and practices from both. The program has had beneficial outcomes for individual teachers as well as for their departments.

In recent years, higher education has begun to pay more serious attention to issues of diversity in the college classroom. Diversity has always existed in the classroom, of course; but changing demographics and the readiness of many students to be more vocal about their social identities have made us more keenly aware of their diversity in ability, age, gender, race and ethnicity, religion, sexual orientation, social class, and learning style. This awareness, in turn, has presented TAs, faculty, administrators, and faculty developers with a variety of instructional and institutional challenges as they work together to explore methods of making the classroom an effective and inclusive learning environment for all students.

As an assistant director and director of a center for teaching, we have worked collaboratively with other campus offices over the past

year to achieve a common goal: to develop and implement a new TA and faculty development program that creates linkages among the domains of teaching, learning, and diversity education. In this case study, we will describe the kinds of programs we've developed, identify some of the key strategies that have proven to be the catalysts for change in our institution, and summarize lessons we've learned. We hope that some of what worked well for us can be applied by faculty developers on other campuses that are grappling with how to value diversity in the classroom.*

The Institutional Context

The University of Massachusetts at Amherst has a rich and complex history of social activism. For more than two decades, various faculty members and student groups have been engaged in developing institutional and curricular structures to promote a more multiculturally inclusive campus. For example, in 1980 the Provost's Office established a broadly representative Civility Commission with an Office of Human Relations as its administrative arm. Their aim was to help articulate an appropriate institutional perspective and to attempt cohesion among the variety of agendas being put forth on diversity issues. During the same time period, the faculty led a curriculum revision that resulted in the requirement that all students take two social diversity courses within the campus-wide general education curriculum, and instituted diversity programs in the residence halls (Adams, 1992; Dethier, 1984; Hunt, Bell, Wei & Ingle, 1992). Still, the needs of teaching assistants and faculty members for support and skills development in *teaching* these and other courses had never been directly or comprehensively addressed. Instructors had little opportunity to explore teaching practices that relate to diverse learning styles, to become better equipped to handle classroom dynamics that result from student diversity, and to incorporate teaching methods that address the needs and interests of our broadly diverse student population.

In response to these changing learning and teaching needs, the Center For Teaching (CFT) and the Graduate Student Senate cosponsored a three year grant to develop a new TA and faculty development program. The grant proposed a variety of programming initiatives under the title of "Teaching and Learning in the Diverse Classroom" (TLDC). In retrospect, getting the money and the ideas together was the easy part; it was much harder to implement of a meaningful TA and faculty development program on social diversity.

Designing Initiatives in Teaching and Learning in the Diverse Classroom

During the initial phase of program design and development we conducted in-depth interviews with stakeholders from across the campus. A wide array of TAs, faculty members, chairs, and deans generously shared their time, ideas, and resources. They provided practical ideas about the needs of TAs and faculty, what would make a sound professional preparation program for TAs, and offered suggestions on what would constitute an appealing and useful professional development opportunity for faculty. We also sought their suggestions about the content and format of the program, strategies that would enable us to navigate the tides of campus politics, and materials that might be included in a packet of readings or in a video library. Based on their recommendations and on our own experiences in faculty development and social diversity training, we decided that our efforts should include several tiers of activities and materials that would provide multiple points of entry into the conversation on diversity. We sketched out ideas on a continuum—from "lower-risk" activities that focused on the experiences and needs of others (e.g. watching videos or responding to reading materials) to activities that asked participants to engage in "higher-risk" activities (e.g. workshops requiring self reflection, dialogues and personal disclosure).

We launched the project at the start of the 1994-95 academic year by offering tested, self-contained workshops such as "Social Diversity Issues in the Classroom," and "Cross-Cultural Teaching and Learning" at our annual campus-wide TA Orientation Day. Throughout the year we piloted a luncheon seminar series for TAs, and produced

collectious of print and video resources focusing on teaching and learning in the diverse classroom. These three initiatives all offered accessible, relatively low-threat means to learn about and improve one's teaching in a diverse classroom. The cornerstone of our program, and also the one with the highest risk factors, was an intensive, year-long TA and Faculty Partnership Project. The following section describes the development of this key program. We believe it is unique in the field in terms of goals, design, format and outcomes.

The TA and Faculty Partnership Program

This pilot project brought together a group of nine TAs and nine faculty members in a year-long, four-tier program: an intensive, two-day immersion workshop at the outset of the year; a monthly seminar on teaching and learning in the diverse classroom; individual consultation on teaching and learning; and a discipline-based project to be designed by each team to implement in their home department.

Goals. The Partnership project had four closely related goals. The primary goal was to increase the ability of these teachers to create inclusive classroom climates. We decided, however, that it would be a mistake to focus at the outset on diversity as a "student issue." The best way to address the needs of students would be to start by addressing the needs, experiences, and belief systems of the instructors. Thus, a corollary goal was to expand the teachers' self awareness in order to engender empathy and greater sensitivity to the feelings, experiences and concerns of students typically underrepresented in the academy. Reflecting on how their own unique social identities inform their perspectives on the classroom and their experiences with students would be crucial to this process of self-exploration. It would also lay the foundation for better understanding the complex dynamics of classroom behaviors and interactions. To this end, we were careful to present awareness of individual students' issues of social identity as only one of many important perspectives on the continuum of teaching practices that promote excellence in teaching and learning.

We also wanted the teams to discuss the impact that organization-level norms and values have on diversity issues in the classroom, encouraging them to examine the values overtly and covertly main-

2 ; 0

tained by the institution and manifested via departments. The decision to build the project around teams (a faculty member and a TA from the same department made up a team) emerged from this organizational perspective. We were convinced that unless a supportive climate could be nurtured within the departments, it would be difficult for the team members to sustain newly learned views and skills. Measures that helped emphasize the idea that effective work for change must address issues at the organizational as well as at the individual level included involving a TA and a faculty member as a team from each department, inviting senior colleagues and chairs to department seminars and the closing dinner, and asking the teams to share what they had learned in their home departments. In addition, we pointed to links between the program and institutional goals by firmly placing it in the context of system-wide mandates for excellence in teaching and campus initiatives to improve student access, retention, graduation rates, and campus climate.

A final goal was to encourage participants to make a long-term commitment to enhance their skills for teaching in the diverse classroom. We readily acknowledged that we were asking participants to reflect upon and perhaps radically shift their perspectives and interpretation of the dynamics of their classrooms—to unlearn perhaps deeply held perspectives and values and to replace them with new ones. Effective change on this scale generally comes only from sustained work over time, so we emphasized that this was a program designed to "get us started."

Criteria for Selection... Selection of participants for the partnership program was based on a variety of considerations. We wanted a group that represented a variety of academic disciplines, different levels of seniority in the academy, both genders, and that had racial balance. TAs needed at least 'one year of teaching experience to qualify. We invited some participants on recommendations from faculty colleagues, chairs and deans. Sometimes we found the TA first and took her suggestion on a "receptive" faculty member, and sometimes the reverse. The key consideration was that the faculty member and TA should feel comfortable working together. At the conclusion of the selection process we had a group of eighteen who were representative in terms of race, gender, and sexual orientation. They were

drawn from every rank—TAs to full professors—and from seven academic departments in the humanities, social sciences, natural sciences and professional schools. Each participant received a $500.00 professional development award for participation in the project.

Elements of the Program. We feel that the TLDC program's components are uniquely suited to supporting participants as they grapple with the difficult dialogues that emerge in the discussion of diversity. These elements include a two-day immersion retreat; a monthly seminar on teaching and learning; collaborative team work on discipline-based projects designed by TA/faculty partners and individual support and consultation for participants throughout the program; and regular opportunities to socialize informally at dinners before each seminar and at a more formal closing dinner (with selected guests) at the end of the program.

Immersion Experience. Operationally, the retreat and seminars modeled three cornerstone concepts: collaborative facilitation, role modeling how to participate and effectively sustain difficult dialogues, and commitment to cooperative learning. We began the program with a two-day immersion experience to build team relationships and group trust quickly. Since most participants knew only one other member of the group, we endeavored to spend this time on the critical tasks of establishing group identity and norms, creating a shared vocabulary around diversity issues, and presenting several models of social identity development (with applications to the university or college classroom). We included many opportunities for participants to share their personal stories, their own backgrounds, experiences in teaching, and personal perspectives on working through issues of prejudice in the classroom. We also wanted to emphasize that these issues are *everyone's* issues. The two-day immersion worked successfully to bring us together as a small group at the threshold of the experience and to acquire a sense of each other's perspectives and interests. By quickly establishing a level of intimacy and comfort, we were able to get right to the heart of sensitive issues during the later seminar sessions.

Seminar Series. Once a month we brought the group together for an informal dinner and a 2 1/2 hour seminar on selected issues related to diversity in the classroom. The participants generated the topics for the seminars, based on what they wanted to know about teaching in a

212

diverse classroom. We balanced topics on social justice awareness training (e.g. discussions with a panel of undergraduate students about experiences of racism in the classroom) with skill-specific topics (e.g. application models of cooperative learning). We included very little direct lecturing from "expert" presenters. We focused on eliciting the experience and perspectives of participants and then provided key information in brief lecturettes, numerous handouts and referrals to other resources. The bulk of our time was spent in dialogues (in dyads, small groups, and large groups) about implications, applications, discipline-specific needs and universal strategies for creating more inclusive classroom environments. At the end of each seminar, we conducted formative evaluations that helped us plan subsequent sessions. A fundamental turning point in the group process came for us when the group decided spontaneously to meet an extra time between two seminars to continue the discussion and invited the facilitation team to join them. It is obvious that this incident marked the point at which participants had achieved an understanding of (and openness toward) each other's viewpoints, leaving behind the desire to convince others that theirs was the "right" way of teaching.

The retreat and the seminars were intended to foster change at two levels. The first was at the organization level, by enhancing participants' general awareness of the dynamics of social group oppression and how this principle operates in the context of the classroom. For example, members of the group targeted by prejudice often know much more about the group that is doing the targeting, or acting as the agents of prejudice, than agent group members know about target group members. The second level of change was at the individual level, by asking participants to articulate and explore the personal implications of theories of teaching and learning in the diverse classroom. By constantly linking the exploration of organization and personal values, assumptions, and social identities with how participants taught, we hoped to create a richer interpretation of the dynamics a diverse classroom and deeper understanding of students' needs and behaviors.

Team Projects and Consultation. The project staff from the Center For Teaching worked with each team to define (and refine) goals for their discipline-based project. As a result, participants often began to

2 1 3   211

look closely at their own teaching and learning and at their department's interest in issues of teaching, learning and diversity. For example, one team asked the CFT to offer a set of workshops on teaching and learning in the diverse classroom for the department's faculty members and TAs. Another team developed their own seminar using consultation, videotapes and print resources from the Center. Additionally, several members sought out CFT staff for help with specific personal questions around diversity issues. In the program evaluations at the end of the first year, participants credited the availability and positive relationship with CFT staff with helping them to gain greater personal clarity on diversity issues, to create focused and manageable goals, to develop as teachers, and to bring their projects to fruition.

Social Dinners. The informal socializing and networking over the "working dinners" before the seminars became a crucial factor in maintaining group cohesion and an amiable climate. At the close of the partnership project's pilot year, we decided to provide an occasion at which participants and guests could come together to acknowledge and celebrate the accomplishments of the group. Participants clearly did not want an award dinner, but rather a "signpost" event in which they could share what they had learned with colleagues committed to teaching, learning and social diversity. Each team invited two or three guests: deans, department chairs, senior colleagues, and "kindred spirits" in the academic community. Each team member was presented with a certificate and a book about teaching and learning in the diverse classroom. All of the formal speeches were finished in about fifteen minutes, after which the evening became what we called "open mike," with participants sharing memorable experiences they had had during the partnership project.

