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Collaborative Learning: “Hearing Many Voices—Learning as One”

This issue of the Washington Center *NEWS* focuses on collaborative learning, an area of burgeoning interest in both K-12 and higher education. The term “collaborative learning” covers a broad array of approaches often recognized by their more

particular names, such as cooperative learning, simulations, or writing groups. The lead article in this issue of the Washington Center *NEWS* provides an introduction to collaborative learning, its underlying assumptions, and its various forms. Some en-

dorse collaborative learning simply as an effective teaching strategy. Others see collaborative learning as much broader work that involves a different way of thinking about knowledge, learning, and being together in the world.

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Participating Institutions: Antioch University, Bellevue Community College, Bellingham Technical College, Big Bend Community College, Central Washington University, Centralia College, City University, Clark College, Columbia Basin College, Eastern Washington University, Edmonds Community College, Everett Community College, Gonzaga University, Grays Harbor College, Green River Community College, Heritage College, Highline Community College, Lower Columbia College, North Seattle Community College, Olympic College, Pacific Lutheran University, Peninsula College, Pierce College, Saint Martin's College, Seattle Central Community College, Seattle Pacific University, Seattle University, Shoreline Community College, Skagit Valley College, South Puget Sound Community College, South Seattle Community College, Spokane Community College, Spokane Falls Community College, Tacoma Community College, The Evergreen State College, University of Puget Sound, University of Washington, Walla Walla Community College, Washington State University, Wenatchee Valley College, Western Washington University, Whatcom Community College, Whitworth College, Yakima Valley Community College.

...Hearing Many Voices...

Collaborative learning underlies much of our work in the Washington Center. Our three major initiatives, mathematics reform, cultural pluralism, and curricular restructuring through learning communities, all involve collaborative learning on the part of students and, frequently, collaborative teaching. We agree that this approach involves a significant rethinking of teaching and learning, and its assumptions and effectiveness are validated by a growing body of research.

The Washington Center's annual conference in February, "Hearing Many Voices: Learning as One," brought together the major threads of our work around collaborative learning. Both of the conference keynoters, Parker Palmer and Lee Kniefelkamp, set a broad and inspiring context for thinking about what's at stake in shifting our educational agenda toward collaborative teaching and learning. Kniefelkamp launched the conference by exploring the multiple selves we bring to the classroom, and by pointing out that real collaboration invites risk and opportunity. Kniefelkamp argued that if we strive to be truly authentic in our teaching and learning, enormous possibilities for everyone emerge. Palmer, in closing the conference, asked why questions about community have become so prominent in colleges today. He presented an overview and critique of a number of different models of community and their lessons for the academy.

For the second time at a major conference, we've asked several colleagues to act as "roving reporters" for us, to provide some different eyes and voices on our work. Biologist Burt Guttman of The Evergreen State College examines the conference in terms of collaborative learning and the sciences. Sociologist Kay McDade from Pacific Lutheran University looks at the conference from the perspective of multicultural education. Susan Wyche-Smith, director of composition at Washington State University, asks what collaborative learning might mean for our own personal transformation as teachers. Their observations form the substance of this issue of the *NEWS*. We are grateful for their insights and welcome your response!



A seminar discussion in the "World of Work in America" coordinated studies program at North Seattle Community College. Left to right: Susan Messina (visiting instructor from Solano Community College in California), Bruce Kochis (instructor at North Seattle), and students Fermin Martin, Sedrick Tyson and Kathleen Neill (back to camera). (Photo: David Gronbeck)



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What is Collaborative Learning? *

by Barbara Leigh Smith
and Jean T. MacGregor

“Collaborative learning” is an umbrella term for a variety of educational approaches involving joint intellectual effort by students, or students and teachers together. Usually, students are working in groups of two or more, mutually searching for understanding, solutions, or meanings, or creating a product. Collaborative learning activities vary widely, but most center on students’ exploration or application of the course material, not simply the teacher’s presentation or explication of it.

Collaborative learning represents a significant shift away from the typical teacher-centered or lecture-centered milieu in college classrooms. In collaborative classrooms, the lecturing/listening/note-taking process may not disappear entirely, but it lives alongside other processes that are based in students’ discussion and active work with the course material. Teachers who use collaborative learning approaches tend to think of themselves less as expert transmitters of knowledge to students, and more as expert designers of intellectual experiences for students—as coaches or mid-wives of a more emergent learning process.

* This is an abbreviation of Smith and MacGregor’s article, “What is Collaborative Learning?” in *Collaborative Learning: A Sourcebook for Higher Education*, by Anne Goodsell, Michelle Maher, Vincent Tinto, Barbara Leigh Smith and Jean MacGregor. It was published in 1992 by the National Center on Postsecondary Teaching, Learning, and Assessment at Pennsylvania State University.

Assumptions about Learning

Though collaborative learning takes on a variety of forms and is practiced by teachers of different disciplinary backgrounds and teaching traditions, the field is tied together by a number of important assumptions about learners and the learning process.

Learning is an active, constructive process: To learn new information, ideas or skills, our students have to work actively with them in purposeful ways. They need to integrate this new material with what they already know—or use it to reorganize what they thought they knew. In collaborative learning situations, our students are not simply taking in new information or ideas. They are creating something new with the information and ideas. These acts of intellectual processing—of constructing meaning or creating something new—are crucial to learning.

Learning depends on rich contexts: Recent research suggests learning is fundamentally influenced by the context and activity in which it is embedded (Brown, Collins and Duguid, 1989). Collaborative learning activities immerse students in challenging tasks or questions. Rather than beginning with facts and ideas and then moving to applications, collaborative learning activities frequently begin with problems, for which students must marshal pertinent facts and ideas. Instead of being distant observers of questions and answers, or problems and solutions, students become immediate practitioners. Rich contexts challenge students to practice and develop higher order reasoning and problem-solving skills.

Learners are diverse: Our students bring multiple perspectives to the classroom—diverse backgrounds, learning styles, experiences, and aspirations. As teachers, we can no longer assume a one-size-fits-all approach. When students work together on their learning in class, we get a direct and immediate sense of how they are learning, and what experiences and ideas they bring to their work. The diverse perspectives that emerge in collaborative activities are clarifying but not just for us. They are illuminating for our students as well.

Learning is inherently social: As Jeff Golub points out, “Collaborative learning has as its main feature a structure that allows for student talk: students are supposed to talk with each other....and it is in this talking that much of the learning occurs.” (Golub, 1988)

Collaborative learning produces intellectual synergy of many minds coming to bear on a problem, and the social stimulation of mutual engagement in a common endeavor. This mutual exploration, meaning-making, and feedback often leads to better understanding on the part of students, and to the creation of new understandings for all of us.

Goals for Education

While we use collaborative learning because we believe it helps students learn more effectively, many of us also place a high premium on teaching strategies that go beyond mere mastery of content and ideas. We believe collaborative learning promotes a larger educational agenda, one that encompasses several intertwined rationales.

Involvement. Calls to involve students more actively in their learning are coming from virtually every quarter of higher education (Astin, 1985; Bonwell and Eison, 1991; Kuh, 1990; Study Group on the Conditions of Excellence in Higher Education, 1984). Involvement in learning, involvement with other students, and involvement with faculty are factors that make an overwhelming difference in student retention and success in college. By its very nature, collaborative learning is both socially and intellectually involving. It invites students to build closer connections to other students, their faculty, their courses and their learning.

Cooperation and teamwork. In collaborative endeavors, students inevitably encounter difference, and must grapple with recognizing and working with it. Building the capacities for tolerating or resolving differences, for building agreement that honors all the voices in a group, for caring how others are doing—these abilities are crucial aspects of living in a community. Too often the development of these values and skills is relegated to the “Student Life” side of the campus. Cultivation of teamwork, community-building, and leadership skills are legitimate and valuable classroom goals, not just extra-curricular ones.

Civic Responsibility: If democracy is to endure in any meaningful way, our educational system must foster habits of participation in and responsibility to the larger community. Collaborative learning encourages students to acquire an active voice in shaping their ideas and values and a sensitive ear in hearing others. Dialogue, deliberation, and consensus-building out of differences are strong threads in the fabric of collaborative learning, and in civic life as well.

Collaborative Learning Approaches

Collaborative learning covers a broad territory of approaches with wide variability in the amount of in-class or out-of-class time built around group work. Collaborative activities can range from classroom discussions interspersed with short lectures, through entire class periods, to study on research teams that last a whole term or year. The goals and processes of collaborative activities also vary widely. Some faculty members design small group work around specific sequential steps, or tightly structured tasks. Others prefer a more spontaneous agenda developing out of student interests or questions. In some collaborative learning settings, the students' task is to create a clearly delineated product; in others, the task is not to produce a product, but rather to participate in a process, an exercise of responding to each other's work or engaging in analysis and meaning-making.

Cooperative Learning

Cooperative learning represents the most carefully structured end of the collaborative learning continuum. Defined as "the instructional use of small groups so that students work together to maximize their own and each other's learning" (Johnson et al. 1990), cooperative learning is based on the social interdependence theories of Kurt Lewin and Morton Deutsch (Deutsch, 1949; Lewin, 1935). These theories and associated research explore the influence of the structure of social interdependence on individual interaction within a given situation which, in turn, affects the outcomes of that interaction (Johnson and Johnson, 1989). Pioneers in cooperative learning, David and Roger Johnson at the University of Minnesota, Robert Slavin at Johns Hopkins University, and Elizabeth Cohen at Stanford, have devoted years of detailed research and analysis to clarify the conditions under which cooperative, competitive, or individualized goal structures affect or increase student achievement, psychological adjustment, self-esteem, and social skills.

