Professional standards and guidelines are a way to plan, maintain, and evaluate learning assistance and developmental education programs. This paper describes the standards and guidelines developed for learning assistance programs by CAS (Committee for the Advancement of Standards in Higher Education) and those for program components by NADE (National Association of Developmental Education) and suggests how they can be used to identify needs and improve existing services.

Why Have Standards?

Most colleges and universities receive an intensive accreditation review every ten years that involves all departments and programs. The initial step of this accreditation process typically requires that each unit perform a self-study by responding to a number of guideline questions such as specifying their mission, goals, and objectives; describing how these were determined; and how they are communicated to students and explaining what evidence shows that the goals are being met. Among the questions departments must address are curriculum, connections with other departments, teaching quality, inclusiveness, institutional support, resources, and evidence of outcomes assessment. Following the self-assessment phase, a group of outside evaluators may review the self-study documents, visit the campus, question the chair people, faculty, staff, and students, and make recommendations for improvement. Learning assistance and developmental education programs are not exempt from these procedures; indeed, they are reviewed as rigorously and intensively as are academic departments. Both learning assistance and academic departments support the goal of maintaining high academic standards and supporting the institution's mission. However, learning assistance programs differ from academic departments in that they have a stronger focus on student development than on content, and a greater commitment to improving students' confidence and skills than to increasing the world's knowledge in an academic discipline. Therefore, some of
the questions asked in evaluating these programs differ from those addressed to traditional academic departments.

In the past several years there has been a groundswell of interest and commitment to the concept of self-assessment and program evaluation guided by the development of professional standards in the field of learning assistance and developmental education. Seasoned professionals, as well as those new to the field seem to be equally concerned about developing standards. One reason for this interest is the grim economic realities we are facing in so many of our institutions as they wrestle with accountability in tight budget situations. Maxwell (1993, p. 2) points out: “With so many institutions of higher education in deep financial difficulties, . . . on the one hand there is pressure to minimize student support, but on the other hand there is a demand to raise academic standards in response to public insistence on accountability.”

Many learning assistance programs, originally developed by their institutions as an expedient way to handle a problem that was believed to be temporary, are now being viewed more seriously about developing standards. While declining general enrollments mean less tuition revenue, students who need intensive help have not disappeared from college classrooms. Keeping students in school has become more than a moral imperative; it is now a fiscal necessity. This need puts new pressure on retention programs. Higher education institutions now must go beyond the “political correctness” of merely assuring accrediting bodies, state or federal boards and potential constituencies that they have a learning assistance program. Now they must show that they have an effective program.

The first efforts directed toward developing standards in the field were the standards and guidelines for learning assistance programs that were approved by the Council for the Advancement of Standards in Higher Education (CAS) in 1985. Founded in the early 1980’s, CAS is presently a consortium of 28 professional associations concerned with evaluating, approving, and publishing standards in college student affairs and support services areas. The goal of the CAS standards is to “proffer a guiding vision of substance and integrity and stable and permanent criteria against which to measure out-of-class education, involvement, and learning pertaining to student development. They enable the student affairs practice to become more significant, valid, and credible in its quest to graduate from service programs of convenience to programs that reflect conviction, purpose, and persuasion” (Mable, 1991, p. 16).
The original CAS Standards and Guidelines for Learning Assistance Programs were written by a committee from Commission XVII of the American College Personnel Association and approved and endorsed by the College Reading and Learning Association (CRLA) and the National Association of Developmental Education (NADE) (Materniak & Williams, 1987). In 1995-6, these standards were revised and now are comprised of statements in thirteen areas: mission, program, leadership, organization and management, human resources (including staff competencies), financial resources, facilities and equipment, legal responsibilities, equal opportunity, access and affirmative action campus and community relations, diversity, ethics, and evaluation. Within each of these general areas, specific guidelines delineate the responsibilities of the learning assistance program. For example, under leadership, one of the many requirements is that the learning assistance program director should facilitate communication with academic and support units to generate collaborative and integrated institutional approaches to fostering the academic success of students. The section on human resources specifies the educational and experiential qualifications and other competencies of the professional, sub-professional and student staff required to accomplish its missions and goals. It further specifies that financial resources should be adequate for the program's goals and the specific functions that should be funded from staff salaries, through data management and evaluation activities, and training and staff development. Also added was the statement, “Decisions on program and service reductions should reflect an analysis of actions that will have the least detrimental impact on altering the mission and goals of the learning assistance program.” Section II includes the statement, “The program should be a resource to other members of the campus community who are interested in knowing and learning about the skills needs of the student population and how to help students achieve their learning goals” and describes ways this can be done.