Lessons Learned

Our commitment to bringing together the two streams of teaching development and diversity education into one program required flexibility and responsive facilitation throughout the course of the program. We were committed to meeting the needs of the individuals and teams (as these emerged), as well as being committed to achieving the overall

goals of the program . We gathered informal feedback from individual participants almost weekly, we asked for formative evaluations at the end of every activity, and we performed a summative evaluation at the end of the program. Intensive study of our pilot project activities suggests nine general lessons that might be of value to other campuses.

Define "diversity." We defined diversity as reflecting all the elements of one's social identity where issues of power and prejudice come into play—gender, race, sexual orientation, physical or mental ability, economic class, religion, and age—as well as issues which are specific to the classroom, such as academic preparation. Our experience suggests that this broad definition affords multiple points of entry into the dialogue and provides a model of an inclusive framework.

Model collaboration. This project was a collaboration from its inception: it started as a joint proposal between the CFT and the Graduate Student Senate. Planning and facilitating activities were team efforts, too. The fact that facilitators were representative in terms of race, gender, sexual orientation, and academic status possessed symbolic power (reiterating that we are all responsible for diversity issues) and also provided role models. Selecting a faculty/TA team from each participating department helped prevent feelings of isolation and opened up the practical, local dimensions of working with diversity issues. Finally, having participants with varied knowledge and experience with diversity issues modeled the pivotal concept that each participant in a learning situation has something to teach as well as to learn.

Start with commitment, not expertise. Ideally, we were looking for teachers who were not necessarily *experts* on diversity, but who expressed a genuine interest in diversity issues, possessed the desire to be effective educators, and who were willing to participate in a pilot program that would necessarily include some bumps and unexpected turns.

Create multiple points of entry into the process. Our first priority was to engage participants at their level of interest in diversity in the classroom. We also realized that there are few places where instructors find the opportu ty to talk about teaching so we needed to build in time for wide-ranging discussions about teaching in its broadest sense, as well as specific issues related to diversity. By first

connecting with their perceptions of important issues on teaching and learning, we were later able to focus the discussions specifically on diversity issues and create connections between different expressions of oppression. We were heartened by the degree of interest and gratitude that participants brought to these discussions of teaching and learning.

Throughout the year, participants consistently sorted themselves into two groups: those who taught subjects where diversity issues are part of the curricular content (e.g. English, the Writing Program, the Schools of Public Health and Education) and those who felt their subject matter is "neutral" and thought of diversity issues in the classroom as a product of the student's or teacher's identities. Of course this is a false dichotomy, but we dealt with it by providing a balance between a focus on classroom-based teaching strategies and resources about social identity, diversity, and oppression education.

Avoid any hint of political correctness. Participants carried into this experience a kind of free-floating defensiveness that we came to understand as a reaction to prior experiences of not-so-subtle attempts to bully people into a specific ideological stance. We immediately set to work to dispel these anxieties and to create a climate of mutual discourse. We emphasized that the program was designed to provide as many approaches to thinking about and understanding diversity as possible. An effective analogy is one of building a big toolbox and wanting to place as many different tools into the box as possible. Depending on the teacher, the student, the curriculum and the classroom, a variety of different tools could be useful. The individual teacher must decide on the utility and application of different devices.

Expect resistance. Work on diversity issues is difficult and often emotional. Age and academic status are not necessarily indicators of sophistication on issues of social diversity or readiness to actively and openly engage in these issues. Group process, therefore, requires a careful balance between cognitive outcomes (teaching techniques and pedagogy) and affective outcomes (expression of and exploration of feelings). It was important to welcome challenges from all corners since each experience helped the other group members clarify their own positions, helped establish and reinforce shared ownership of the learning process and modeled strategies that might be effective re-

sponses in class situations as well, It can be helpful for the facilitation team to model being "in process" on their own relationship to diversity issues.

Be prepared for complex TA/faculty dynamics. The faculty/TA partnerships had many benefits and our evaluations resoundingly encouraged us to stay with the teams. However, trying to "level the playing field" also presented complex issues in the facilitation of the group process (e.g. faculty talked a lot more) and in various levels of cynicism about change (senior faculty were more likely to talk about having "seen it all before"). Over time, some activities also brought forward the differences in the perspectives and experiences of team members much more clearly then might otherwise ever have been articulated. Careful facilitation and pacing allowed conflicts to emerge in ways that contributed robustly to the experience rather than compromising it. Here again, co-facilitation allowed for focus on both content and process during activities.

Honor personal stories. The most powerful teaching experiences were also the moments in which program members shared their own stories, experiences and questions about teaching and learning. It is crucial not to "overprogram." Reserve pockets of flexible time to explore issues in depth and to place personal experience in the context of knowledge about the aggregate experiences of social groups.

Locate the program in an organizational context. We placed this program as one point along the continuum of activities that the Center For Teaching conducts on teaching and learning. We resisted identifying the TLDC program as addressing "student problems" or as the answer to all diversity issues on campus. While some TAs and faculty are drawn to this work by moral arguments or personal commitment, we found it important to point to the long-term pragmatic interests of the institution in engaging both individual participants and their departments in this enterprise. We explained how, through the program, individuals and their departments could begin to address institutional concerns such as dealing with large classes, inconsistent academic preparation, and fewer resources for student success. We were also scrupulous about resisting expectations that this single program could solve the issues.

Conclusions

The first year of the "Teaching and Learning in the Diverse Classroom" initiative yielded several positive outcomes, especially from the TA and faculty partnership project. Three outcomes underscore the usefulness of a program like this for addressing faculty and TA skills for teaching and learning in the diverse classroom.

First of all, participants report that the program confirmed for them that there is a universal nature to good teaching which reaches beyond any single discipline. They reported that it increased their confidence that these skills can be learned. And they enjoyed being given the opportunity to work directly on issues of teaching and learning with colleagues. In retrospect, we underestimated the positive appeal of networking across disciplines and ranks and the impact that this experience would have on the participants.

A second important outcome of the program was the creation of a core of faculty and TA partners interested in issues of teaching, learning and social diversity. Many expressed strong satisfaction with being part of a university-wide network of people who clearly see the linkage between diversity issues in the classroom and excellence in education. Through this year-long process participants reported that they learned practical applications for linking the dimensions of good teaching with the tenets of diversity education in ways that they otherwise might not have been able to do. TLDC created opportunities for participants to explore issues of teaching and learning and diversity with a degree of depth and honesty with each other that was, for many, unprecedented.

Finally, participants reported that their self-concept as teachers underwent a transformation. Many, both graduate students and faculty, were already competent researchers, but they freely acknowledged that they were not as prepared as teachers—and even less prepared as facilitators of dialogues about diversity. Participants believed that they would return to the classroom with increased self-awareness and self-confidence as instructors, increased empathy for, and sensitivity to, the needs of diverse students, and with a new corpus of knowledge and useful strategies for teaching in the diverse classroom.

2 8

References

Adams, M. (Ed.). (1992). Promoting diversity in college classrooms: Innovative responses for the curriculum, faculty, and institutions. *New Directions for Teaching and Learning, No. 52.* San Francisco: Jossey-Bass.

Dethier, V.G. (1984). *A university in search of civility.* Amherst: Institute for Governmental Services, University of Massachusetts.

Hunt, J.A., Bell, L.A., Wei, W., & Ingle, G. (1992). Monoculturalism to multiculturalism: Lessons from three public universities. In M. Adams (Ed.), Promoting diversity in college classrooms: Innovative responses for the curriculum, faculty, and institutions. *New Directions for Teaching and Learning, No. 52.* (pp. 101-114). San Francisco: Jossey-Bass.

Section IV

New Practices

Two of the current trends in higher education concern the use of technology in teaching and teaching critical thinking. Faculty developers must stay abreast of the applications of new technology in teaching and learning, as well as creative uses for existing technology, in order to help faculty members select and use technology effectively. The first two articles in this section address these issues and provide working examples of applications. The third article describes a method for teaching critical thinking using an eight-step process based on Stephen Brookfield's work.

Electronic mail offers a method of communication between teachers and students that can be personal and direct or completely anonymous. Student-teacher (or teacher-student) contact can occur at any time, and various teaching and learning functions can therefore take place anytime and anywhere. The article by James Hassett, Charles Spuches, and Sarah Webster, is based on their experience in using e-mail in their courses. They suggest three basic uses for e-mail—course management and support, teaching and learning, and course evaluation and feedback—and provide rationales and practical examples for each of the applications.

In 1985, Robert Lewis began to explore ways to elicit more useful information from his student course evaluations by creating a data base of student responses and using simple statistical techniques to analyze the results. His article describes the methods he used and examples of the kinds of questions he tried to answer using the data base. Although his ratings, like those of many teachers, were generally positive, he

was curious about the responses of sub-groups within each class and how they reacted to specific elements of the course. In one case, he tested whether "challenge" or "enjoyment" was more important for learning particular elements of the course, and concluded that "enjoyment has a higher relationship with learning than challenge." This use of computers illustrates the power that technology can place in the hands of individual teachers.

Classroom examples of the application of critical thinking theory are still uncommon in the literature. The article by S. Kay Thornhill and Melissa Wafer provides a clear picture of the strategy they used for incorporating critical thinking into a clinical course in nursing. Their example offers a model for other teachers, especially those in professional education, to teach critical thinking as an integral part of the curriculum.

221

Using Electronic Mail for Teaching and Learning

James M. Hassett

SUNY College of Environmental Science and Forestry

Charles M. Spuches

SUNY College of Environmental Science and Forestry

Sarah P. Webster

SUNY College of Environmental Science and Forestry

Electronic mail (e-mail) can be a useful educational tool that can enhance learning in any curriculum. This article will provide instructors with a conceptual framework and several examples of how e-mail can be integrated into a variety of classroom and independent learning situations.

As a cost effective and accessible communications tool, e-mail makes a significant impact on communications within and across college and university campuses and has become a vehicle for finding and using information resources. While the use of e-mail for all communications is growing rapidly, few materials are readily available for faculty who want to use e-mail as an educational tool. Thus, we have not yet realized the potential of e-mail to enhance learning and to integrate this type of computing into the whole curriculum.

We hope this article will encourage faculty to incorporate this new application of computer technology into the teaching and learning process.

Why Use E-mail?

Although computing in general, and e-mail in particular, are well established in undergraduate education, they are not fully integrated into the curriculum. We often limit computing to courses in which it is the primary focus or a necessary tool, such as computer programming or statistics courses. The notion of integrating e-mail into the undergraduate curriculum as an instructional tool is still relatively new, but introducing e-mail into any curriculum has many potential benefits.

Students and faculty both benefit from using e-mail. Students learn a communication tool that is used throughout academia and industry. Using e-mail is the first step in using the Internet, the international research and education network that our students can navigate by using network searching tools.

Students who use e-mail find that faculty are accessible for more than posted office hours. E-mail extends office hours to virtually any time and place, to the mutual convenience of faculty and students. Students also can discover and learn to use educational resources that exist beyond the boundaries of the campus.

E-mail allows students and faculty to join other learners of all ages, from all over the globe, in discussions of mutual educational interest. This enlarged "peer group" brings together people from other cultures, religions, educational systems, and political systems, enriching students on the local campus.