In cooperative learning, the development of interpersonal skills is as important as the learning itself. The development of social skills in group work—learning to cooperate—is key to high quality group work. Many cooperative learning tasks are put to students with both academic objectives and social skills objectives. Many of the strategies involve assigning roles within each small group (such as recorder, participation encourager, summarizer) to ensure the positive interdependence of group participants and to enable students to practice different teamwork skills. Built into cooperative learning work is regular "group processing," a "debriefing" time where students reflect on how they are doing in order to learn how to become more effective in group learning settings (Johnson, Johnson and Holubec, 1990).

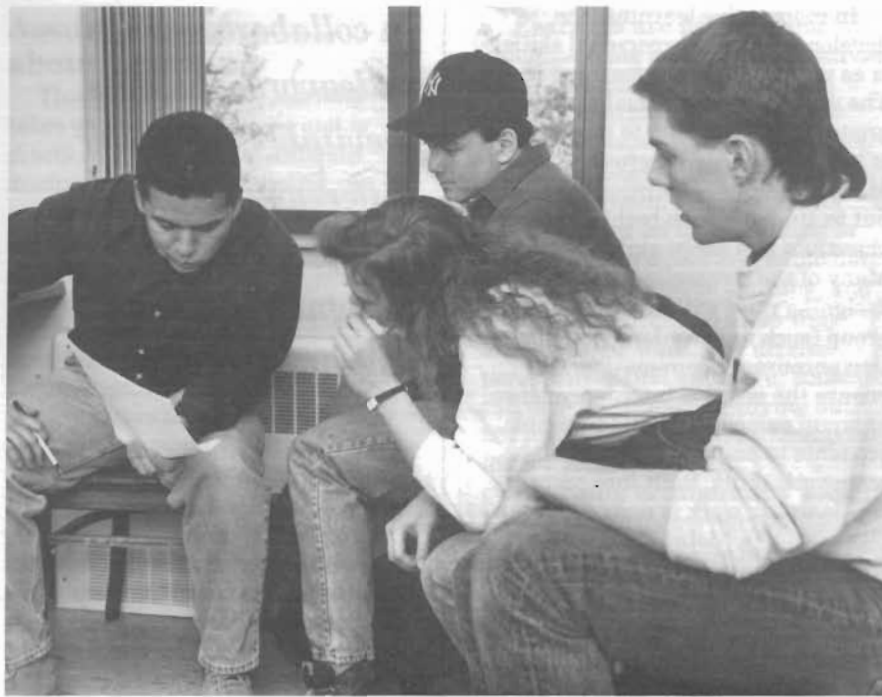
Problem-Centered Instruction

Problem-centered instruction, widely used in professional education, frequently is built around collaborative learning strategies. Many of these spring from common roots, especially the work of John Dewey in the early part of this century. Dewey endorsed discussion-based teaching and believed strongly in the importance of giving students direct experiential encounters with real-world problems. Guided Design, cases, and simulations are all forms of problem-centered instruction, which immerse students in complex problems that they must analyze and work through together. These approaches develop problem-solving abilities, understanding of complex relationships, and decision-making in the face of uncertainty. While problem-solving has long been a focus of professional education, it is increasingly regarded as an important aspect of the liberal arts as well.

In collaborative endeavors, students inevitably encounter difference, and must grapple with recognizing and working with it.

Guided Design: Guided Design is the most carefully structured approach to problem-centered instruction. The approach asks students, working in small groups, to practice decision-making in sequenced tasks, with detailed feedback at every step. Developed in the late 1960's in the engineering program at West Virginia University, the Guided Design approach has since been adopted in many disciplines and professional programs, most notably in engineering, nursing and pharmacy, but in many liberal arts and sciences courses as well (Borchardt, 1984; Day et al, 1984; deTornyay and Thompson, 1987; Miller, 1981; Roemer, 1981; Vogt et al., 1992).

Cases: Case studies have long been a staple for teaching and learning in the professions, particularly in the fields of business, law and education, and they are now being used in many other disciplines as well (Christensen and Hanson 1987). A case is a story or narrative of a real life situation that sets up a problem or unresolved tension for the students to analyze and resolve. The use of cases does not necessarily imply collaborative learning or small seminar discussion. However, case method teaching frequently asks small groups of students to tackle cases in class or in study group sessions.



Students working in a peer writing group in the writing center at Washington State University. From left to right, Raymond Herrera, Mike Baczwaski, Amanda Bieloh and Chris Lathim. (Photo: Robert Hubner)

Writing Groups

Both in theory and practice, the most concentrated effort in undergraduate collaborative learning has focused on the teaching of writing. The writing group approach, (known variously as peer response groups, class criticism, or helping circles) has transformed thousands of college writing classes. Through the spread of writing-across-the-curriculum initiatives, writing groups increasingly are appearing in other courses as well.

Peer writing involves students working in small groups at every stage of the writing process. Many writing groups begin as composing groups: they formulate ideas, clarify their positions, test an argument or focus a thesis statement before committing it to paper. This shared composing challenges students to think through their ideas out loud, to hear what they "sound like," so they will know "what to say" in writing. Writing groups also serve as peer response groups. Students exchange their written drafts of papers and get feedback on them either orally or in writing. This is a challenging process, one that requires students to read and listen to fellow students' writing with insight, and to make useful suggestions for improvement. Word processors have helped peer writing enormously; in many writing labs, students share their drafts and revise them right on the screens.

Problem-centered Instruction in Medical Education. Problem-centered instruction has also emerged in recent decades in the field of medical education. This work began in England, then spread to Canada and ultimately to the U. S. M.L.J. Abercrombie's research in England in the 1950's made a compelling case for discussion methods of teaching, contending that when people work in teams, they make more valid judgments than when working alone. This pioneering research had a profound impact on collaborative learning in medical education both in England and North America (Abercrombie, 1961, 1970). McMaster University in Canada was one of the early leaders in problem-centered medical education (Barrows and Tamblyn, 1980), followed by Western Reserve University, the University of New Mexico, and others. In 1985, the Harvard Medical School adopted a problem-based curriculum entitled "New Pathways" that has garnered national attention.

Simulations: Simulations are complex, structured role-playing situations that simulate real experiences. Most simulations ask students, working individually or in teams, to play the roles of opposing stakeholders in a problematic situation or an unfolding drama. Taking on the values and acting the part of a stakeholder usually gets students emotionally invested in the situation. The key aspect of simulations, though, is that of perspective-taking, both during the simulation exercise and afterwards. Following the simulation, there is usually a lengthy discussion where students reflect on the simulation and explore their own actions and those of others. This is where important concepts and lessons emerge. There are now a large number of simulations or educational games, as they are sometimes called, relating to many disciplinary areas (Abt, 1987; Bratley, 1987).

Peer Teaching

With its roots in our one-room schoolhouse tradition, the process of students teaching their fellow students is probably the oldest form of collaborative learning in American education. In recent decades, however, peer teaching approaches have proliferated in higher education, under many names and structures (Whitman, 1988). The following examples represent three of the most successful and widely adapted peer teaching models.

Supplemental Instruction: The Supplemental Instruction approach is an undergraduate teaching assistant model developed by Deanna Martin at the University of Missouri-Kansas City. It has been adopted at hundreds of colleges in the United States and abroad. This urban campus recognized the need to offer tutoring help to students, but budgetary constraints made one-to-one tutoring too expensive. Its search for an alternative approach led to "Supplemental Instruction." This approach focused not on "at risk students," but rather on "at risk classes," entry-level classes in health sciences, and later in general arts and sciences classes, where more than 30 per cent of the students were either withdrawing or failing. The university invites advanced undergraduates who have done well in those classes to become "SI leaders." These students are paid to attend the class, and to convene Supplemental Instruction sessions at least three times a week at hours convenient to students in the class. (Blanc, DeBuhr and Martin, 1980)

Writing Fellows: The Writing Fellows approach, pioneered by Tori Haring-Smith at Brown University, is a peer teaching approach somewhat parallel to Supplemental Instruction. The writing fellows are upper-division students who are strong writers. After extensive training, these students are deployed to an undergraduate class (generally in the discipline of their major) where they read and respond to the papers of all the students. Haring-Smith calls this a "bottom-up approach" to sustaining writing-across-the-curriculum initiatives, particularly in large classes where many faculty flag at assigning writing because there are simply too many papers to which to respond. Over 50 colleges and universities have created Writing Fellows Programs.

Mathematics Workshops: A third peer teaching approach that spread rapidly in the late 1980's is the intensive mathematics workshops program developed by Uri Treisman while he was at the University of California at Berkeley. Treisman wanted to address the drawbacks of traditional tutoring models—particularly those geared to minority students in academic difficulty. Finding that study groups made a difference in student success, he created a co-peer teaching approach called the Professional Development Program. The program assumes the culture of an honors program rather than a remedial program. Graduate instructors (usually doctoral candidates) lead math workshops built around small group problem-solving, with an explicit emphasis on peer teaching. These workshops supplement the regular lecture and discussion sections of mathematics courses. This intensive small group workshop approach, which emphasizes developing strength rather than remediating weakness, and peer collaboration rather than solo competition, completely reversed the prevailing patterns of failure by Hispanic and African American students in calculus classes at Berkeley (Treisman, 1985). This intensive math workshop approach has since spread widely in the mathematics community in high schools, as well as in both two- and four-year colleges.