Another guideline specifies that the facilities should provide private, sound-proofed areas for affective skills programming, testing, counseling, and other activities that require confidentiality or intense conversations. Standards for evaluation state that there must be systematic and regular research and evaluation of each functional area and that methods of evaluation “must include both quantitative and qualitative measures.” Guidelines under evaluation specify that programs should be evaluated by users, including students, staff, and faculty and that both quantitative and qualitative measures be used.

These are some brief examples of what is contained in the lengthy document. The recently revised guidelines represent the input of over 150 different learning
specialists from many different professional organizations who reviewed the document and suggested changes. It also reflects changes in the CAS general standards as well as those that have occurred in the profession during the past decade. For example, CAS added two areas: 1) equal opportunity, access, and affirmative action; and 2) diversity. The new document also reflects changes made in light of the dissatisfaction of some classroom teachers with the original standards. (See below).

A Self-Assessment Guide is also being developed to accompany the CAS Standards and Guidelines. As mentioned above, self-study is the first step in credentialing and/or certifying academic programs in any discipline and provides the basis for internal peer reviews and reviews by panels of outside experts. This was the intended purpose of the CAS standards.

NADE's Response to CAS

Following the publication of the original CAS Learning Assistance Standards and Self-Study Questionnaire, the National Association of Developmental Education (NADE) became actively involved in standards work and appointed Susan Clark-Thayer to chair a committee to consider changes that would reflect the special roles and needs of developmental educators. In general, the committee agreed that the quality and comprehensiveness of the original CAS documents are impressive and represent a huge step forward for professionals in the field. However, while embracing their philosophy and intent, many colleagues in the developmental education field who reviewed the documents had serious concerns about their functional application.

The concerns about the CAS documents most frequently expressed by developmental educators fell into four areas:

1. Generality. The CAS General Standards and Guides were not always easily applied uniformly to the diversity of activities found within learning centers. Certain commonalities provided an important overview, but the general standards were hard to operationalize within diverse specific programs. (Example, the statement "Learning assistance programs are purposeful" is appropriate to all programs, but the statement that "The program promotes student development by encouraging appropriate personal and occupational choices" is not relevant to adjunct skills programs.)
2. **Vague/confusing terminology.** The meaning of some terms was not clear. (Example: “The institution recognizes that the educational experience of students consists of both academic efforts in the classroom and developmental opportunities through learning assistance programs.” Since some developmental education programs offer remedial courses as well as learning assistance services, this might be confusing.)

3. **Student Services Perspective.** This reflects the standards. (Example: They contain many terms more appropriate for counseling services than for academic support programs. This exacerbated the terminology confusion.)

4. **Lack of strong academic/pedagogical component.** This was the most serious concern. Developmental education is essentially an academically related endeavor offering courses and grades. There was nothing in the CAS documents to reflect this central feature of developmental education.