Finally, students are encouraged to learn independently and are rewarded for doing so. The educational networks are so enticing that students often explore them beyond the requirements of a particular course.

Each of our courses has a specific goal and objectives according to its place in the overall college curriculum. E-mail has proven useful for communicating these details to our students. More broadly, we want to introduce our students to the notion that their intellectual efforts constitute part of a worldwide community of teaching and learning — learning that goes on far beyond the confines, in time and space, of a classroom. We can empower our students by giving them access to electronically stored information. It is important to discuss

223

protocols for using an electronic network, as well as to consider the ethical issues inherent in using it. In short, we want to produce literate citizens of the worldwide networks, and e-mail is a starting point.

Putting E-mail to Use

The conceptual framework we developed to organize examples of e-mail use is represented in figure 1. There are many ways to portray uses for e-mail. We all have our own mental maps of the teaching and learning process, and this is true for the use of technology such as e-mail as well. The reader should not, therefore, treat this framework as the last word, but rather as a starting point. Use it for critical consideration of how you use or might use e-mail in your own teaching. Then, adapt or extend this framework as your experiences and needs suggest.

Figure 1: A Framework for E-mail Use in Teaching and Learning
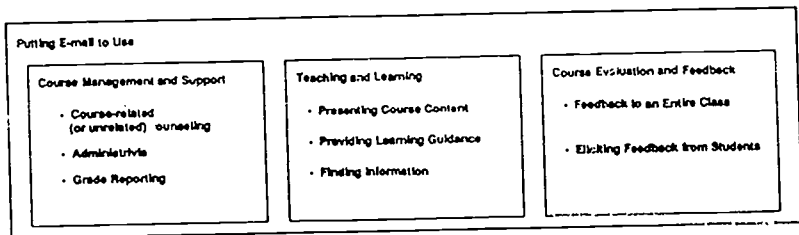
The examples of e-mail use in this article are derived from our experience with a mainframe computer and are based upon its unique operating and mail systems. Other e-mail packages on other systems typically have similar functions but different details. While the examples used here represent one particular format, we emphasize that the functions discussed here are not specific to particular computer systems.

One obvious point bears mentioning. The following framework and examples of e-mail use in instruction are based on the premise that

everybody concerned owns or has access to a computer. Whether students own or lease computers loaded with the necessary software or use campus computer clusters, easy access to e-mail is a prerequisite to its use as an instructional tool.

Course Management and Support

Course-related (or unrelated) counseling

All of us know students who are dealing with events in their personal lives that interfere with their studies. Sometimes we think a student needs specific help right away.

A male student in Dr. White's course comes up to the professor after class to explain why he will be late handing in a paper. His father is dying, and his mother is having trouble. The student goes home every weekend to help his mother and brothers and sisters. It's clear this young man will have a rough semester. White sends this message.

Date:19 Oct. 1994, 14:29:44 EST

From:Dr. White <WHITE@SUVM>

To:Phil Koerner <KOERNER@SUVM>

Subject:Your paper

Thanks for letting me know about the late paper. This is your "official" confirmation that I've extended your deadline until October 26.

I'm sorry about your father. I lost my own father two years ago, and even though I'm much older than you, it was very hard to realize I could never ask his advice again. Let me know if I can do anything else to help you.

Administrivia

E-mail can be a useful tool for communicating day-to-day announcements that facilitate student progress in our courses. Consider the following scenarios.

Professor Johnson wants to make sure all her students know who the teaching assistant is and how to reach him for help. She could follow up an announcement in class with a message like this:

FROM:SUNRIS::WJOHNSON 1-SEP-1994 09:32:37.06

TO:@users

CC:CMOORE

SUBJECT: Teaching Assistant

Our teaching assistant this semester is Clark Moore. His office is 410a Bray Hall. His office hours will be Wednesday and Thursday 9-10 a.m. or by appointment. His phone extension is 6664, or e-mail may be addressed to him via cmoore@mailbox or cmoore@suvm.

In this example, the @users on the TO line shows that all computer users registered for this class will have received the identical message — except that their computer userid (their personal e-mail address) will appear instead of the @user. This requires Professor Johnson to create the proper file of userids in her master account.

Professor Johnson also might wish to communicate course announcements as she learns of them rather than waiting for the next class meeting, as the following example suggests.

From:SUNRIS::WJOHNSON 03-SEP-1994 16:06:24.32

To:@users

CC:

Subj:Course reader ready

I have just learned that the course reader of assigned labs and suggested (for undergraduates) and required (for graduate students) articles is ready. You may purchase the reader at the campus copy center in the Campus Mall. Ask for reader number 338. Please have the reader in hand for your first lab session.

Grade Reporting

Most students want to know their grades for examinations and assignments as soon as possible. E-mail can provide quick dissemination of grades as soon as they are known, freeing valuable class time for other uses. Performance messages can also focus the student's attention on issues raised by her or the class's performance on the exam rather than on the grade alone.

Assistant Professor Wheeler teaches 40 students in a required junior-level course. He has just given one of three course examinations. As soon as he knows the results, after finishing the grading at home, he sends the following messages to the students in his class.

From:SUNRIS::GWHEELER 29-FEB-1994 20:18:08.24

To:@users

SUBJECT:Exam 1 Grades

The grades on the first examination in Forestry 323 ranged from a low of 28 to a high of 97. The mean grade was 72.8 with a standard deviation of 14.3. Most students mischaracterized stem cambial growth patterns in answers to the questions at the end of Part B. While this is not a course in cellular botany, these patterns are important because they determine wood characteristics. If you feel rusty on this topic, review pages 68 through 74 in your textbook.

Your grade will be in the next mail message in your reader.

Feel free to ask any questions you may have in class or during my office hours (Wednesday and Friday afternoons from 3 p.m. to 4 p.m.). You may, of course, send an e-mail anytime.

Until later — Gordon Wheeler.

At times it may be appropriate or necessary to contact an individual student, as in the following example. An extra word of encouragement to a student who has had difficulty will be appreciated. On the other hand, e-mail is an unobtrusive way to focus a student's attention on less than satisfactory attendance or performance. E-mail is a convenient way to schedule or reschedule individual conferences with students.

From:SUNRIS::GWHEELER 29-FEB-1994 20:21:54.02

To:SUNRIS::RAROE

SUBJECT:

Your grade was 92. Excellent! I know you were concerned after your last exam but you're doing well. It looks like your study group and initiative have helped.

Teaching and Learning

Presenting Course Content

It's easy to forget to hand out information in class. Moreover, you may prefer to spend class time having students work on problems rather than listen to lectures. We've often used e-mail to disseminate new information and to correct misinformation.

On Thursday, Professor Miller's class became so involved in problem-solving that he decided not to interrupt them to introduce the next topic. However, he didn't want to wait for the next lecture, five days later. So he decided to introduce the topic electronically.

Date:16 Nov 1994, 11:45:45 EST

From:Peter Miller <MILLER@SUVM>

To:ENG645@SUVM

The next topic we'll discuss is the electric properties of dilithium crystals and their part in the warp drives of starships. Warp drives are

the third propulsion system we are considering this semester (the other two are ramjet engines and scoopjet engines). Please read the chapter on warp drives for Tuesday's class. By the way, good discussion today.

Professor Anderson has been reading papers written by the Scientific Writing class and she's drowning in misplaced modifiers. She'd hoped not to have to use time discussing grammar with college juniors; however, if she sees too many more of these, she'll go nuts. Moreover, it's important in any writing course to remediate or reinforce student ability to write clearly. She sends this message to the class.

Date:19 Sep 1994, 13:13:13 EST

From:Morgan Anderson ANDERSON@SUVM

To:WRT444

Subject:Misplaced Modifiers

I've been reading the most recent set of papers, and there's an issue we have to address — namely, misplaced modifiers.

Definition: Misplaced Modifier — a word, phrase, or clause which is so badly placed in a sentence that it's not clear what word it is defining or elaborating.

Examples:

1. Coming up out of the subway, the sun hit me in the eye.

"Coming up out of the subway" is the modifier. It is supposed to refer to the person coming up out of the subway (maybe "I"). Instead, because of where it is placed in the sentence, it actually refers to "the sun." So I have this picture of the sun riding the A train.

Sentence corrected:

"Coming up out of the subway, I was blinded by the sun hitting me in the eye." or

"As I came up out of the subway, the sun hit me in the eye."

2. If locked, please see the secretary for the key.

The modifier is "If locked" and probably refers to a door. However, because of where it's placed in the sentence, it appears to refer to "you" which is the understood subject of the next clause "please (you) see the secretary for the key." So what the sentence really says is "If you are locked, please..."

Use another word or two to be precise: "If the door is locked, please see..."

You may want to try the fatuous argument that "everybody knows what I mean," but don't! This is the course where you learn to write precisely what you mean, so the reader does not have to translate.

Expect an exercise during the next class on rewriting sentences to get rid of misplaced modifiers. Your text has a section in the back about this. Please review it.

Assistant Professor Jones is in a quandary. He offers a seminar in his specialty but finds no suitable textbooks available. He could spend hours composing assignments, proofreading them and making revisions before having them copied for the students in his class. Rather than use this route, Jones chooses to e-mail the bulk of the material to his students. Consider the following examples.

From:SUNRIS::WJONES 08-SEP-1994 21:33:35.38

TO: @users

CC:

Subj:Second problem assignment

The following problems are due one week from today.

Problem 4.

Discuss.....

Problem 5.

Discuss.....

Professor Jones can also respond to questions that arise in class or office hours via e-mail. This way the entire class benefits from the discussion.

From:SUNRIS.·WJONES 25-SEP-1994 14:33:02.04

To:@users

CC:

Subj:Hint on problem 16.

A question in class concerned proving that critical flow implies maximum discharge for a given specific energy. Here's a hint: write the energy equation for a channel of arbitrary geometry, i.e., in terms of Q and A.

Providing Learning Guidance and Feedback

E-mail messages can provide reminders of, and guidance for, exams. Each student receives an individual message regardless of whether or not they were in class. Professor Johnson might well choose to send a message similar to the following example.

From:SUNRIS::WJOHNSON 25-OCT-92 15:27:41.12

To:@users

CC:

Subj:Better get ready!

We will have a quiz on Thursday, October 30, 1994. The quiz will be based on a problem similar to problem 52. The quiz may well involve:

Calculation of critical energy.

Calculation of normal depth.

Identification of hydraulic controls.

Identification of flow profiles.

Calculation of flow profiles for regular channels.

You will want to solve and think about problem 52. For example, can you, after having solved the problem, relate the profiles to the E-y

diagram? Can you draw the conjugate depth curve? Can you relate the data in the problem to the M-y curve, i.e., locate the profiles, locate the hydraulic jump, etc.? Such will be the nature of the quiz!

Professor Johnson soon finds that some of her students use e-mail to ask for help on certain assignments. She sets aside a few minutes each day to answer queries, as illustrated in the following example, hoping that the time spent composing replies to these messages will be of.set by fewer visitors during formal office hours.

From:SUNRIS::EBWHITE 12-OCT-1994 17:33:52.56

To:WJOHNSON

CC:

Subj:#27

How about a helpful hint on problem 27?

Is it simply algebraic manipulation or do we have to ASSUME something?

In this example, Professor Johnson recognizes the userid (EB-WHITE) as belonging to a somewhat shy student who had not come to office hours for help. She responded with an appropriate hint and the student was able to proceed with the problem assignment.