Writing Fellows... are a "bottom-up" approach to sustaining writing-across-the-curriculum initiatives...

Discussion Groups and Seminars

The terms *discussion group* and *seminar* refer to a broad array of teaching approaches. In college settings we usually think of discussions as processes, both formal and informal, that encourage student dialogue with teachers and with each other.

All the approaches we have described above involve discussion. Most, however have distinct protocols, goals, or structures framing the activity. What we are describing here—more open-ended discussion or seminars—puts the onus on the teacher or the students to pose questions and build a conversation in the context of the topic at hand. There is enormous variability, then, in terms of who sets the agenda, who organizes and monitors the discussion, and who evaluates what. Some discussions or seminars may be heavily teacher-directed, others much more student-centered. There are myriad possibilities for discussions, and many good resources on strategies exist (Christensen et al., 1991; Eble, 1976; McKeachie, 1986; Neff and Weimer, 1989).

Learning Communities

Collaborative learning practitioners would say that all collaborative learning is about building learning communities. However, we use the term *learning community* here in a broader but more specific sense, in terms of intentional reconfiguration of the curriculum. In the past 15 years, a number of colleges have recognized that deep-seated structural factors weaken the quality of undergraduate learning and inhibit the development of community. These schools have attacked the problem directly by developing learning communities, a “purposeful restructuring of the curriculum to link together courses so that students find greater coherence in what they are learning and increased interaction with faculty and fellow students” (Gabelnick, MacGregor, Matthews, and Smith, 1990). As such, learning communities are a delivery system and a facilitating structure for the practice of collaborative learning.

Learning community curriculum structures vary from campus to campus. They can serve many different purposes, but have two common intentions. They attempt to provide intellectual coherence for students by linking classes together and building relationships between subject matter, or by teaching a skill (e.g., writing or speaking) in the context of a discipline. Second, they aim to build both academic and social community for students by enrolling them together in a large block of course work. Learning communities directly confront multiple problems plaguing undergraduate education: the fragmentation of general education classes, isolation of students (especially on large campuses or commuter schools), lack of meaningful connection-building between classes; the need for greater intellectual interaction between students and faculty; and lack of sustained opportunities for faculty development.

By altering the curricular structure to provide larger units of study, learning communities frequently provide more time and space for collaborative learning and other more complicated educational approaches. Small group workshops and book seminars are staples of most learning communities. Peer writing groups and team projects associated with labs and field work are also fairly common. Study groups emerge in learning communities, both intentionally and spontaneously. These programs provide a unique social and intellectual glue for students that results in high rates of student retention, increased student achievement and more complex intellectual development (MacGregor, 1991).



North Seattle Community College students Charles Taylor and Caryn Wood discussed the benefits of coordinated studies in a fishbowl at the Washington Center's recent Collaborative Learning Conference. (Photo: Steve Davis)

Creating a collaborative classroom can be wonderfully rewarding opportunity but it is also full of challenges and dilemmas.

Collaborative Learning: Challenges and Opportunities

Creating a collaborative classroom can be a wonderfully rewarding opportunity but it is also full of challenges and dilemmas. Few of us experienced collaborative work in our own undergraduate settings, and much of our graduate school training reinforced the teacher-centered, lecture-driven model of college teaching. For each of us, stepping out of the center and engaging students in group activity is hard work, especially at first.

Designing group work requires a demanding yet important rethinking of our syllabus, in terms of course content and time allocation. If some (or a great deal) of the classroom time is considered an important social space for developing understandings about course material, or if some of the out-of-class time is devoted to study groups or group projects, how should we design the rest of the class time (lectures, assignments, examinations)? How do we ensure students are learning and mastering key skills and ideas in the course, while at the same time addressing all the material of the course? Teaching in collaborative settings puts front and center the tension between the **process** of student learning and **content** coverage.

As we become more involved in using collaborative learning, we discover what radical questions it raises. Collaborative learning goes to the roots of long-held assumptions about teaching and learning. Classroom roles change: both teachers and students take on more complex roles and responsibilities. (Finkel and Monk, 1983; MacGregor, 1990). The classroom is no longer solo teacher and individual students—it becomes more an interdependent community with all the joys and tensions and difficulties that attend all communities. This degree of involvement often questions and reshapes assumed power relationships between teachers and students, (and between students and students), a process that at first can be confusing and disorienting (Romer and Whipple, 1990).

Not only is course content reshaped, so are our definitions of student competence. Because the public nature of group work makes demonstration of student learning so continuous, collaborative learning both complicates and enriches the evaluation process.

Challenges to collaborative learning at the classroom level are compounded by the traditional structures and culture of the academy, which continue to perpetuate the teacher-centered, transmission-of-information model of teaching and learning. The political economy of the academy is set up to front load the curriculum with large lower division classes in rooms immutably arranged for lectures, usually in classes limited to fifty-minute “hours.” Student-student interaction; extended, careful examination of ideas; the hearing-out of multiple perspectives; the development of an intellectual community — all these are hard to accomplish under these constraints.

The lecture-centered model is reinforced (both subtly and blatantly) by institutional reward systems that favor limited engagement in teaching, and give greater recognition to research. Achievement for teachers and students alike is assumed to be a scarce honor, which one works for alone, in competition with peers. This assumption of scarcity is the platform for norm-referenced grading, or “grading on the curve,” a procedure that enforces distance between students and corrodes the trust on which collaborative learning is built.

Moreover, our definitions of ourselves as teachers, as keepers and dispensers of disciplinary expertise, are still very much bound up in the lecture podium. For example, a colleague recently told us a poignant story about his dean coming to observe his teaching. The dean looked into the room where students were avidly engaged in small group work. Turning to leave, the dean said to our colleague, “Oh, you’re doing groups today. I’ll come back when you’re teaching.” We have a long way to go.

What really has propelled us and our colleagues into collaborative classrooms is the desire to motivate students by getting them more actively engaged. Nonetheless, wanting to be a facilitator of collaborative learning and being good at it are very different things. As with all kinds of teaching, designing and guiding group work takes time to learn and practice. And for students, learning to learn well in groups doesn’t happen overnight. Most teachers start with modest efforts. Many work with colleagues, designing, trying and observing each other’s approaches.

At their best, collaborative classrooms stimulate both students and teachers. In the most authentic of ways, the collaborative learning process models what it means to question, learn and understand in concert with others. Learning collaboratively demands responsibility, persistence and sensitivity, but the result can be a community of learners in which everyone is welcome to join, participate and grow.

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The Challenge of Reform is to Remake Ourselves

by Susan Wyche-Smith



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As a “roving reporter” for the Washington Center, I came to the conference on Collaborative Learning in a unique capacity: to listen and report what I saw—or didn’t see—in the concurrent and plenary sessions. But I also came with what I thought was my personal agenda and the agenda of many there: to learn new ideas from teachers who are experts at using collaborative learning methods. I mistakenly thought my exhaustion and malaise as a teacher who uses collaborative learning methods had been coming primarily from the need for an infusion of new techniques.

I was not alone. Informal discussions with other participants often began with the question “what do you teach?” and quickly segued into “how do you teach it?” But once the conference was underway, the questions changed. For one thing, these teachers seemed actively engaged not just in reforming pedagogical methods but in rethinking the curriculum itself. For another, the problems they raised in session after session extended beyond the usual parameters of teaching and learning.

Experience tells me that two themes exist in most conferences: the stated and the emergent. The first is the publicized purpose for coming together, in this case, collaborative learning. The second takes time to discern; it grows organically from the issues and concerns that are expressed in and around the stated theme. At this conference, the emergent theme was one of spiritual need: for teachers, students, and the larger educational community they inhabit. Signs of this theme appeared in the titles, in session talk, and in the imagery of the plenary speeches. It appeared to be driven by a shared sense of urgency. Many heads nodded in agreement when session leader Maxine Mimms, emeritus faculty member from The Evergreen State College, observed that what we do with our students matters to our survival as a culture.

At the opening session, Lee Knepelkamp argued that to tinker with the curriculum is to tinker with our souls, changing not only who and how we are, but the very world we share. “We (teachers),” she said, “have a moral obligation and a sacredness.” In “Sticky Wickets,” a session led by Bruce Kochis and students Dan O’Leary, Andrea Paul, Charles Taylor and Caryn Wood from North Seattle Community College, a participant asked how to develop skills as a collaborative teacher. The discussion that followed, which included advice from one teacher to try “family counseling,” was summed up by participant R.C. Hoover: “The growth needed for collaborative learning seems not to be so much professional growth—tricks of the trade—but human growth, the ability to think of students as also being human, and being sensitive to the implications of that.”