NADE became a catalyst for other learning assistance organizations in addressing standards through using the CAS documents as a guide for developing specific standards for program components. To address the generality issue, self-assessment guides were designed for each separate component of learning assistance programs (i.e., Tutor Program, Adjunct Skills Programs [including Supplemental Instruction], and Developmental Courses). The terminology problem was addressed through a standardized dictionary of terms developed by a College Reading and Learning Association (CRLA) committee (Rubin, 1991) that is appended to each self-assessment guide. Also a self-assessment guide on the program factors related to the teaching/learning process was developed to provide an academic/pedagogical component reflecting the philosophy of learning assistance programs. For example, the teaching/learning process guide includes items on instructor behavior (“Instructors show awareness of each student’s learning style”), the teaching process, (“Instructors model processes and expected performances for students”) as well as items on instructor’s style, evaluation methods, and the other categories suggested by the CAS standards (e.g., mission, legal responsibilities, ethics, evaluation, etc.). After the NADE component standards were developed, they were field-tested, reviewed, and revised. Also the input and endorsement of other professional groups such as the CRLA Board were sought.
People using the self-assessment documents set the criterion for each statement and are expected to make their own decisions about what is the appropriate numerical code for their programs in the context of their own institutions in order to meet this criterion. After each section, there is a Scoring Guide enabling the program director to total scores and list “strengths,” “rationale for not meeting a criterion totally,” and “actions feasible and recommended.” The goal of the statements is to help program directors consider what components are necessary for a high quality program.

Clearly specified standards and guidelines can be useful for many purposes—establishing programs, evaluating existing programs, improving programs, and as a guide to future changes. Reviewers indicate that standards are also beneficial in stimulating the decision-making process. They state that the NADE Self-Assessment Guides are useful in guiding program development, identifying and prioritizing areas needing improvement, and encouraging them to take a more comprehensive perspective of their programs. In addition, they provide criteria for evaluating the program components.

For example, a standards document establishing quality learning assistance programs can be invaluable to practitioners entering the field. This is especially true in a field where higher education administrators often assign someone who lacks developmental education experience to start a tutor program or administer a learning center or teach a developmental education course.

When used to assess existing programs, national standards can provide program directors ammunition in budget discussions. Additional funds can be requested based on a desire to meet criteria established in published national standards. “I have compared my program with the national standards and find I am weak in this area. I need more resources so I can meet the national standards.” Or, “proposed cuts can be fought when they result in a lowering of program quality according to the national standards set by the profession. I can cut that program, but you should know that I will no longer meet the national standards.”

Maxwell (1991, p. 2) observes that, “...pressures from professional organizations that services meet professional standards and adhere to certification guidelines influence all of our programs.” It is true that many professional organizations have been assertive in encouraging members to embrace national standards. In part, these efforts were originally motivated by the desire for increased professionalism and credibility for a discipline that deserved to achieve that status.
Professional standards establish the norms for a profession. Members of the profession have an ethical obligation to follow those standards as rigorously as possible or to systematically amend the standard to better assure the profession, the public, and the students that the end result of the educational process reflects the high-quality practice to the betterment of all concerned" (Miller, 1991, p. 60).

Finally, the best reason of all for establishing professional standards is the shared desire for excellence by professionals in the field of learning assistance. Miller points out "...the quality of students' educational experience is directly related to the quality of the student services and developmental programs available as resources for students" (Miller, 1984, p. 413). Our ultimate goal is the successful college experience of the students we serve. Professional standards should be embraced to the extent that they help us meet that goal. Readers who are facing an institution-wide accreditation review, should also appreciate the availability of professional standards that are custom-tailored to their field.

**Conclusion**

Boylan (1981, p.14) concluded in his discussion of the issues, needs, and realities of program evaluation: "Perhaps it is time for those involved with learning assistance programs to accept the reality of their environment and to respond aggressively to the challenge it presents." The interests of learning assistance programs will not be served by refusing to "determine or fix the value of their services. They will be served by assessing what learning assistance programs do, determining how well it is done, and describing the benefits that result from having done it. If learning assistance is to have any relevance at all, its value must be determined, measured, and reported." This sentiment was written over 10 years ago but continues to be true today.