Finding Information

Sometimes local information resources are not robust enough for a student research project. In the past. this and the tendency of some students to put off their work has led to poor or late results, with the explanation (excuse?) that "it wasn't possible to get information about this unusual subject in time." We use the computer networks to gain access to information housed elsewhere, removing obstacles of time and place and showing students how to reach beyond the boundaries of the campus.

The seniors in Professor Robinson's class have used the library resources of the college and neighboring colleges extensively, but a

few of them cannot find enough information on the topics they've chosen for research papers. As usual, they have delayed starting their projects so long that Interlibrary Loan cannot come to the rescue. Professor Robinson belongs to an electronic interest group, and he remembers that one of the subscribers informed the group that a large group of documents in the field had been put on a public file server at her institution, available to students and scholars alike. Robinson gets an index of the documents and instructions for retrieving them and sends the following message.

Date:Wed, 10 Nov 1994 11:11:11 EDT

From:Jim Robinson <ROBINSON@SUVM>

To:Tom Mason <TMASON@SUVM>, Dick Smith <DSMITH@SUVM>, Harriet Wilkins <HWILKINS@SUNRISE>

Subject:Information for your research papers

OK. I have a list of some articles you can get for your research papers. Come to my office hours THIS WEEK and let's look the list over. I'll teach you how to get the articles if you're interested. Do not wait!

For a course in industrial policy, Professor Ortiz wants her students to work in teams, something she's never tried before. She can't do a first-class literature search on this technique in the few weeks remaining before classes begin. She decides to use computer networks to ask for advice from others with more experience. She belongs to several electronic interest groups, but wants to ask people in other groups as well. So she uses the network to get a list of all possible lists.

Date:14 Aug, 1994 10:10:10 EDT

From:Maria Ortiz <ORTIZ@SUVM>

To:LISTSERV@BITNIC

list global

233

This mail message activates a piece of software at the BITNET Information Center which sends back a global list of all electronic interest groups on BITNET.

When she receives the master list, Ortiz sends e-mail to a half-dozen of them, asking for help.

Date:15 Aug, 1994 16:35:59 EDT

From:Maria Ortiz <ORTIZ@SUVM>

To:POLITICS@UBVM, PUBPOL-L@NDSUVM1, HISTORY@YALEVM, TEACHTEC@IUBVMS, HUMANIST@BROWNVM, POLISCI@TAUNIVM

I'm teaching an upper-division course in public policy starting in September. The class is very large, and I'd like to have the students work in teams. I've never tried this before, and I'm not sure how to do it: what to avoid, what to try. I'd like some advice from any of you who have tried it.

In 48 hours, she's received long mail messages from eight faculty members (all from different institutions), and she has specific suggestions, warnings, names of others to contact, and titles of articles and books she can read.

Course Evaluation and Feedback

As teachers, we ask students to comment on and evaluate us and our courses in many ways. The college asks for anonymous general comments at the end of each semester. Some of us also ask for specific comments on the content and organization of individual courses. Most of this evaluation is done on paper and is anonymous. It helps us revise the course for its next offering. However, it's possible to use e-mail to get ongoing information from students about a course as it is progresses.

Because e-mail is not necessarily anonymous (user identifications typically accompany e-mail messages), students must be confident that anything they say will not be used against them.

234

Feedback to an Entire Class

The students in Professor Brown's class appear to be struggling. He sees too many glassy eyes and frowns, but he's not sure what the problem is. Could it be the pace? The new text? The problem sets? Rather than take up 15 or 20 minutes in class, he sends this message to the class.

Date:22 Oct 1994, 19:44:10 EST

From:Brown <BROWN@SUVM>

To:APM500

Subject:Problems?

I'm starting to worry about you folks. I see a lot of strained expressions and puzzled looks. When I ask for questions or comments, you're not talking. This is particularly true over the last two weeks. Please, tell me what's going on.

It's true I'm moving pretty fast. Too fast?

The text is new this year, written by one of the experts in the field. Is it readable? Shall I put some other information on reserve?

The problem sets are not trivial, but then, this is a 500-level course, so I think I can give some tough ones.

Maybe I haven't even guessed what the trouble is. Heavy course loads? Personal problems? What?

Please give me some information. You can come see me at office hours or send mail this way. Remember, neither method is anonymous. If you'd prefer, leave an unsigned paper message in my mailbox. Thanks.

Eliciting Feedback from Students

For the first time, Professor Olsen has broken her class into teams whose members are supposed to help each other work problems and study for exams. The law of averages suggests that some teams will not work very well. Which ones are they? Should she intervene?

Counsel the team leaders? Change the responsibilities of the teams? She sends the team leaders a message.

Date:01 Oct 1994, 09:09:09 EST

From:H. Olsen HOLSEN@SUVM

To:LEADERS

Subject:Teams & how they're working

I'd like some information from you on how the teams are working out. As you recall, I formed them by generating random numbers, so people were put together without regard for major, gender, eye color or any other criterion.

Could you please send answers THIS WEEK to these questions:

1. Is your team getting together to study? If not, why not?

2. Are you having any leadership troubles? If so, why is that, do you think? How can I help?

3. If I could do one single thing to make your team work more effectively, what would it be?

Please also tell me anything else you think I need to know about your team or about the team structure. Thanks.

Tips for Introducing E-mail to the Classroom

We hope we have piqued your interest and that you are ready to join the community of electronic teachers and learners. If you are not an e-mail user yourself, we recommend that you learn and use it regularly for at least a semester before you introduce it to students. If you have a choice of mail systems, you need to choose one. Talk to colleagues and find out which e-mail system they use. It's always good to have people nearby who can help you when you're getting started. Ask them to show you how their systems work, not so much to learn how to use them, but to see how they look.

Look for organizational help to learn the system of your choice. The academic computing organizations often give short, free workshops on popular software. Sometimes they give away documentation with which you can teach yourself. Call or visit your computing organizations (including faculty support centers) to find out what help is available.

If you use e-mail for your own research or for keeping in touch with colleagues elsewhere in the world, it is relatively easy to expect your students to learn and to use it in your courses. The major changes you need to make are figuring out when and how to introduce it to your students, changing some of your own class management practices to make use of it, and, perhaps, learning some of the advanced features that make classroom use efficient — such as sending messages to groups. We think you should be able to make these changes within one semester.

When you introduce e-mail in the classroom, you need to help students get their e-mail accounts. Unless a student has a great deal of experience on another system, arrange for all students to use the same system you do. Start early to set up class or individual accounts, especially for the fall semester, because there is a high demand for computer accounts during the first few weeks of the academic year.

You should make sure you and your students can do the fundamentals, no matter what mail system you choose. If your academic computing organization gives away information on using the mail system, use that to teach students the fundamentals. In our courses, we have extracted the relevant information from such sources and made handouts for our own students. You might want to do that if the original covers many more topics than the fundamentals or if you want to give students a quick reference guide. A progression of basic to advanced e-mail skills is suggested in figure 2.

While you're teaching e-mail fundamentals, be sure to stress the network guidelines for responsible mail and network use. You can get these guidelines from the computing organizations and from the networks themselves. We all learned at home not to read someone else's mail or to listen in on others' telephone calls. Our mothers probably did not discuss e-mail etiquette, so we have to educate ourselves and our students to be good citizens of cyberspace.

237

One final thought, some would disagree, but we think that e-mail messages, both those we send and those our students send, should exhibit proper English usage, with correct spelling, punctuation and capitalization.

Figure 2: E-Mail Fundamentals

Single Message/Single User:

- Reading a Mail Message
- Discarding a Mail Message
- Receiving a Mail Message
- Rereading Mail Messages in Notebooks
- Writing and Sending Mail
- Replying to a Mail Message

Multiple Message/Multiple User:

- Sending a Message to a Group
- Suppressing Automatic Carbon Copies
- Forwarding a Message

Increasing Proficiency:

- Using a Names Utility to Personalize Mail Messages
- Using an Address Book
- Checking Spelling in Mail Messages
- Adding a Subject Line to a Message

Advanced Techniques:

- Transferring Files to & From Email to a Personal Computer
  - Downloading
  - Uploading
- Joining an Electronic Mail Interest Group

237

Exploring Student Ratings Through Computer Analysis: A Method to Assist Instructional Development

Robert Lewis

St. Thomas University

This paper demonstrates how computer analysis of student ratings can assist professors in instructional development. Student ratings of three courses taught by the author were placed in computer databases and were then manipulated using BASIC programs. The needs of different client groups within a class were considered. Ratings of students who had different professional goals and differing preferences for learning goal structures were compared. The responses of students to nine different procedures within a class were analyzed to study the interaction between enjoyment, challenge, and learning on the class components. The author argues that computer analysis of the raw data from student course evaluations offers a valuable method for improving teaching practices.

Student ratings of university courses remain an established strategy for faculty evaluation. After reviewing the major studies of faculty evaluation procedures Cashion (1989) concluded, "Many believe — and I share that belief — that student ratings are the only primary data that are systematically gathered at many colleges and universities." (p. 4). The large number of studies exploring biasing factors (Abrami, d'Appollonia, & Cohen 1990; Benton, 1982; Gaski 1987; Marsh 1984) have resulted in general acknowledgement of the validity of

student rating forms (Cohen, 1981; Seldin, 1988). Baird (1987) found "that perceived learning is a significant predictor of both summative course and professor ratings" (p. 91). Aleamoni (1987) has pointed to numerous myths surrounding the use of student ratings, and stressed that "...gathering student ratings can provide the instructor with first hand information on the accomplishment of particular educational goals and on the level of satisfaction with and influence of various course elements" (p. 144). But the validity of course ratings is a question of little importance if the results are not carefully used in attempting to reach one of the three purposes of faculty evaluation defined by Cohen (1980): 1) to aid in administrative decisions, 2) student course selection and 3) instructional improvement. This paper demonstrates the use of student ratings for improvement of teaching, focusing on ways to tease out information that is unavailable from the usual reports consisting of summary or normative data.

There is conflicting evidence about the value of student ratings for aiding faculty development. Wright and O'Neill (1994) surveyed university staff involved in faculty development and found little confidence in the power of summative course evaluations alone to stimulate teaching development. They suggested that rating systems function more as part of an institutional press rather than providing specific information or insights upon which to build better teaching and learning. But institutional press may at times have a negative effect. Davey and Sell (1985) described a tendency among junior faculty at a large research university to "compromise the personal and organizational purpose of ongoing improvement and development for the practical requirements surrounding the promotion and tenure process" (p. 63). They further suggested student ratings were used in preference to evaluation methods with more potential meaning. There is potential value in student ratings, however. Marlin (1987) found that students feel they can make fair and accurate judgments with little bias, but also that they have little confidence that their views are used. In a longitudinal study, Stevens and Aleamoni (1988) found that faculty who used evaluation data made more use of resources and had better student ratings. Centra (1979) concluded that instructional improvement is greatest when a discrepancy exists between the teacher's self-rating and student ratings and when consultation is

$2 \cdot i\ 0$

available. However he concluded, "Student ratings may lead to some changes when only the teachers see the results, but there are probably many ways to increase their impact" (p. 38).

Computer analysis of their students' course evaluations by individual professors may offer one way to increase impact. Databases can be constructed from ratings in ways that effectively hide the identity of raters while allowing teachers to explore the ratings in more depth. Different groups within a class may have very different responses, and if identified without violating rater anonymity a professor may find helpful clues to better serving all students. Knowledge of how those who rate one aspect of a class low (or high) react to other aspects of a class might offer clues to improved class structures. Computer analysis of raw data from student ratings, if combined with that from other sources, can add to the diagnostic strength of a faculty evaluation system, a factor included by Cashion (1990) in a list of recommendations for programs. The added depth of exploration may even help avoid assigning undue precision to ratings, a problem cautioned against by Centra (1979).