The emergent theme was sounded most clearly by activist Parker Palmer in his concurrent session, “A Movement Model of Educational Reform.” Like all the sessions I attended, this one was organized around collaborative methods rather than formal presentation. Palmer began by asking participants if they saw themselves as being involved in a movement. Everyone did. Then he asked, “What does that belonging to a movement look like?” The participants generated answers quickly: organization in the face of chaos, action and non-action, danger and excitement, new enemies and friends, power gained and lost, seeing things in new ways and losing the ability to see them from former perspectives, a conversion experience. The group noted that many of these answers contained opposing pairs, including fear of isolation and the excitement in belonging to a growing community.

Palmer, who has studied development of modern social movements, offered a model sequence for change occurring through organized movements. The first stage, "Divided No More," is characterized by isolated individuals who independently realize they can no longer carry on in the usual ways, that any punishment for defiance of existing systems cannot match the personal diminishment felt in continuing as before. In the second stage, "Communities of Support," these individuals slowly find one another, enjoying the sense of sanity that comes from no longer being alone, developing a shared vision and language, and eventually gaining experiences of leadership within the community. The third stage occurs in "Going Public," when the community takes its vision to the public realm, sees its private symbols becoming viable for greater numbers of people, and survives criticism leading to greater clarity and strength. The final stage, "Developing Alternative Rewards," involves the institutionalization of the movement, including a set of alternative rewards for its participants. Eventually, the movement will either reshape traditional organizations or be co-opted without forcing substantive change, thus creating the need for other movements to begin a new cycle.

New ideas require shifts in power, Palmer argued, which means not abandoning institutions but redrawing the lines inside.

As I listened to this discussion, it occurred to me that this conference represented the second stage of the movement, the development of "communities of support." Unlike most conferences, this one had energized me instead of wearing me out. I had not just heard about various collaborative methods, I had seen them modeled by a variety of teachers and had experienced them as a participant. In fact, as a reporter, I had expected to sit in the back as a quiet observer, but each time the changing configurations of chairs made it difficult to keep outside the circles of discussion—a reminder that collaborative learning methods work against the problems of the disconnected "back row." I had also enlarged my own circle of pedagogical kin, as discussions begun in sessions seemed to carry naturally into the spaces between sessions. My desire to leave the conference with a few new techniques was being replaced by the much more satisfying experience of having found "soulmates" in the community of collaborative learning.

However, I also felt support alone might not be enough, that teachers faced the incredible inertia of their home institutions. The power of that inertia was addressed in the second half of the Palmer session, again through group discussion. Drawing a box divided into smaller boxes, he asked us to consider the institutions that shape our lives and the walls that exist within them. New ideas require shifts in power, Palmer argued, which means not abandoning institutions but redrawing the lines inside. As the group studied the possibilities of this image, one participant commented that institutional power arises because we internalize institutional divisions, hierarchies, and systems of reward. Institutional space takes up internal space: the institution becomes us. The challenge of institutional reform is to remake ourselves.

When Palmer asked the group to identify fears that make collaborative learning feel dangerous, teachers named institutional constraints, competing agendas (of administrators, colleagues, and the disciplines, which collaborative methods frequently challenge). Some teachers said they feared that alternative approaches will not prepare students to fit into existing institutional boxes. And everyone acknowledged personal fears: the additional demands of trying something different, of being co-opted, of possible defeat. One woman said she participated in other social movements and found it hard to retrench for educational reform. However, student Andrea Paul spoke to this last concern. Describing the difference collaborative learning made for her, she said: "We [students] can carry on. We respect what we've been given." Her comment reminded the group that efforts have already taken hold, that this movement might live on beyond our individual work.

The significance of seeing ourselves as part of a movement—one that has survived long enough to forge new generations—was driven home for me in the session, "Autobiographical Reflection as a Prerequisite to Teaching," led by Maxine Mimms, and Joye Hardiman of The Evergreen State College Tacoma Campus. They asked us to describe and reflect on our own stories as teachers, first by sharing them in small groups (that was the easy part), then by imagining the person who influenced us to become a teacher and role-playing that person for the group. One by one, stiff and nervous, participants wandered into the center of the human circle to do their impersonations. Although we had time for only a few performances, everyone seemed transformed: no doubt by memories of old friends as well as by the fearful possibility they might be called next. We had fun.

Mimms and Hardiman suggested that such exercises are a good way to get students started writing autobiographies. They use an Egyptian model, which cites goals achieved and challenges faced, cast in the form of a legacy for future generations. This particular model resists the problems of confession and victimization that plague standard autobiographical assignments, because the legacy format shapes difficulties into “lessons learned, wisdom earned” and is an exercise in hope. For Mimms and Hardiman, this kind of reflection is “fundamental to both the learning and teaching process,” and as a participating teacher in this session, I found a peculiar irony in alternative methods to recall connections to tradition, the legacy of our former teachers.

By the time I arrived at the final session, a keynote talk by Parker Palmer, my earlier expectations had changed. I was ready, therefore, when he began by suggesting “The death knell of collaborative learning will be when it is reduced to techniques.” He observed that in higher education we live in intense pain every day, a pain that comes from disconnected selves, disciplines, and colleagues, arising out of a way of looking at the world, requiring distance (objectivity) to what is known. Traditional notions of reality—what it is and how we know it—have left us with a fear of subjectivity and relationships, which translates into fear of change. When we take this way of looking at the world and use it as the basis for our teaching, our students often reject it as yet another “disconnected activity.” If, however, we teach students that thinking *is* a community—acknowledging the hidden curriculum of relationships between students, teachers, and subjects—then we have a chance. Palmer concluded that collaborative learning can never be reduced to mere technique because it is, instead, a spiritual journey.

Although the secular humanist in me tends to get uncomfortable with religious imagery, the idea of education as a spiritual journey is well in keeping with the ancient notion of curriculum as a course to be run. If we change the curriculum, it makes sense that we are also changing who we are, and the direction our lives will take. By the end of the conference, I realized much of my earlier exhaustion came from failing to acknowledge that struggles to change the institution are often spiritual struggles as well, frequently faced alone, without the sense of belonging to a larger, equally-committed community. I was reminded that one of the best things about travelling is the folks we meet along the way, the stories we tell one another, and the comfort of knowing that someone else will take the baton when our leg of the journey is finished.

If we change the curriculum, it makes sense that we are also changing who we are, and the direction our lives will take.



Parker Palmer listens to comments in his session on “A Movement Model of Educational Reform” at the Washington Center’s conference on collaborative learning. (Photo: Steve Davis)

Collaborative Learning and Multiculturalism: A Report from the Washington Center Conference

by Kay McDade



Kay McDade teaches in the Sociology Department at Pacific Lutheran University.

Collaborative learning can be both frustrating and empowering. I learned this in my role as a roving reporter at the recent Washington Center Collaborative Learning Conference. My assignment was to cover workshops that focused on issues of diversity. I was excited about this opportunity because I've been struggling to make my classes more inclusive since I attended the Washington Center Conference on diversity in 1991.

In the classes I teach, simply adding reading or discussion material has not always worked and in some cases has backfired. Students are sometimes less than enthusiastic about the material: they feel excluded, skeptical, guilty, attacked, and, sometimes, bored. I know I'm not alone on this issue. Another conference participant quoted her students as complaining "Haven't we done enough of this diversity stuff?" On occasion, I've introduced readings or discussion topics that reinforce some student's negative feelings and stereotypes about certain groups, exactly the opposite of my intention. It's a particularly difficult issue in the discipline of sociology because much of the material available about people of color and about gay, lesbian and bisexual people has a problem focus. For example, there is a vast amount of literature on poor, single parent families from the African American community but almost no literature on middle or upper class families. So I attended diversity sessions with high expectations, looking for solutions to problems I've experienced and hoping to discover additional material, assignments and exercises I might use in my classes.

I left the conference empowered, with a renewed sense that addressing multiculturalism in the curriculum and teaching collaboratively were both worthy goals. I was frustrated, however, at the amount of time spent on process in the sessions, often, I thought, at the expense of content. I suppose this was to be expected at a conference focusing on collaborative learning but there was so little time to gather information that I longed for a more traditional lecture format. (I should say that not all participants shared this viewpoint - many with whom I talked wanted less presented material and more participant interaction.)

I attended four sessions dealing with diversity. (My apologies to Johnella Butler and Betty Schmitz; I skipped their session because I've heard them speak before.) The major theme of the first three sessions was how to effectively teach a diverse student body, although the reverse issue (how to teach multiculturalism to a traditional student body) was also mentioned. The fourth session examined how we talk about diversity and the cultural constraints that make this a difficult enterprise. I came away from each of the sessions with some new ideas, but also with some new questions and concerns.

Joye Hardiman, ("Comparative World Views: A Dialogue in Managing Diversity"), introduced us to Edwin Nichols' model of cultural difference which suggests that people from different ethno-cultural groups have different frames of reference, including how they think, how they know and what they value. In order to connect with our students and be successful collaborative teachers, we need to understand and appreciate different frames of

reference and talk about them with our students. In addition, as teachers, we need to be willing to make accommodations for students whose frames of reference are different from our own. For example, students who come from ethno-cultural groups that value relationships above all else (African American, Latino, and Arabic according to Nichols) will do better in our classes if we establish relationships with them BEFORE we attempt to give critical feedback on course material. It also helps to give these students feedback in non-traditional spaces that are more hospitable and less institutional (e.g., around the coffee pot rather than in our offices).