In 1985 I began constructing my own course evaluations, which were then transformed into databases of student responses which could be manipulated by computer. Descriptions of three such procedures follow, each designed to analyze a different course structure. They are offered as examples of how summative course evaluation can be individualized and the raw data manipulated to answer professor generated research questions about teaching and learning. In each case the paper explores only one or two questions, however the exploration involved several others and raised many additional questions.

A course serving three groups

In 1985 I taught a course in Educational Psychology, required of Bachelor of Education students and elective for Bachelor of Arts students. There were three distinct groups, each using the course for a different purpose. Psychology majors entered the course to complete their programs. B.A. students with some psychology background often used the course to explore education as a career. Education

students with a variety of backgrounds in psychology were required to enroll unless exempted because of previous courses. I had serious concerns about whether the course was serving all students well, and whether the selected areas of Educational Psychology were appropriate for all. It was impossible to tell when all students were grouped together in course rating reports.

TABLE 1
Mean Ratings of Four Groups in Educational Psychology, Dec. 6, 1985.

Ranked on a scale of:
  1)Very low 2)Below average 3)Average 4)Above average 5)Very high
Breakdown of ratings for groups below:
(1) Majors in Psychology (2) 3 or more Psych courses
(3) Introductory Psych only (4) No previous Psychology

	(1)	(2)	(3)	(4)
$n=18$	18	19	21	9
How much did this course replicate your past learnings in:				
Unit I Cognitive theory and development	3.56	3.05	2.84	1.56
Unit II Educational Planning and Measurement	2.89	2.53	2.58	1.56
Unit III Behaviorism, Social Learn., Motivation	3.72	3.21	3.06	1.44
To what extent did the course develop your:				
Factual knowledge	3.79	3.47	3.73	3.55
Principles and theories	3.53	3.56	3.68	3.64
Understanding of the discipline.				
Rate the amount and kind of work involved in this course:				
Amount of reading required	3.58	3.32	3.41	3.27
Amount of non-reading work	2.84	2.95	2.71	3.27
Difficulty of course	3.11	3.16	3.23	3.09
How effective was the professor in accomplishing:				
Communication of goals and content	3.95	4.37	4.27	4.45
Involving students in the course	4.11	4.5	4.05	4.09
Creating enthusiasm/stimulating effort	3.89	4.21	4.23	4.27
Evaluating learning accurately	3.79	4.05	4.43	4.45
How much did the following procedures aid your learning?				
Lectures and class presentations	3.47	3.47	3.36	4.00
Quality of text and handouts	3.58	3.61	4.05	4.00
Contract system of measurement	3.74	4.05	4.00	4.09

The course evaluation shown in Table 1 was completed by 67 of the 74 students in the class. Student volunteers entered the data into a DOS Text file. I was able to analyze the judgments made by each client group through sorting, while maintaining the covert nature of the ratings. Table 1 is a replication of the computer printout obtained by sorting for psychology background.

The most important outcome of this analysis was the endorsement it offered of the selected content and procedures. Differences between the four groups on familiarity of material were striking, while all other ratings failed to show dramatic differences. There did seem to be less reliance on professor and course structures on the part of psychology majors however the demands of the class were not dissimilar for the four groups. The contract system, given the highest rating of course procedures, may have been a mediating factor.

A similar sort comparing B.Ed. student ratings to those of B.A. students showed few differences when psychology background was controlled.

A course involving three teachers

By 1993 the Educational Psychology course evaluated in 1985 had been redesigned. A module structure was devised, and three professors taught the modules. Each module had its own structure and procedures for evaluation of student learning. The university's mandatory course evaluation form was inappropriate for this structure, however the policy allowed an individually designed evaluation. Four questions were important to answer for each module:

1) How important was this module to your overall program of study?
2) How effective was the "constructive mismatch" - was the material within your abilities yet challenging?
3) How effective was the teaching in reaching the module's objectives?
4) How appropriate and valid was the evaluation in assessing your learning?

243

Several demographic variables were included on the course evaluation form; the most important being the level of student teaching the student had chosen, and whether the person preferred cooperative, individual, or competitive goal structures in learning. With modules varying dramatically in method and measurement procedures, the overall effect of the course on students was of particular interest and it was reasonable to ask whether demographic factors had any effect on student assessment of the methods or evaluation system. Table 2 shows the mean ratings for each demographic group.

The most interesting outcome of the computer analysis was the differing views on evaluation procedures between those oriented toward the elementary school and those aiming for junior high school or high school teaching. This was especially evident in two modules I taught, which involved contract (Metacognition) and portfolio (Learning Styles) evaluation. A third, (Cooperative Learning), involving elements of a contract but closer to traditional measurement, showed a smaller difference. The basis for this difference still eludes me, however it seems that elementary candidates feel more traditional evaluation methods reflect their learning better. This is an area to be explored, either in subsequent evaluations or by using formative methods. It is of particular interest considering the faculty's emphasis on the use of less traditional methods in evaluating elementary students.

A course with nine components

It is especially difficult to sort out the effects various teaching procedures have on the learning of students. In 1991-92 I taught a course in two successive semesters for which I used a course structure and textbook approach that was completely new to me. As a visiting professor I could not alter text (readings only) or course entry requirements, even though I was initially uncomfortable with them. I designed a course which required weekly critiques of the articles, small group processing, some amount of experiential learning and large group discussion. A research paper, midterm with rewrite, and a final exhibition filled out the required elements of the course. I was eager to obtain student responses, for I was breaking new ground for myself.

What were the interactive effects of each of the elements, and what part did the varying demands and motivational properties of the

TABLE 2
Means of Educational Psychology Course Evaluations
Sorted by Preferred Teaching Level and Goal Structure

Scale - 1 (lowest) to 7 (highest)

	Chosen Level of Teaching			Preferred Goal Structure		
	Elem.	JHS	SHS	Co-op.	Compet.	Indiv.
Nature-Nurture						
Importance	6.13	5.69	5.76	5.91	5.33	5.81
Mismatch	6	5	5.13	5.53	4.67	5.81
Teaching	6.44	6.67	6.69	6.72	6.33	6.56
Evaluation	6.38	6.33	6.38	6.5	6	6.38
Metacognition						
Importance	4.94	5	5.25	5.14	5.38	5.35
Mismatch	4.82	5.1	5.3	5.31	4.88	5
Teaching	5	5.45	5.6	5.6	5.43	5.4
Evaluation	4.39	6	5.95	5.39	5.86	5.3
Special Education						
Importance	6.36	6.13	6.13	6.56	5.8	5.46
Mismatch	6.18	5.63	5.73	6.2	5.2	5.38
Teaching	6.55	6.44	6.53	6.72	5.4	6.23
Evaluation	6.09	6	5.93	6.24	5.4	5.77
Learning Styles						
Importance	6	5.7	5.85	6.05	5.2	5.81
Mismatch	6.5	5.65	5.8	5.95	5.4	6
Teaching	6	5.75	5.85	5.86	5.6	6
Evaluation	4	5.32	5.58	5.5	5.5	5.56
Co-operative Learning						
Importance	5.84	4.93	5.27	5.71	4.71	5.71
Mismatch	5.32	5	5.07	5.47	4.86	5.24
Teaching	5.26	5.53	5.8	5.65	5	5.41
Evaluation	4.94	5.4	5.53	5.34	5	5.29
Classroom Management/Motivation						
Importance	6.2	6.38	6.44	6.36	6.33	6
Mismatch	5	5	5.22	5.21	5.33	3.78
Teaching	5.6	5.63	5.56	5.29	6	4.56
Evaluation	5.2	6.38	6.33	5.71	5.67	5.11

Note: Based on 55 course evaluations from 60 students
The number of students in each demograhic group varies for each module

components play in student learning? Table 3 shows the accumulated ratings from all twenty member of the class.

TABLE 3
Course evaluation of Advanced
Educational Psychology, EDI 361
Summary data for 20 students of 20 enrolled

Evaluation of Course Components:
  Lowest rating = 1 Highest rating = 5

	Challenge					Enjoyment					Learning				
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5
The readings themselves:		2	7	6	5			1	9	10	1			14	5
Writing the critiques:			4	6	8	1	3	6	7	3		1	2	11	5
Prof's memos and marks:	1		2	5	11			3	5	11	1		2	3	14
Small group discussions:		1	2	9	7		1	3	7	9		1	2	7	9
Large group discussion:		1	5	6	6	1	1	3	7	8			3	7	9
Class activities (other than group discussions)			3	9	7			3	6	10			4	3	12
Writing research paper			4	2	14	2	1	7	4	5			2	5	12
Mid term exam/rewrite			2	3	14	4	4	5	4	2	2	1	3	3	10
Final exhibition			2	4	14	1		1	4	14			1	6	13

The results shown in Table 3 tended to confirm my own observations, as such results often do. Despite the overall positive view offered by this survey, some puzzling questions remained. What effect does a low rating on challenge or enjoyment have on a student's learning in the class? Is there a "silent minority" within the class whose needs are not well served by the structure? Is challenge more important for learning in some elements and enjoyment more important elsewhere? To explore these questions, I wrote a program which could divide the group on any factor, displaying comparison ratings on all other elements. Since the writing of critiques was a critical requirei. nt, upon which many others depended, I focused on it first. Table 4 shows the computer display of the mean rankings on all categories for the ten students who rated enjoyment of the critiques as 1, 2, or 3 (FOCUS) compared to the ten students who rated writing critiques as 4 or 5 on

enjoyment (OTHER). The difference between the two groups is also shown (DIFF).

TABLE 4
Means of Raters Who Judged Enjoyment of Writing Critiques 1-3 Compared to Means of all Other Raters

Element	Challenge			Enjoyment			Learning		
	Focus	Other	Diff	Focus	Other	Diff	Focus	Other	Diff
Readings	3.5	3.9	-.4	3.4	3.5	-.1	4.2	4.1	.1
Critiques	4.11	4.33	-.22	2.5	4.3	-1.8	4.11	4	.11
Memos-marks	4.44	4.2	.24	4.44	4.4	.04	4.2	4.7	-.5
Small gp.	4.22	4.1	.12	4.4	4	.4	4.5	4.1	.4
Large gp.	3.78	4.11	-.33	4	4	0	4.1	4.6	-.5
Activities	4.3	4.11	.19	4.3	4.44	-.14	4.6	4.22	.38
Res. Paper	4.5	4.5	0	2.8	4.22	-1.42	4.3	4.78	-.48
Mid-term	4.89	4.4	.49	2.78	2.8	-.02	4.22	3.7	.52
Final Exhib	4.6	4.6	0	4.8	4.2	.6	4.8	4.4	.4

It is clear that those who found little enjoyment in writing critiques were not an alienated minority. In nearly all other ways they were similar to those who liked writing the critiques. They reported effective learning from all class components, including writing critiques. It may be that these ten students simply dislike writing or prefer to respond rather than to initiate, since the rating on enjoyment of the research paper also shows a large difference. The same kind of analysis was possible using any of the rated categories, and permitted me to explore other hypotheses derived from study of the data in Table 3. I found no evidence of an alienated minority.

Interestingly, those who rated enjoyment of writing the critiques low rated their learning from the midterm higher than their colleagues who enjoyed writing critiques. This, combined with the similar "enjoyment" differences of these two groups on writing the research paper led to considering the correlations between enjoyment and learning and between challenge and learning. The correlations for all course elements are shown in Tables 5 and 6.

TABLE 5
Correlations between Challenge and Learning of Class Components in EDI 361

		read	crit	memo	sm gp	lg gp	activ.	paper	mid-t	exhib.
					Attributed learning					
C	reading	.31	.40	.65	.17	.51	.27	.41	.43	.14
H	critiques	.34	.43	.05	.25	.34	.34	.66	.35	-.27
A	memos/marks	.08	.24	.70	.26	.28	.24	.17	.30	.56
L	small groups	.05	.10	.01	.55	.44	.51	.13	.41	.02
L	large group	-.08	.16	.41	.23	.59	.19	.16	-.01	.05
E	activities	.04	.39	.06	.51	.46	.77	-.12	.62	.36
N	term paper	.52	.46	-.10	-.08	.32	.17	.54	.25	-.22
G	mid term	.33	.35	.29	.38	.34	.58	.04	.61	.60
E	final exhib	.02	.14	-.03	.66	.60	.51	.13	.44	.10

TABLE 6
Correlations between Enjoyment and Learning of Class Components in EDI 361

		read	crit	memo	sm gp	lg gp	activ.	paper	mid-t	+ exhib
					Attributed learning					
E	readings	-.05	.42	.16	.43	.68	.67	.03	.68	.37
N	critiques	-.09	.10	.47	-.19	.46	-.06	.45	-.11	-.23
J	memos/marks	.03	.42	.83	.23	.62	.63	.38	.52	.52
O	small groups	.29	.22	.23	.80	.60	.66	-.10	.56	.55
Y	large groups	-.07	.38	.26	.43	.69	.50	.10	.49	.46
M	activities	-.12	.25	.16	.12	.61	.52	.16	.23	.18
E	term paper	.16	.28	.58	-.28	.32	.27	.71	.18	-.17
N	mid term	.15	.35	.41	.20	.40	.60	.20	.75	.17
T	final exhib	-.12	.24	-.03	.12	.17	.44	.33	.43	.52

It seems that enjoyment has a higher relationship with learning than challenge. The particularly higher relationship between these two factors with respect to memos and marks offers some food for thought. Challenge is particularly important to the class activities. Both of these findings were contrary to my intuition, and both have influenced me

to rethink the manner in which I approach assigned work and class activities.

The survey offered a wealth of information about methods I might use in other classes. The ratings on challenge, enjoyment, and learning offered a gauge of motivation potential for the various elements, and the correlations suggested numerous hypotheses. The computer program made it possible to "play" with the results to follow any hunches that were suggested by the results.

Summary

This paper described the use of computer manipulation of student course evaluations to explore reactions of various demographic groups to course elements or to analyze the interrelations between components of a class. Summative course ratings can be given more meaning if subgroups can be compared and the interaction of student ratings of course elements can be analyzed. Although there is some danger in attributing more precision to ratings than they deserve, computer analysis allows student views to be analyzed in more depth. The very process of analysis tends to reduce overgeneralization. Rather than looking for confirmation of quality teaching or dreading negative ratings, one is drawn to anomaly and irregularity. The ratings shown here were generally positive, yet they offered many hypotheses which led to further study and course changes. If changes actually are derived from student ratings, and that fact is shared with students, it may further their willingness to offer constructive views.

Computer databases, if made available to professors, can provide anonymity for raters while allowing professors the chance to analyze student views in detail. The ratings used in this study were done outside (and in some cases replaced) the official course evaluations, but university wide ratings forms could easily be made available with access limited to each professor's classes. Database or spreadsheet software could easily be adapted for analysis. Allowing faculty access to databases of their student evaluations should provide a powerful tool for teaching analysis and may serve to improve teaching and the faculty evaluation system.

References

Abrami, P. C., d'Appollonia, S., and Cohen, P.A. (1990). Validity of student ratings of instruction: What we know and what we do not. *Journal of Educational Psychology*, 82, 219-231

Aleamoni, L. M. (1987). Student rating myths versus research facts. *Journal of Personnel Evaluation in Education 1*, 111-119

Baird, J.S., Jr. (1987). Perceived learning in relation to student evaluation of university instruction. *Journal of Educational Psychology*, 79, 90-91.

Benton, S.E. (1982). *Rating college teaching: Criterion validity studies of student evaluation of instruction instruments*. (AAHE-ERIC/Higher Education Rep. No. 1). Washington, DC: American Association for Higher Education

Cashion, W.E. (1989). *Defining and Evaluating College Teaching*. (IDEA Paper No. 21) Manhattan, KS: Center for Faculty Evaluation and Development.

Cashion, W.E. (1990). *Student ratings of teaching: Recommendations for use*. IDEA Paper No. 22) Manhattan, KS: Center for Faculty Evaluation and Development.

Centra, J.A. (1979). *Determining Faculty Effectiveness*. San Francisco, CA: Jossey-Bass.

Cohen, P.A. (1980). Effectiveness of student-rating feedback for improving college instruction: A meta-analysis of findings. *Research in Higher Education 13*, 321-341

Cohen, P.A. (1981). Student ratings of instruction and student achievement: A meta-analysis of multisection validity studies. *Review of Educational Research, 51*, 281-309

Davey, K. B. & Sell, G. R. (1985). *Instructional evaluation for development/improvement: Fact or fiction based on a case study of faculty practices*. (Paper presented at the annual meeting of the American Educational Research Association, Division J, 69th Chicago IL., Mar 31-April 4 1985) ERIC Document Reproduction Service No. ED 260 603

Gaski, J. F. (1987). On "construct validity of measures of college teaching effectiveness". *Journal of Educational Psychology*, 79, 326-330

Marsh, H.W. (1984). Validity of student's' evaluation of college teaching: A multitrait-multimethod analysis. *Journal of Educational Psychology*, 74, 264-279

Marlin, J.W. (1987). Student perception of end-of-course evaluations. *Journal of Higher Education, 58*, 704-716

Seldin, P. (1988). Evaluating college teaching. In Young, R.E. and Eble, K.E. (Eds.), *College teaching and learning: Preparing for new commitments*. San Franscisco, CA; Jossey Bass.

Stevens J.J & Aleamoni, L.M. (1988). The use of evaluative Feedback for Instructional Improvement. In Arreola (Ed.), *Handbook for development of a comprehensive faculty evaluation system*. Center for Educational Development and Assessment, Memphis TN. (Reprinted from Instructional Science 13 (1985) pp. 285-305)

Wright, W. A. & O'Neil, M. C. (1994). Teaching improvement practice: New Perspectives. *To Improve the Academy 13*, 5-37

Improving Students' Critical Thinking Outcomes: An Process-Learning Strategy in Eight Steps

S. Kay A. Thornhill

Southeastern Louisiana University

Melissa Wafer

Our Lady of the Lake College

This article describes an eight-step strategy through which students learn to critically analyze situations that they have encountered in their clinical practice. The method was derived from Stephen Brookfield's four components of critical thinking and his suggestions for themes that relate to nursing culturalization. The approach used to develop this model has implications for educators in all fields because it illustrates a method for integrating the learning of critical thinking processes with their real-world applications.

Although educators in all disciplines share a general interest in developing students' ability to think critically, nurse educators are especially challenged because they must prepare their students to perform technical, interpersonal, and critical thinking skills simultaneously. They must learn to function as safe, competent, and skillful clinical nurse practitioners in a complex health care environment in which new information and new clinical situations continually emerge (del Bueno, 1990; Miller & Malcolm,19' ').

In 1988, the U. S. Department of Education issued a mandate that required accrediting agencies to consider evidence of educational outcomes when conducting program reviews (U. S. Department of Education, 1988). As a result, nursing education's accrediting agency, the National League for Nursing (NLN), changed its accreditation criteria to include five required outcomes, including critical thinking, in Baccalaureate and Higher Degree Programs (National League for Nursing, 1991). As defined by the NLN, critical thinking should reflect student skills in reasoning, analysis, research, or decision making relevant to the discipline of nursing (National League for Nursing, 1992). In addition to these developments, the U.S. Department of Health and Human Services published a list of national health promotion and disease prevention objectives that supported the need to balance nursing education's program content and learning strategies (U.S. Department of Health and Human Services, 1992).

These factors provided the impetus for the authors' development of a process-focused critical thinking strategy. The authors' employment setting is a baccalaureate nursing program with over 500 nursing student majors, located in an urban area of the Southeastern region of the country. Students participating in the critical thinking activity selected acute cardiology nursing for their clinical learning setting in a nursing synthesis course. The cardiology nursing unit is located in a large urban regional medical center complex.

Conceptual Framework

In his 1987 book on developing critical thinkers, Stephen Brook-field posited four components of critical thinking: (1) identifying and challenging assumptions; (2) challenging the importance of context; (3) imagining and exploring alternatives; (4) reflective skepticism. More recently, Brookfield (1993) also suggested a "phenomenography of nurses as critical thinkers" to account for how nurses learn and experience critical thinking. Each of these culturalization themes has important implications for anyone who practices critical thinking in the field of nursing (and, potentially, many other professional fields): *impostership, cultural suicide, lost innocence, roadrunning, and community.* Because these themes are less widely known than Brookfield's

components of critical thinking, they require some elaboration. A complete exploration of these themes is beyond the scope of this article, but brief definitions, based on Brookfield (1993), follows.

"Impostorship," common to many professionals, is a feeling of underlying incompetence that often does not diminish with years of practice. Imposters must always appear to know what they are doing and they live in fear that they will be "exposed" for the hopeless incompetents that really are. "Cultural suicide" refers to a kind of cultural alienation that can result when critically aware nurses question their colleagues who are less critically aware: . . . nurses who expect their efforts to ignite a fire of enthusiasm for critical reflection and democratic experimentation may be sorely disappointed when they find themselves regarded as uncooperative subversives (and) whistle-blowers . . . (p. 201). The theme of "lost innocence" relates to the often sad discovery that there are no perfect, unchanging models of clinical practice, but only "the contextual ambiguity of practice" (p. 203). "Roadrunning" (inspired by the Warner Brothers cartoon) describes the state of limbo that occurs in the process of critical thinking when "we realize that the old ways of thinking and acting no longer make sense, but . . . new ones have not yet formed to take their place" (p. 204). Brookfield explores this theme in the context of the rhythm and pace of the epistimologic, transformational process of critical thinking. "Community" is a more positive and hopeful theme that relates to the development of "emotionally sustaining peer groups" that may consist of just four or five good friends who "know that experiencing dissonance, challenging assumptions, taking new perspectives, and falling foul of conservative administrators are generic aspects of the critical process, not idiosyncratic events" (p. 205).

Brookfield's four components of critical thinking and his culturalization themes provided the conceptual framework for the authors' eight-step learning strategy for critical thinking. The process is initiated in Step One by the examination of a critical incident (a real-life situation) in nursing care. Steps Three, Four, Five, and Six incorporate Brookfield's four components of critical thinking, and his culturalization themes involve Steps Two and Seven. In Step Eight students explore the usefulness of critical incidents as a means of achieving their' learning outcomes.