Joye suggested that Nichol's model is also helpful in teaching the value and importance of multi-cultural studies to our students. Since each of Nichol's three ethno-cultural groups has excelled in an area that is vital for the survival of humanity, i.e. technology, spirituality and human relationships, each group has something significant to "bring to the pot." Another way to make multi-cultural studies relevant to Euro-American students is to "expose the myth that white people in America have no ethnicity." Joye suggests using autobiography and stories of collaboration among different cultural groups, such as the abolitionists and suffragists in the 19th century.

More needs to be said about introducing multi-cultural material to existing classes. The idea of autobiography has merit but the sad truth is that many Euro-American students have no knowledge of their European heritage. I once asked students in a Sociology of the Family class to trace the ethnic history of their family and to discuss how this heritage influenced their family's current traditions and values. More than half the class was unable to respond to the question. Finding good reading material is often a challenge too. Many of the newly published anthologies on race, class and gender are based on themes of oppression and injustice. While this is a critically important perspective, I think it needs to be tempered with themes of celebration and accomplishment.

Nancy Hoffman's workshop, "Being Disagreeably Collaborative: What Feminist Research Tells us about the Tyranny of Harmony," focused on the communication difficulties female students face in the classroom because they have been socialized to preserve relationships, minimize conflict and make sure that everyone gets heard. This cultural imperative to "be nice" often prohibits real learning because it prevents an open and honest discussion of different points of view. Nancy cited supporting research with adolescent girls but it's unclear whether the findings apply to girls from all race and ethnic groups.

Nancy introduced two classroom exercises that could help students recognize and discuss conflicting viewpoints in a non-threatening way. The first was a problem-solving exercise; participants were encouraged to come up with as many different solutions as possible. The exercise illustrated there are

multiple ways to approach an issue, there is no absolute right or wrong way, and different cultural groups tend to approach issues in different ways, which should ultimately lead to a better solution.

For the second exercise we read a recently published article on a controversial issue, featuring various people's opinions about the issue. Small groups of participants took on the identity of one of the players in the article and prepared a short statement from that person's viewpoint. Then a spokesperson from each group joined in a panel discussion of the issue. This way, all viewpoints on the subject were aired and discussed. I think this exercise has real promise as a teaching approach, especially when dealing with issues that have "politically correct" overtones. Students quickly learn what not to say in class and this method would allow them to express controversial viewpoints without personally owning them.



David Sherrill (University of Hawaii-Manoa), Joye Hardiman (The Evergreen State College-Tacoma), and Cynthia Chan Imanaka (Seattle Central Community College) working on a problem posed by Nancy Hoffman in her session, on "Being Disagreeably Collaborative" at the Washington Center's collaborative learning conference. (Photo: Steve Davis)

Although Nancy proposed these exercises as especially helpful for female students because they make use of women's relational expertise, I find them useful for male students as well. Perhaps males will benefit most from relational aspects of the exercise, while females will benefit from expressing controversial opinions. Nancy did not address the issue of the instructor's gender and how this impacts classroom dynamics, although I think this is an important consideration. Following the research to its logical conclusions suggests that male teachers would be more comfortable inviting controversy in their classrooms, but that female students would be more likely to express controversial views with female teachers.

In her workshop, "A Step Toward Inclusive Pedagogy," Jan Kido began by asking every participant to define "inclusive pedagogy." We each shared our definition with another person, then with the whole group. The definitions were written on large paper and posted on the walls. This simple exercise demonstrated a way for all voices in a classroom to be heard and honored. Next Jan passed out a sheet of paper with five perception problems and asked us to solve them. All the questions had some gimmick or trick involved; solving them was more a function of past experience than intelligence. We all groaned of course, but, like good students, quickly began to work on the problems. After a few minutes Jan asked us to compare our answers with another person, and after that, with another group. She asked, "How many of you learned from another person?" Many hands were raised. "How many of you were able to help another person?" Again, many hands were raised. I'll use this exercise in my classes. It's a powerful illustration of the benefits of collaborative learning.

Jan suggested we must talk more about the "art of teaching." To teach effectively we must place the student, not ourselves, at center. We need to know how each student thinks (which ties directly into Joye Hardiman's discussion of frames of reference) and make our respective disciplines accessible to all students. We need to be able to recognize when our "invitation to learn" has not connected with students and when to try other approaches. At the end of the session Jan offered some "do's" and "don'ts" for fostering closeness between students and faculty and encouraging learning. Faculty who want to enhance closeness might use humor, gesture, smile, touch students (with prudence), move around the classroom and ask questions that elicit opinions rather than facts. On the other hand, asking students factual questions and calling on students arbitrarily, without any indication from them that they want to speak, can create a tense atmosphere that inhibits learning.

An issue Jan mentioned as important but did not pursue was power in the classroom. I wanted more discussion on this issue. As instructors, we bring differing degrees of power to the classroom, much of it based, on sex, age, and race or ethnicity rather than abilities and experience. How do these differing degrees of "social power" affect our ability to become successful collaborative teachers and learners?

Janet and Milton Bennett began their workshop on "Multi-Culturalism: Divisiveness and Dialogue" by assuring us, "There is no single right way to do this." Since there are currently no good models for establishing a multicultural community, "we are in the process of making it up." Tensions are inevitable as we engage in the "difficult dialogue," and we must learn to understand the tensions rather than assume we can resolve them. The Bennetts define culture as a pattern of values, beliefs and behaviors that develop as a result of interaction. They find this broad definition of culture useful in talking about ethnicity, class, race, ability, gender and sexual orientation. They made an important distinction between

generalizations we can legitimately make about cultural groups (e.g. Americans tend to be individualistic) and stereotyping, which is the (often incorrect) assumption that an individual possesses certain characteristics because s/he is a member of a particular group (e.g. Jane is American so she must be individualistic).

An interesting discussion about the strategy of defining gays and lesbians as a cultural group ensued in the session. Milton Bennett suggested that treating sexual orientation as a culture rather than a sexual preference makes it possible for people with strong religious beliefs against homosexuality to become more understanding and tolerant. However, some participants felt that is danger in defining a "gay culture" because it makes sexual orientation seem like a lifestyle choice rather than an essential part of an individual's self-definition. Also, many gays, lesbians and bisexuals do not identify with, nor want to be a part of, what we currently recognize as the gay culture. Many people in the session agreed that teaching about sexual orientation was both different and more difficult than teaching about race, ethnicity, class, gender or ability and that more discussion on this issue is needed.

This is such a brief overview of the sessions attended. I apologize to the session leaders for merely skimming the surface of their presentations. They all had much more to say than I have been able to communicate here. All in all, it seems to me that collaborative learning as a classroom process and multiculturalism as an educational goal really go together very well. One of the best ways for our students to learn about cultural diversity is from one another. We can use collaborative learning processes to create a classroom climate in which students feel safe enough to tell each other "who they are," to express different and perhaps controversial viewpoints, and to listen to others with respect and curiosity.

What I Learned at the Revolution

by Burton S. Guttman



Burt Guttman teaches biology at The Evergreen State College. (Photo: Steve Davis)

In his closing remarks to the Washington Center conference on Collaborative Education, Parker Palmer talked about collaborative education as a personal journey, as a change in the individual teacher. In saying this, he summarized a theme presenters kept repeating as they told us how they had come to be in this place: again and again, dedicated teachers told of trying to teach in traditional ways, discovering it wasn't working, searching for a solution, and recognizing that to be effective they must take themselves out of the center of attention and bring students in as active participants in their own education. We heard, in Evergreen faculty member Don Finkel's terms, a series of people realizing they must dissolve the Atlas complex. That so many people have discovered this general solution for themselves suggests it is the right solution. Further evidence, of course, lies in data showing improvements in outcomes that all instructors strive for—retention, deeper understanding, student satisfaction—and perhaps even more importantly, in the obvious satisfaction instructors find in their work and the pleasure they take in learning along with their students.

Palmer warned us that the death of the collaborative education movement would be its reduction to a series of techniques. That is probably right. Success probably lies in each instructor making a personal journey of discovery, finding what works. And yet every wheel does not have to be reinvented. For those wanting to try, there are valid questions of "How do you do it?" and useful answers of "Here's how I did it" to give them courage and get them over the initial barriers. Every journey should be different, but why not learn from such things as compasses and comfortable hiking boots? In one session, Karl Smith opened his academic REI store, laid out some useful tools, and modeled them for us. ("Would someone in the

back paraphrase those instructions?" he requested, emphasizing the importance of having students do just that to ensure they have really heard what you want them to.) An initial goal, he emphasized, is to create a context for students' work, a context in which they get to know one another and feel comfortable working together. An appropriate learning situation demands positive interdependence, promotes face-to-face interactions, and requires students to take personal responsibility for their work. As additional benefits, beyond learning the subject of the course, they may come away learning collaborative skills and the ability to examine their group's process of working together — skills becoming increasingly important in the modern workplace.

Smith emphasized the importance of laying out specific objectives for any collaborative work, which will lead to decisions—important decisions—about how student groups are to be organized and to work. Explain the task clearly, he said, emphasizing students' responsibilities and interdependence. But, as other presenters also emphasized, the time students are working is not a time you can go off and have coffee. This is a time to monitor their work, teach skills and intervene to help them understand the intended lessons.