The Eight-Step Process: Critical Thinking in Clinical Practice

Step One: Identify a Critical Incident

In Step One students first identify critical incidents they encountered during clinical practice. As Brookfield (1993) advises, students are instructed to think about episodes in which they experienced "good" or "bad" forms of clinical practice. A critical incident cited by a student in the class is described below and used as an example in the remaining steps of the process:

The 40 year old cardiac patient was experiencing chest pain, nausea, vomiting, and headache. He was unable to take his oral medications for the heart condition and other problems. The student nurse notified the staff nurse assigned to the patient. The nurse told her not to "bother" the patient's physician because they had talked with him earlier and he was aware of the patient's present condition and had not given any additional orders to treat the patient. The nurse refused to call the physician for the student nurse.

Step Two: Note Personal Experience

In Step Two, the student describes why the incident should be defined as "critical." The student thinks about what happened during the incident and writes responses to four questions (Brookfield, 1993): What triggered your engagement in critical thinking and was there a clear cause? As you moved through the situation, what resources were most helpful to you? What were the high and low points of the process? What happened because of the critical thinking process? The student's answers to these questions for the incident in Step One are given below:

An inability to relieve the patient of symptoms prompted the student to engage in critical thinking. The most helpful resource was the patient's understanding of the students desire to care him and the faculty serving as a resource when the staff nurse differed in the student's decision to call the physician. The helplessness experienced by the student nurse after the staff nurse refused to call the physician was the low point of the episode.

251

Step Three: Identify & Challenge Assumptions

In Step Three, the critical incidents provide the basis for exploring the values, beliefs, rationales, and appropriateness of ideas that influence their individual actions. Ideas are often based on cultural norms, ethnic values, influential teachers or mentors, or policies and procedures learned in discipline-specific programs, and these perspectives frame group discussions of each clinical practice incident. In the final exercise in Step Three, students identify assumptions and propose challenges on a group worksheet. In the incident in the example, students identified the following points:

1. Nurses rely on the medical doctor and or medications for relieving patient's symptoms.
2. Staff nurse showed more compassion and caring for the physician than for the patient.
3. Staff nurse feared physician actions more than patient as a consumer of health care.
4. Student nurse had more compassion and caring for the patient than did the primary nurse assigned to his care.
5. The patient was passive in his ability to treat himself and required the care of his admitting physician.
6. The staff nurse and student nurse were in conflict with the method of treatment.

Step Four: Challenge the Importance of Context

In Step Four, students examine the importance of the circumstances surrounding their critical incidents. Students must struggle with the difficulty of interpreting any action without considering the context within which the action occurred. This discussion includes an examination of the group worksheets from Step Three and how differing perspectives on the incidents help shape their interpretation.

Developmental context issues identified by the student nurse included the patient's loss of role functions: i.e. head of household, family provider, faced with serious debilitating heart disease at an early age.

Professional context issues included student nurse-staff nurse relationships, student nurse-physician relationships. Students were concerned with care of this patient only and their perspective on the situation concerned only the patient, as opposed to staff nurses who were concerned with a myriad of other issues such as the physician's actions, the days unit staffing, and previous experiences in caring for the patient.

Step Five: Imagine and Explore Alternatives

Step Five is essentially a brainstorming session in which students explore alternatives to the way each critical incident occurred and speculate on ways to resolve each one. Students are encouraged to express their opinions about the outcomes of each situation. In the example, students suggested the following alternatives:

1. Student nurse could state she was caring for the patient also and would call the physician without the staff nurse's permission.
2. The student nurse could confer with a faculty member and request the faculty member call the physician.
3. The student nurse could present the situation to the nurse responsible for all patients care on the unit.
4. The student could explain to the patient the staff nurse's decision to not call the physician and perhaps the patient could call the physician from his room telephone.
5. The staff nurse could reassess the patient's chest pain and other symptoms, and call the physician to report the changes with additional orders to treat the patient's current status.
6. The student could reevaluate the situation from a more holistic viewpoint of the patient.
7. The student could provide nursing comfort measures for the symptoms noted for the patient without relying totally on the medical regimen.

Step Six: Reflective Skepticism

Following step five's brainstorming session, students begin to focus on possible outcomes of the critical incidents and to question the scenarios for their resolution. Students are urged to question ideas

suggested as the answer for the critical incident as well as general assumptions about the explanation of human behavior. Students record these questions on their individual worksheets. Students generated the following questions in the example case:

1. Are the decisions made by the unit nurses regarding assigned patients made with an awareness that the decisions have an impact on all members of the health care team?
2. Are nurses a part of a collaborative effort to assure that quality care standards are maintained?
3. Are unit nurses accepting the accountability and responsibility for providing nursing care to all patients according to the hospitals established standards of care?
4. Is the patient allowed to participate in decisions related to his/her plan of care?
5. Are the patient's rights a factor in this situation?

Step Seven: Consequences of Critical Thinking Experience

Step Seven turns the focus of the discussion away from the critical thinking process itself and toward an exploration of the professional consequences that may result from their engagement in the critical thinking process. Using Brookfield's definitions of impostership, cultural suicide, lost innocence, roadrunning, and community, students discuss the implications of engaging in critical thinking in the specific context of their critical incidents. In their discussion of this theme, it becomes clear to students that there may be a variety of implications, some of which are very unpleasant, for practicing the critical thinking skills they have been working on in the course. In the example, students suggested the following consequences:

1. Calling the physician without the nurse's permission would be cultural suicide for the student. The student with less experience and nursing knowledge has questioned the nursing care practices of a "real" nurse.
2. Impostership may be a consequence also. The student nurse may agree with the staff nurse's decision to not call the physician but the "correct" decision is to be a patient advocate.
3. The situation is jolting to a student nurse who envisions nursing practice as nursing education has shaped the student's image of

nursing practice. The student's way of interpreting nursing practice and the way nursing is practiced differs. This jolting, halting, and fluctuating rhythm is "roadrunning."
4. The student nurse realizes that nursing care practices and decisions involving patient care are complex and there are no set rules to serve as a rigid guide. Hence, another consequence may be "lost innocence."

Step Eight: Impact of Thinking Critically on Learning Outcomes

In the final step of the process, students identify concepts, themes, and issues that may have an impact on clinical practice and affect student learning outcomes. Students organize the critical incidents by focus areas, analyzing the impact of each area, and assess the impact of the learning activity on their learning outcomes. In this stage of the example case, students made these points:
1. Patient care decisions learned in education programs may differ in nursing practice since many variables are considered in actual nursing practice situations.
2. Nurses standards of care may differ from student nurses, from ones ascribed to, and from ones reflected in actual nursing practice.
3. Nurses practice nursing from a medical model of care more than from an interdisciplinary patient care framework.

Conclusions and Recommendations

Students were pleased with their critical thinking experience in this class, citing the use of real clinical situations as a basis for learning and how the process assisted them in clarifying course objectives, understanding the management theory of the course, and validating clinical outcome behaviors. The richness of the critical incidents they chose helped make the method a success. They explored situations relating to issues of management, patients and families, nurse-physician relationships, and clinical nursing practice. Students also participated freely in discussions and they differed widely in their individual responses during each step of the process.

The eight-step critical thinking process encourages students to engage in critical thinking, to view situations from broad perspectives, and to seek solutions to problems and situations experienced in clinical practice settings. This learning strategy incorporates the realities of nursing practice, merges nursing education with practice, and involves students in affective, cognitive, and psychomotor domains of learning. It provides students with enhanced skills in critical thinking and prepares them to function in a dynamic and complex health care system. Baccalaureate nursing education programs seeking accreditation could document their graduates' critical thinking abilities using this strategy at all levels of the curriculum. Completing the eight-step critical thinking learning strategy could also serve as an alternative clinical learning method for Registered Nurse students and students absent from clinical practice.

Brookfield's culturalization themes for nursing and their relationship to critical thinking clearly have parallels in other professional fields. Educators in these fields might find it useful to study the extent to which the themes apply in other fields and possibly identify additional themes that could be used to teach the application and consequences of critical thinking in the real world. Critical incidents for use in the program could be suggested by recent graduates or developed by teachers, based on their own real-life experiences. Using Brookfield's model of the four components of critical thinking as a basis for analyizing these incidents, multi-step processes such as the one described in this article could be established in many other fields.

References

Allen, D., Bowers, B. & Diekelmann, N. (1989). Writing to learn: A reconceptualization of thinking and writing in the nursing curriculum. *Journal of Nursing Education,* 28(1), 6-10.

Brookfield, S., (1987). *Developing critical thinkers: Challenging adults to explore alternative ways of thinking and acting.* San Francisco: Jossey-Bass Publishers.

Brookfield, S. (1993). On impostership, cultural suicide, and other dangers: How nurses learn critical thinking. *Journal of Continuing Education in Nursing,* 5(24), 197-205.

del Bueno, D.J. (1990). Experience, education, and nurses' ability to make clinical judgments. *Nursing and Health Care,* 11(6), 290-293.

Foster, P.J. Larson, D. & Loveless, E.M. (1993). Helping students learn to make ethical decisions. *Holistic Nursing Practice,* 7(3), 28-35.

Kramer, M. K. (1993). Concept clarification and critical thinking: Integrated processes. *Journal of Nursing Education, 32*(9), 406-414.

Lewis, J. B. (1992). The AIDS care dilemma: An exercise in critical thinking. *The Journal of Nursing Education, 31*(3), 136-137.

Miller, M.A., Malcolm, N.S. (1990). Critical thinking in the nursing curriculum. *Nursing and Health Care, 11*(2), 67-73.

National League for Nursing, (1989). *Curriculum revolution: Reconceptualizing nursing education.* New York: National League for Nursing Press. ·

National League for Nursing, (1991). *National League for Nursing Accreditation Criteria: 1991.* New York: National League for Nursing Press.

National League for Nursing, (1992). *Perspective in Nursing-1991-1993.* New York: National League for Nursing Press.

U. S. Department of Education (1988). Secretary's procedures and criteria for recognition of accrediting agencies. *Federal Register, 53*(127),25088-25099.

U.S. Department of Health and Human Services Public Health Service. (1992). *Healthy people 2000 national health promotion and disease prevention objectives.* Boston:Jones and Bartlett Publishers.

Afterword

The 1994 POD Conference

To members of POD the annual conference is an opportunity to learn the latest theories and practices, renew their ener&y, re-establish contacts with olJ friends, and meet (and help) people new to the field. Although long-time POD members believe that the organization is special in many ways and the traditions of the organization promote an atmosphere unlike any other professional conference, we often have little data to confirm our closely-held beliefs. Conference evaluations are not published, and anecdotal information tends to fade into the oral tradition over time. We offer the following article, *Family Portrait: Impressions of a Nurturing Organization*, to place into the printed record the impressions of four first-time POD participants, Jon Travis, Lisa Cohen, Dan Hursh, and Barbara Lounsberry. The authors are from four different institutions and have considerable experience at other professional meetings. Their impressions, and their evaluation of how they were welcomed and what they learned at the conference are evidence that POD often succeeds in promoting an atmosphere of openness and helpfulness in the best traditions of the organization.

Family Portrait: Impressions of a Nurturing Organization

Jon Travis

East Texas State University

Lisa Cohen

Thomas Jefferson University

Dan Hursh

West Virginia University

Barbara Lounsberry

University of Northern Iowa

National conferences and conventions are intended to provide individual development and multiple opportunities to share. The POD Conference offers yet another important feature not common to national educational organizations, instant affiliation.

Family Portrait: Impressions of a Nurturing Organization

Each of us became members of a new family (new to us at least) last October. Because of the extraordinary impact on us by this group and its national conference, a report of our reaction seemed to be in order. Hence, we offer our collection of impressions, a portrait in words.

No doubt, the majority of educators maintain membership in at least one professional organization, even attending the group's conferences, be they local, regional, or national. Such gatherings com-

monly exhibit vigorous networking of long-standing informal groups that are clearly "inside operations" within the particular organization. The various alliances and rivalries engendered by professional organizations and their familiar appendage, the conference are not unlike those represented in Lodge's *Small World* (1984). However, the "small world" of the conference is generally a private club. Novice attendees are usually not immediately welcomed into the specific informal groups. Hence, newcomers are casually left alone as outsiders—left to their own devices to work their way into a group.

Why should an organization's new members have to attend several annual meetings to begin finally to feel any sense of inclusion? The Professional and Organizational Development Network in Higher Education (POD) is clearly not the typical professional organization described above. Accordingly, one may conclude that POD conferences are also atypical. Happily, this is the case.

A number of distinguishing features set POD and its conferences apart from the professional organizations and meetings one may regularly encounter. First of all, the POD vision attempts to be both comprehensive and systematic. POD refuses to see development narrowly; rather, it works constantly to remind membership that *faculty* development can lead to *instructional* development (or vice versa) and that both have roles to play in optimal *organizational* development. This systemic vision provides a rich theoretical context for everything POD does.

All organizations are distinguished by their individual members (Argyris, 1964; Barnard, 1968). From the initial exposure one has to the POD organization, the people who make up its membership appear especially distinctive. First of all, the organization appears to be promoted chiefly through individual contact. Each of us was drawn into the organization through the encouragement of one or more POD members. The operant word in the organization's name, therefore, is definitely "network."

The members of POD demonstrate their effective people skills in other ways as well. We were all impressed with the friendliness of the membership. Being openly drawn into conversation, in workshops as well as in social gatherings, while commonplace at the POD conference, is a rare experience at many other organizations' events. The

263

willingness of POD members to share information is yet another conference benefit, one that caught some of us off-guard, albeit pleasantly. Strangers, like ourselves, were warmed by the generosity of spirit so apparent at the POD conference. In POD, egos are low and sharing high. In fact, POD seems to pride itself on its permissive approach to research and materials: if it is useful, use it, seems to be the POD way—although members scrupulously acknowledge their intellectual debts. Obviously, the concept of a network remains dominant throughout the organization.

An example of the lack of pretentiousness prevalent at POD conferences is the direct access we had to the conference chair, organization president, and other group leaders. One of us attempted to visit with the president of another national group at an annual conference only to be rebuffed with a strong non-verbal message: "I'm too busy." Also, the POD conference is routinely attended by significant authors in the fields of faculty development, teaching, and instructional leadership; journal editors; and publishers, all of whom are likewise readily accessible. Mutual respect, akin to Native American spiritual tenets, abounds. We experienced a genuine concern for one another and our combined mission to improve education.

The organization of the POD conference and substance of the individual sessions are another asset. POD conferences routinely experiment with new presentation formats. A sense of humor accompanies this exercise in experimentation, which can make for quite a heady atmosphere. In addition, conference sites of unparalleled natural beauty are selected to remind us that the world is not found entirely in a meeting room.

The conference began with a workshop for those new to faculty development, immediately providing a wealth of useful information. As with any organization, this process of orientation is so much more successful if new members are provided with an opportunity to establish a support group among themselves. This session easily afforded all of us the means to form such a group, even given the circumstance that the new member group included people from a range of higher education settings. The leaders of the workshop made sure that we knew who was from which kinds of settings to make it easier for us to identify who we might want to contact later. The

organization clearly wanted to ensure that every opportunity was created for us to begin to be a part of the network.

The conference offered a mix of presentations, discussions, workshops, and case studies that were most helpful in establishing a continuous array of worthwhile sessions. Often the problem was to determine which of two or three sessions to select. The concurrent sessions also demonstrated that POD practices what it preaches. Members know what makes for good teaching and exemplify it in their presentations. No talking heads appeared in the concurrent sessions. In fact, presenters apologized profusely when their sessions involved more lecture than interactive learning.

POD presentations were always active, and were often collaborative and included multi-media. Handouts were also plentiful. Indeed, presenters often gave us our basic notes at the outset—so we made no mistakes on key concepts and definitions. This freed us to move from simple comprehension to forms of synthesis and application. Participants thereby tend to learn much more, more quickly, at a POD conference session.

At many sessions we found participants with similar interests, which led to animated conversations and more networking. Breaks provided many opportunities for these conversations and were always enhanced with food and drink. In no other conference we attend is care taken so consistently for the experience of the audience. Even the meals were designed to keep the occasions for networking going. One very common maxim in faculty development, which was frequently confirmed for us throughout the conference, is that any activity that incorporates food attracts more participants and occasions more active involvement. The location of the conference hotel and inclusion of food costs in the room rates helped to ensure that we spent most of our waking hours together in one activity or another.

In conjunction with the notion of sharing among the membership and adding to the remarkable conference atmosphere, the affective domain was not neglected. Any professional conference must address the need for intellectual fulfillment. However, for educators, especially faculty developers, the affective domain is our "engine." Educators do a great deal of nurturing in their profession. To presume that educators do not themselves need a nurturing experience is unwise.

Unfortunately, too many professional organizations conduct annual conferences that could be mistaken for a row of loaded boxcars racing down the tracks toward oblivion.

Throughout the POD conference, a calculated regard for the affective needs of individuals permeated each event. Deliberate mixing of groups was included in the program to avoid the trap of cliquishness. The whole conferen :e atmosphere resembled a holiday gathering of a large family—tl)ugh without the histrionic games (Berne, 1964) of a typical soap)pera script. Honest emotions and a manifest effort for inclusion prevailed. Everyone at the conference seemed to go out of their way to make us feel comfortable.Another new member of the group, who had been commissioned by the conference chair to perform for those assembled, demonstrated a physical metaphor which so characterizes everyone in POD: outstretched arms in an overt display of openness and welcome. Not long afterward, many members were mimicking this gesture of joy. If the group needs a physical symbol of its character, this one would certainly be appropriate.

In summary, the POD conference was so unusual that it remains vibrant in our memories, unlike the familiar "cut flower" programs, mentioned by yet another new member. Understandably, these glowing observations are based solely upon the experiences of a few participants at one conference, clearly insufficient for statistical significance. However, a reasonable effort on our part to confirm these findings supports the conclusion that future POD conferences will continue the success story. To those within the POD Network, this is our statement of thanks. To everyone else, this is what you have been missing.

References

Argyris, C. (1964). *Integrating the individual and the organization.* New York: John Wiley.

Barnard, C. I. (1968). *The functions of the executive.* Cambridge, MA: Harvard University Press.

Berne, E. (1964). *Games people play: The psychology of human relationships.* New York: Grove.

Lodge, D. (1984). *Small world: An academic romance.* New York: Macmillan.

1995 *To Improve the Academy*
List of Contributors

Beverley T. Amick
Director, Center for Professional Development
Kean College of New Jersey
Morris Avenue
Union, NJ 07083

Lisa Cohen
Center for Faculty Development
Thomas Jefferson University
1520 Edison Building
130 S. Ninth St.
Philadelphia, PA 19107-5233

Arthur L. Crawley
130 Woodcrest Drive
Athens, Georgia 30606-2336

Robert R. Dove
Pittsburgh Technical Institute
635 Smithfield Street
Pittsburgh, PA

Thomas G. Dunn
Center for Teaching Excellence
University of Wyoming
P.O. Box 3334
Laramie, WY 82071-3334

Lynnda J. Emery
Eastern Kentucky University
Department of Occupational Therapy
Eastern Kentucky University
Dizney Building, Rm. 103
Richmond, KY 40475

James M. Hassett
Division of Environmental and Resource Engineering
SUNY College of Environmental Science and Forestry
Syracuse, NY 13210

Dan Hursh
Psychology Department
West Virginia University
P.O. Box 6122
Morgantown, WV 26506-6122

Debrah Jefferson
Council for Effective Teaching and Learning
University of Illinois at Chicago
M/C 147, 1040 West Harrison
Chicago, IL 60607-7133

Roy Killen
Department of Teaching and Curriculum and Teaching Studies
University of Newcastle
University Drive
Callaghan, NSW 2308
Australia

Kate Kinsella
Department of Interdisciplinary Studies in Education
San Francisco State University
1600 Holloway Avenue
San Francisco, CA 94132

268

Robert W. Lewis
Chair, Education Department
St. Thomas University
Box 4569
Fredericton, N.B. E3B 5G3
Canada

Barbara Lounsberry
Department of English
University of Northern Iowa
206 Baker Hall
Cedar Falls, IA 50614-0358

Margaret M. Morgan
Instructional Development Center
University of Central Arkansas
Torreyson Library 100
Conway, AR 72035

Jane V. Nelson
Center for Teaching Excellence
University of Wyoming
University of Wyoming
P.O. Box 3334
Laramie, WY 82071-3334

Richard J. Nichols
Prof. of Education, Emeritus
28 DeHart Road
Maplewood, NJ

Matthew Ouellett
Center for Teaching
University of Massachusetts-Amherst
239 Whitmore
Amherst, MA 01003

Susan Peverly
Council for Effective Teaching and Learning
University of Illinois-Chicago
M/C 198, 851 S. Morgan St, 623 SEO
Chicago, IL 60607

Patricia Phelps
Coordinator, Instructional Development Center
University of Central Arkansas
201 Donaghey Ave, THD 216
Conway, AR 72035-0001

Joan E. Pritchard
Instructional Development Center
University of Central Arkansas
Torreyson Library 100
Conway, AR 72035

Donna Qualters
Office of Medical Education
University of Massachusetts Medical Center
55 Lake Avenue North
Worcester, MA 01655-0314

Ronald A. Smith
Learning Development Office
Concordia University
7141 Sherbrooke Street
Montreal, Quebec H4B 1R6
Canada

Mary Deane Sorcinelli
Director, Center for Teaching
University of Massachusetts-Amherst
239 Whitmore
Amherst, MA 01903

Charles M. Spuches
SUNY College of Environmental Science and Forestry
Room 8, Moon LRC
Syracuse, NY 13210

S. Kay A. Thornhill
School of Nursing
Southeastern Louisiana University
4849 Essen Lane
Baton Rouge, LA 70809

Jon Travis
Department of Secondary and Higher Education
East Texas State University
East Texas Station
Commerce, TX 75429

Melissa Wafer
Our Lady of the Lake College of Nursing and Allied Health
7500 Hennessey Blvd.
Baton Rouge, LA 70809

James K. Wangberg
Director, Center for Teaching Excellence
University of Wyoming
P.O. Box 3334
Laramie, WY 82071-3334

Ben Ward
Director, Faculty Center for Teaching Excellence
Western Carolina University
Cullowhee, NC 28723-9646

Sarah P. Webster
Computer Applications
SUNY College of Environmental Science and Forestry
Syracuse, NY 13210

About POD

The Professional and Organizational Development (POD) Network in Higher Education is devoted to improving teaching and learning in post-secondary education. Founded in 1975, the POD Network provides leadership for the improvement of higher education through faculty, administrative, instructional, and organizational development. The operating word in the title of the organization is "network." It is this commitment to connecting people with other people that characterizes POD and its members.

POD is an open, international organization. Anyone interested in improving higher education can join the diverse membership that includes faculty and instructional development center staff, department chairs, faculty, deans, student services staff, chief academic officers, and educational consultants. POD members work in a variety of post-secondary settings: public and private institutions, two-year colleges and graduate universities, small colleges and multiversities, and educational services organizations.