Two instructors who described their own journeys of discovery, Judy Moore and Eric Mould from Yakima Valley College, explained how they have come to develop their way of teaching various biology courses. The twin themes of individual preparation and group learning run through their work. They begin with low expectations of individual student knowledge, but with high expectations of the group's ability to develop the required understanding. They can then have high expectations of the individual students at the end of the process. They structure each week around a series of clear

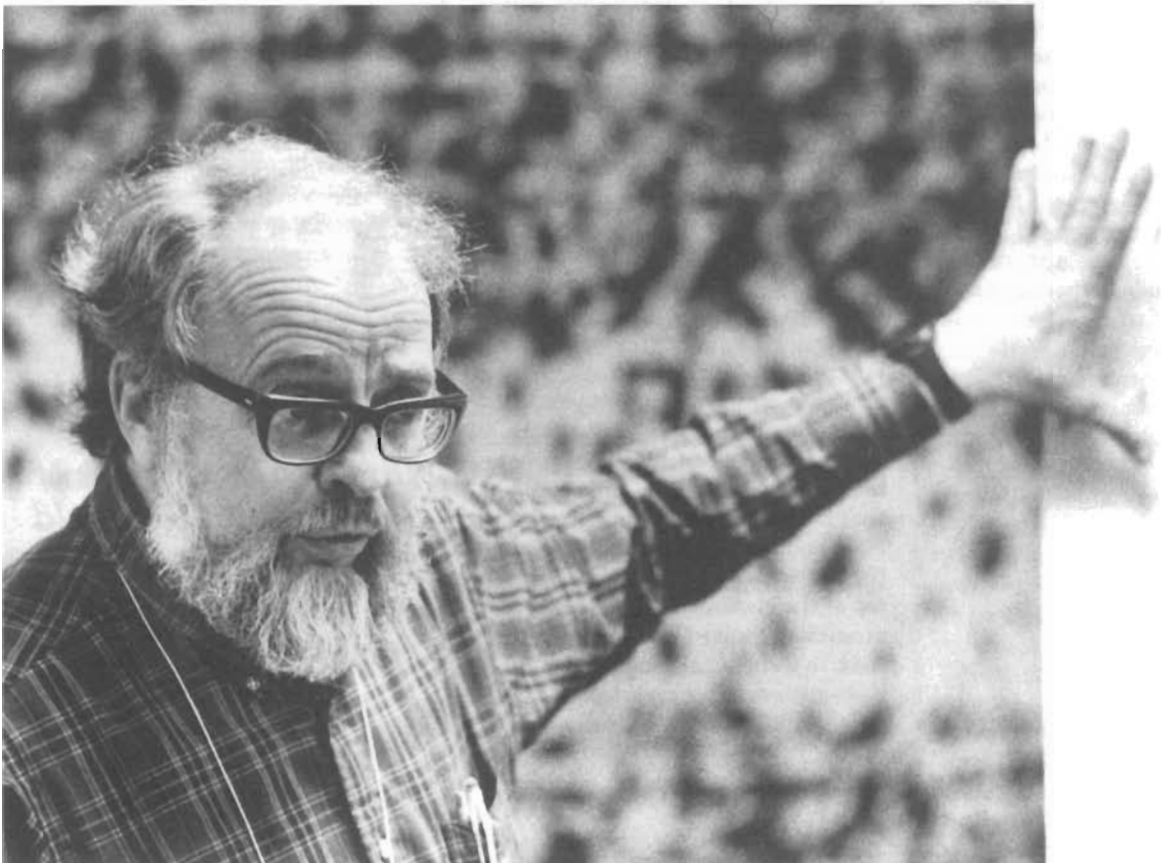
objectives—concepts the students need to master—and a series of small-group discussions in which students can develop that mastery. Of course, successful group interactions depend on noncompetitive grading; students must feel cooperation is to their advantage, and the best outcome would be for everyone to get an A. Even if the method does not quite produce this outcome, it certainly yields a superior level of understanding and a lot of satisfaction. (How many courses, I wondered, are actually given with the opposite goals in mind: tough exams, tough grading, and fierce competitiveness to eliminate students for one purpose or another.) An interesting aspect of Moore and Mould's method is their use of multiple textbooks. (My textbook writer's side has grave doubts about this method; my teacher's side thinks it's great.) Since students have to ferret out their own answers to a series of questions, they are forced to confront the approaches of

different authors to the same concepts. This forces them into an interesting kind of critical thinking. Instead of just memorizing one version, they have to analyze possibly conflicting viewpoints and develop their own conceptions.

I came away from this session filled with gratitude and admiration for some excellent ideas and insights. But why, I wondered, haven't my Evergreen colleagues and I developed some of these methods to such a high degree? After all, collaborative learning has been a principal feature of Evergreen from the beginning. The answer, I think, lies in a kind of talk running through many discussions at the conference that sounds odd to an Evergreen faculty member: students earning points toward their final grade for success in each activity. Evergreen began as a very free, experimental institution, valuing continuing freedom from all kinds of constraints. Since we write narrative evaluations, we are free to describe

students' behavior qualitatively, to give them credit for what they have accomplished, and to note their deficiencies. At most colleges, however, students must be given grades. Students have to finally prove they know enough to justify certain grades, and the good teacher is responsible for helping them pass the tests and obtain those grades. I think it is just this more stringent demand of grading that has imposed more stringent demands on students; it has inspired superior, more creative uses of group processes, tapping the full potential of collaborative methods and leading to a higher level of achievement on the part of students. I learned important things that should lead me to develop deeper and more consistent understanding in my own students. I'm grateful.

For those who are interested in the special problems of science for the science-phobic, or science-reluctant, Western Washington University's Fairhaven College team of Dan Larner, Gary Bornzin, and David



Ed Reynolds, English instructor at Spokane Falls Community College, leads a small group through the process of analyzing a case at the collaborative learning conference. (Photo: Steve Davis)

Mason described multiple approaches to making a science course not only palatable but exciting. In developing their courses, they reexamined the question of what students really need to know and have integrated a lot of discussion of socially relevant issues. This is clearly a problem many instructors have faced, and participants in this session shared their concerns in a lively interaction.

Following Larner's emphasis on teaching science as a humanistic activity, I would characterize their work as humanistic, the collaborative element being only one aspect of humanism. They address the issues that have turned students away from science, making these much of the material in their courses; and they address the humanistic aspects of science that make it so attractive and exciting to those of us who love it, and which non-scientists generally have not understood. Science, for instance, is exciting because it allows us to understand the world we live in. It is exciting and attractive because of its aesthetic dimensions, which are generally invisible to non-scientists. It has, by some interpretations, a spiritual dimension. In spite of their distaste for science, many students appreciate these elements, or can be led to appreciate them, and the course is partly devoted to bringing out these matters and developing these themes. At the same time, the course addresses what students perceive as negative aspects of science: its jargon, its exclusionary image, its role in creating environmental destruction and other contemporary problems. The Fairhaven instructors take these issues seriously, rather than ignoring them, and make them integral to their teaching.

In his course, Bornzin raises the classic question of whether scientific knowledge is discovered or created, leading to the view of feminist critics who contend that it is much more created than discovered. (This is a tricky matter. The personal understanding of each student is certainly created, and the instructor's job is to foster that development, but that does not mean the shared knowledge of a community of scientists is all created, in contradistinction to being discovered.) Bornzin emphasized the importance of creating an appropriate context for group work, not simply creating little groups and expecting them to operate properly. Furthermore, it is important to respect the student, recognizing each student's background. The students' previous attitudes and knowledge forms part of the basis for further instruction.

David Mason demonstrated how easily statistical concepts can be developed by using information from students about themselves, with a simple computer spreadsheet that provides correlation analyses and generates graphs. Here is an example of making mathematical concepts meaningful and palatable to students who are generally turned off by math.

Craig Nelson puts on provocative, stimulating workshops, raising disturbing questions, perhaps especially disturbing for scientists. In his session on classroom implications of diversity he raised a number of serious issues. Participants easily recounted examples of bias in language and in underlying attitudes and assumptions. But Nelson's contention is that the language we use everywhere, including in science, is inherently biased in some way, that it always has some political bias, and that we should be choosing the particular bias we want carried out of the classroom. Our own discussion focused on the metaphor that, in a chemical reaction, one molecule *attacks* a chemical bond of another. Why not, asks Nelson, say

that the two molecules *cooperate* to make a third? But this is anthropomorphic, I react, and he replies that so is "attack," to which I must finally agree. But I reject the argument that all language is political. Words must set boundaries. "Political" must refer to some range of discourse and must *not* apply to everything outside that range; the contention that all language is political would make "political" meaningless. What we can do, however, is to recognize metaphors reflecting underlying schemas of thought that we would just as soon eradicate.

Rather than searching for metaphors that promote some political or social agenda, we can search for the most neutral. This procedure is certainly more in keeping with the ideal of neutrality and objectivity in science, an ideal that most scientists are unwilling to give up. Reactions can be described in terms of interactions, fields, and other terms that have no obvious political implications. In thinking about scientific problems, and in teaching science, we don't have to promote any political agenda; but if science is one of the most humanistic of human endeavors, perhaps we have an obligation to promote humanistic values. The infusion of this recognition into science education may be one of the most important outcomes of the changes we are witnessing in teaching.

What we can do, however, is to recognize metaphors reflecting underlying schemas of thought that we would just as soon eradicate.

Learning Community Programs in Washington— Spring 1993

Learning communities purposefully restructure the curriculum to link together courses so that students find greater coherence in the courses they take, as well as increased intellectual interaction with faculty and fellow students. The following is a listing of learning communities under way this spring.

Unless otherwise indicated, the learning communities at the community colleges are being offered in college transfer "A.A." degree programs. Please be in touch with the colleges and faculty involved if you would like more information about any of these programs.

Bellevue Community College

Coordinated Study

"Pink Cadillac: Myths about American Culture"
Astrida Onat/(Seattle Central) anthropology
Bonnie Wallace Hoffman/drama
Woody West/English

Linked Class

"The Galactic Village"
Jim Rostirolla/astronomy
Laura Burns-Lewis/English

Centralia College

Linked Class

"Public Policy for the 90's"
Don Foran/ethics
Laura Siebuhr/American government

Centralia College— East County Center

Linked Class

"Imagine: A Metarhythmythical Journey through the Lens of Perception"
Vann Cantin/art, computer science
Bob Conrad/English

Edmonds Community College

Coordinated Study

"The Games of Life: Rituals for Sport and Survival"
Jim O'Donnell/English
Joe Hollinsworth/anthropology

Coordinated Study

"Myths in the (He)Art: Where Does Art Come From?"
Melissa Newell/art
Margaret Scarborough/humanities

Coordinated Study

"Chemath"
Mary O'Brien/chemistry
David Chalif/math

Coordinated Study

"Voices from the Edge"
Anne Martin/sociology
Margaret Scarborough/English

Everett Community College

Cluster

Women on the Move to a Four Year Degree
"Humans and Their Environment"
Sally van Neil/environmental studies
Holly Hill/English

Coordinated Study

"20th Century American Literature and History: Fiction and Fact"
Tom Gaskin/English
Ann Jackets/English

Gonzaga University

Linked Class

"Ethics and Fiction"
Rose Mary Volbrecht/philosophy
Mary Jo Bona/English

Green River Community College

Team-taught Linked Class

"Music and Art: 17th Century to the Present"
Elayne Levensky-Vogel/art
Ron Smith/music

Team-taught Linked Class

"Business, Government and Society"
Steve Sisson/business
Pat Dennett/business

Highline Community College**Team-taught Linked Class**

"Writing and American Government"
Robert Hughes/English
Craig Schwartz/Social Science

Coordinated Study

"People in America: Separate or Connected?"
Rosemary Adang/English
Bob Baugher/psychology
Davidson Dodd/political science

Lower Columbia College**Coordinated Study**

"Vietnam"
Michael Strayer/psychology/sociology
David Benson/political science/history
Don Correll/drama

North Seattle Community College**Coordinated Study**

"Revolution and Conquest in a Global Society"
Jim Harnish/history
Rick Olguin/American ethnic studies
Leo Daugherty/(Evergreen) literature

Coordinated Study

"Nature - Nurture: The Search for Human Nature in Psychology, History, Biology and Literature"
Larry Hall/psychology
Mike Kischner/English
Susan Starbuck/history
Denise Lim/biology

Coordinated Study

"Natural History of Puget Sound"
Ellie Cauldwell/biology
Mitch McGuinness/botany

Coordinated Study

"The Vietnam Era: From Civil Rights to the Aftermath of War"
Harris Haertel/geography
Bob Brubaker/history

Coordinated Study

"The World of Work in America"
John Mason/economics
Bruce Kochis/cultural studies

Coordinated Study

"Speaking Across Cultures"
Lynn Sharpe/ESL
Lynda Minatoya/counseling

Coordinated Study

"The Beautiful and the Strange: Britain and America"
Diane Hostetler/drama
Patricia Alley/humanities (Bellevue CC)
Bruce Haulman/social science (Green River CC)

Coordinated Study

"The Politics of Identity: Gender, Race, and Class in the Modern World"
Bruce Kochis/cultural studies
Camille Coffey/philosophy

Olympic College**Team-taught Linked Class**

"History of American Culture: Fine & Popular Arts"
Louis Graham/English
William Harvey/drama

Team-taught Linked Class

"American Culture from 1930 to the present"
Louis Graham/English
William Harvey/drama

Coordinated Study

"Life on the Edge: A study of Community featuring Marine Biology, Art and Intercultural Communication"
Imy Klett/art
Donald Seavy/biology and marine science

Seattle Central Community College**Coordinated Study**

"Finding our Humanity"
Valeric Bystrom/English
Liz Lyell/philosophy
David Jurji/(Bellevue CC) anthropology

Coordinated Study

"Introduction to Cultural Pluralism: Language, Life and Labor"
Larry Silverman/English
Rochelle de la Cruz/ESL

Coordinated Study

"The Human Condition: Psychological Adjustment, Social Expectation, and Personal Change"
Nancy Finley/psychology
Bob Groeschell/social and human services

Linked Class

"Ways of Knowing: Seminar in Humanities"
Carl Waluconis/English/humanities

Linked Class

"Introduction to Geography linked with English Composition"
Ajan Forsberg/geography
Marcie Sims/English

Linked Class

"History of American Minorities linked with English Composition"
Tracy Lai/history
J.T. Stewart/English

Seattle Central Community College

continued

Linked Class

"Effective Library Techniques linked with English Composition"
Kate Trent/library sciences
Minnie Collins/English

Linked Class

"Biography in American History linked with Effective Library Techniques"
Maureen Nutting/history
Karen Michaelson/library sciences

Coordinated Study

"Building for College Success"
Becky Boon-Mills/ESL

Coordinated Study

"Reading and Writing for Academic Purposes"
Jacqueline George/ESL

Coordinated Study

"Production Systems"
Kathren Whitham/English
Marlene Palazzo/office occupations/business
Doug Solowan/computer science/math

Coordinated Study

"Integrated Media Communications II"
J.T. Stewart/English
David Hundley/photography
Hisako Nakaya/apparel design

Shoreline Community College**Linked Class**

"History of Civilization: Survey of the History of the Modern World"
Wayne McGuire/English
Kathie Hunt/English
Tim McMannon/social science

Team-taught Linked Class

"Looking In Looking Out"
Pam Dusenberry/developmental English
Lauri Kimpton-Lorence/humanities

Linked Class

"A Cultural Portrait of the Pacific Northwest: The Literature and History of Minority Groups in the Pacific Northwest."
Amy Mates/English
Lloyd Keith/history/sociology

Skagit Valley College**Coordinated Study**

"Experiences On the Edge"
Trish Barney/humanities
Mike Witmer/psychology

Linked Class

"Intimations of Immorality"
Lynn Dunlap/humanities
Larry Sult/philosophy

Linked Class

"Writing about Social Problems: Knowledge and Process"
Jovita Lopez/English
David Muga/sociology

Linked Class

"Writing for the Workplace"
Bob Graham/English
Michelle Koci/office occupations

**Skagit Valley College—
Whidbey Campus****Team-taught Linked Class**

"Reading Writing and Race: The Minority Experience in American History & Literature"
Deborah Wallin/history/ethnic studies
Laurie Stapleton/literature

**South Puget Sound
Community College****Linked Class**

"Link of Composition II and Introduction to Ethics"
Michael Shurgot/English
Stephen Dickerson/philosophy

Linked Class

"Psychology of Human Relations and Human Development"
Gaylor Bolton/psychology
Shirley Sawdon/developmental education

Team-Taught Linked Class

"The Mythic Image in Literature and Composition II"
Don Johnson/humanities
Bill Swanson/humanities

Spokane Community College**Team-taught Linked Class**

"Ourselves Among Others"
Shusmita Sen/English
Val Clark/speech

Team-taught Linked Class

"He Said/She Said"
Sue Herdrich/literature
Julie James/speech

Spokane Falls Community College**Linked Class**

"Modern Art History and English Composition"
Carolyn Stephens/art history
Nel Hellenberg/communications

Linked Class

"The Bible as Literature and Advanced Composition"
Steve Reames/communications

Linked Class

"German and Modern European Literature and Film"
Almut McAuley/English
Inga Joblonsky/German

Linked Class

"Racism and Minorities and Advanced Composition"
Meredith Leigh/social sciences
Terry Truman/English

Linked Class

"Environmental Science and English Composition"
Gary Blevins/environmental science
Marilyn Carpenter/English

Coordinated Study

"Passions and Power:The Modern World"
Richard Baldesty/history
Wayne Smith/music
Alexis Nelson/English

Tacoma Community College**Coordinated Study**

"The Literature and Philosophy of Business"
Richard Wakefield/English
John Kinerk/philosophy

Coordinated Study

"Sexual Personae: The Faces of Desire"
Paul Clee/English/art/photography
Violeta Clee/English

Coordinated Study

"Crises and Choices: Coping with the Consequences"
Marlene Bosanko/English & humanities
Charles Cline/speech and humanities

Walla Walla Community College**Team-taught Linked Class**

"Basic Math and Study Skills"
Ellen Montoya/developmental education-math
Ann Bogard/developmental education-reading

Yakima Valley Community College**Team-taught Linked Class**

"Genethics: Thinking Critically about the Clash between the New Genetics and Human Values"
Judy Moore/biology
Millie Stenehjem/speech/drama

Team-taught Linked Class

"The Music of Life: Biological Evolution and Music as Co-metaphors"
Eric Mould/biology
Scott Peterson/music

Team-taught Linked Class

"Other Peoples: Fact and Fiction"
Eric Anderson/anthropology
David Ripper/English

Linked Class

"Mind over Math: Math Anxiety in Pre-Algebra"
Carolyn Gregory/math
Kathy Calvert/counseling

Team-taught Linked Class

"Talk About Living:Understanding Biology through Speech"
Judy Moore/biology
Millie Stenehjem/speech/drama

Other learning community programs in Washington:

The Evergreen State College's curriculum is largely organized around 16-credit, team-taught coordinated studies programs. About 30 coordinated studies programs are offered each quarter, each one addressing interdisciplinary themes or questions. For information on this year's programs, write The Washington Center for a current catalogue.

What's Happening in Undergraduate Education in Washington State

Faculty Exchanges

The Washington Center's small faculty exchange program, now in its eighth year, continues to flourish. The faculty exchange initiative supports our learning community effort, so all faculty participants exchange into teaching teams on another campus. This results in an immediate support system for the exchange faculty member, and a multiplier effect in terms of the potential for learning from others. We estimate more than 400 faculty in Washington have now been part of the faculty exchange initiative, either by being an exchange faculty or by team teaching with one. The Washington Center brokers these exchanges and allocates a small amount of its budget for housing subsidies (when necessary) and partial replacement for costs when an exchanging faculty member has no exchange in return.

The following are on faculty exchange in Spring Quarter 1993: North Seattle Community College's Rita Smilkstein (English) continues a two-year long faculty exchange to Evergreen to teach in the Master in Teaching program. This gives Rita

the opportunity to work through the full program cycle with one cohort of students. Replacing Rita at North Seattle this spring is Evergreen Faculty Member Leo Daugherty (English) who joins Jim Harnish (History) and Rick Olguin (Ethnic Studies) in "Revolution and Conquest in a Global Society."

Continuing from Fall quarter are Joye Hardiman (Classical Studies) and Yun-yi Ho (Asian Studies and Philosophy) in the "Bridge Program" offered by Evergreen and Tacoma Community College.

Seattle Central Community College Faculty Member Astrida Onat (anthropology) is exchanging with Bellevue Community College's David Jurgi (anthropology). Onat is teaching in "The Pink Cadillac" program at BCC while David joins Seattle Central faculty members Valerie Bystrom and Liz Lyell in the coordinated studies program "Finding Our Humanity."

At Green River Faculty Member Ken Nelson (Business) is on exchange to Brockenhurst College in England while Brockenhurst College's Pat Dennett (Business) is teaching at Green River under a Fulbright exchange.



Rita Smilkstein (North Seattle Community College) is on faculty exchange to Evergreen to teach in the Master in Teaching program.



Tacoma Community College faculty member Yun-yi Ho (standing on right) and Evergreen faculty member Joye Hardiman (standing on left) are team teaching in the TCC-Evergreen "Bridge Program" this year.

Learning Community Requirements Instituted

Both Les Stanwood (Skagit Valley-Whidbey) and Trish Barney (Skagit Valley) report that their campuses are busy preparing for the 1993-94 academic year when the faculty will begin teaching collaboratively on an unprecedented scale. Preliminary planning calls for 20 to 24 learning communities and 40-42 linked composition classes next year. By the time Skagit Valley's ambitious General Education program is fully implemented in 1995-96 the two campuses will be offering 32-36 learning communities and more than 50 linked composition classes on the two campuses. The faculty are currently planning and training for the first two quarters of this experience and a majority of the faculty are participating.

Trish Barney also reports high faculty enthusiasm at Skagit Valley for discussing cases on collaborative teaching and learning which were developed through a Washington Center effort. These cases, short narrative stories that invite analysis and discussion, are being "pilot-tested" in faculty development workshops at Seattle Central, Green River, and South Puget Sound. At Skagit Valley, 15 faculty members are participating in four case seminars. Produced by the Washington Center's Evaluation Committee, the cases provide a focus for discussing questions about team teaching and staffing learning communities, student readiness for seminars and group work, administrative support of learning communities, and diversity in the classroom. In future years, these cases will be available to other campuses.

Title III Projects Fuel Faculty Dialogue

North Seattle Community College reports its new Teaching and Learning Center, headed by Marcia Barton and funded by a Title III grant, has sparked an "explosion" of faculty development opportunities. The Center organized 19 workshops on both technical and pedagogical issues for winter quarter. One of the many highlights was a series of faculty conversations led by Rick Olguin on the inclusion of multiculturalism in the curriculum.

Highline Community College has also benefited enormously from a Title III grant aimed at retention of at-risk students. Mary Odem reports that more than 80% of the faculty have been involved in faculty development workshops and projects to improve the quality of teaching and the retention of at-risk students. The Title III effort is a cooperative project between Highline, South Seattle, and Skagit Valley. The schools are in the third year of the grant. Highline's workshops this year have focused on multicultural issues, outcomes assessment, emerging technologies, and alternative instructional methods.

Innovations in the Teaching of Biology...

Kathleen Pace reports that she and Myles Robinson (biology) at Grays Harbor College have been working to improve the success of developmental students in biology. Utilizing the computer, they have created a basic set of concepts and vocabulary and devised a curriculum and related readings to tie computer work to reading and study skills taught in Reading/Study Skills 080,090, and 120.

Yakima Valley Community College biologists Eric Mould and Judy Moore have been presenting workshops at many different colleges on their cooperative learning, workshop-based approach to teaching introductory biology. They report that this approach is being extended to other biology classes as well.

Whitworth College Joins the Washington Center

Whitworth College in Spokane, Washington has recently joined the Washington Center. This brings to 44 our total involved campuses in Washington Center activities. Kenneth Shipps, provost and dean of the faculty, and John Yoder, professor of history and political studies are the lead contact people.

Assessing Learning Communities

Substantial assessment studies are examining a number of long established learning communities and the results are encouraging. Three recent studies look at learning communities at the University of Washington, Seattle Central, and Everett Community College.

UW Freshman Interest Groups:

Ken Tokuno from the University of Washington reports preliminary results from the National Center for Postsecondary Teaching, Learning and Assessment 1991-92 study (led by Anne Goodsell and Vince Tinto) of Freshman Interest Groups at UW. The study indicates that freshman interest groups "provide a modest, though non-trivial benefit" to the students, probably by making them more comfortable with university classes. This study involved both qualitative and quantitative measures at two times (Autumn 1991 and Spring 1992) and compared results with a control group of students not in a FIG. Students in FIGs had a higher GPA and were more likely to persist. Differences are not due simply to higher motivation levels among students who join the program. Results are consistent with the UW's own studies. A forthcoming article in *Journal of the Freshman Year Experience* indicates the differences persist after three years and that FIG students progress more rapidly toward degree completion.

Seattle Central Community College's Coordinated Studies Programs

Seattle Central Community College is another of Vince Tinto's research sites for the National Center on Postsecondary Teaching, Learning and Assessment research studies on collaborative learning. Tinto unveiled preliminary results at the annual meeting of the Association of American Colleges in Seattle in January 1993. Like the UW design, his research included both qualitative and quantitative measures. Tinto reports, "The quantitative analyses suggest that participation in the Coordinated Studies Program yields a significant benefit to its participants. Participation is associated with greater involvement in a range of activities...more positive views of the college, its students and faculty, its classes and climate, and with one's own involvement in the life of the institution. More importantly, participation was associated with increased persistence into the second year of college." Tinto's research suggests that coordinated studies are especially valuable in the context of a commuter campus where students face many competing demands. Tinto concludes, "Collaborative learning strategies respond to the needs of students in ways that traditional teaching strategies cannot."

Everett Community College Cluster Program: "Women on the Move to a Four Year Degree"

Five years ago, Everett Community College created a unique learning community cluster program to provide a community-building and academically coherent program for returning women. Starting with a small seed grant from the Washington Center, the "Women on the Move to a Four Year Degree Program" has now become institutionalized at Everett. Eight instructors coordinate and teach the program each year. The women move as a cohort through classes created especially for them. They form study and support groups and participate in recreational activities as well. While testimonials and anecdotes convinced supporters early on that the program was effective, the first systematic assessment was undertaken in Fall 1992. Paul Marshall and Cheryl Garcia received an outcomes grant for an evaluation project to compare Women on the Move students since Fall 1989 with a control group that entered Everett at the same time. Preliminary results indicate the Women on the Move group had little college experience prior to entering the program and faced more obstacles (limited English proficiency, single parenthood, academically and economically disadvantaged). However, they achieved higher overall grade point averages in college and went on to become tutors, school senators, student body president, university graduates and job holders.

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The Washington Center for Improving the Quality of Undergraduate Education

■ Established in 1985 at Evergreen as an inter-institutional consortium, the Center focuses on low-cost, high-yield approaches to educational reform, emphasizing better utilization and sharing of existing resources through inter-institutional collaboration. Established with funding from the Exxon and Ford Foundations, the Center is now supported by the Washington State Legislature.

■ Includes 44 participating institutions: all of the state's public four-year institutions and community colleges, and ten independent colleges.

■ Supports and coordinates inter-institutional faculty exchanges, the development of interdisciplinary "learning community" programs, conferences, seminars and technical assistance on effective approaches to teaching and learning.



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