We need the benchmark guide to excellence that national standards can give us as we assess current activities, develop new programs, guide budget discussions, demonstrate our professionalism, and meet our mission of helping students succeed in college. The CAS Standards and Guidelines for Learning Assistance Programs and the NADE, Self-Evaluation Guides for Tutoring Services, Adjunct Instructional programs, Developmental Coursework Programs and Factors Affecting the Teaching/Learning Process are valuable tools to help us achieve these goals.
Susan Clark-Thayer, is Chairperson of the NADE Committee on Standards and Evaluation and CAS Representative from NADE as well as director of the Geno A. Ballotti Learning Center, Suffolk University.

Martha Maxwell is an educational evaluator and consultant with M.M. Associates.

References


Rubin, M. (1991, Spring). A glossary of developmental education terms compiled by the CRLA Task Force on Professional Language for College Reading and

TLAR, Spring 1996

Copies of the *CAS Standards and Guidelines for Learning Assistance Programs* and *The Learning Assistance Programs Self-Assessment Guide* can be obtained from the Council for the Advancement of Standards, Office Student Affairs, 2108 North Administration Building, University of Maryland, College Park, MD 21742.

Copies of the *NADE Self-Evaluation Guides: Models for Assessing Learning Assistance/Developmental Education Programs (Tutoring Services, Adjunct Instructional Programs, Developmental Coursework Programs, and Program Factors Influencing the Teaching/Learning Process)* can be obtained from H & H Publishers, 1231 Kapp Drive, Clearwater, FL 34625, 813/442-7760.

ENHANCING MATHEMATICS ACHIEVEMENT THROUGH COLLABORATIVE PROBLEM SOLVING

By Pamela V. Thomas and Jeanne L. Higbee, University of Georgia

Abstract

This research describes the results of a study that tracked college algebra students who had previously completed an Academic Assistance mathematics course that facilitated collaborative learning. Only 53% of all students enrolled in college algebra in Fall, 1994, earned grades of C or higher, but 95% of students who had previously participated in the collaborative Academic Assistance course earned an A, B, or C in college algebra.

At some institutions, success in freshman mathematics courses is a primary factor in the retention of students from the freshman to sophomore year. Achievement in core curriculum mathematics courses can also have a significant role in determining whether students will be able to pursue degrees in such highly lucrative careers as computer science, engineering, business, biological and physical sciences, and the medical professions (Tobias, 1978). During the last two decades, numerous studies have been conducted to explore variables related to achievement in collegiate mathematics, such as critical thinking and problem solving skills (Berenson, Best, Stiff, & Wasik, 1990; Carpenter, 1981), affective barriers (Dwinell & Higbee, 1991; Goolsby, Dwinell, Higbee, & Bretscher, 1988), learning styles (Newman & Matthews, 1994), and previous mathematics experience and aptitude (Waits & Demana, 1988). Educators have used the results of recent research to determine strategies to enhance mathematics achievement (Thomas & Higbee, 1995).

During the last decade, one shift in research focus has been from mathematics anxiety to collaborative learning in mathematics. For purposes of this article, collaborative learning refers to situations in which students work together in pairs or small groups to complete assigned tasks. Although research results have not been consistently significant, most studies that have produced significant results have favored cooperative small groups over traditional teaching methods (Davidson, 1985). Davidson and Kroll (1991) propose that further research is needed to address more specific research questions. Studies that address specific behaviors elementary explored.

Dees (199...
behaviors or benefits of small group learning have focused primarily on elementary and secondary education (Webb, 1991). Relatively few studies have explored collaborative learning in collegiate mathematics.

Dees (1991) conducted a study among students enrolled in a four credit college remedial algebra and geometry course to determine whether there are "simple, but effective, cooperative teaching strategies adaptable to the ordinary classroom by an average teacher" (p. 411). She also explored whether working cooperatively improved students' problem solving ability. The treatment group earned a mean course grade of 71.5%, and 74% of the students in this group passed the course. For the control group the mean course grade was 65.7%, and only 52% of the students passed the course. The results of Dees' research indicate that it is worthwhile to experiment with small group learning in college mathematics courses for high risk students.

Statement of the Problem

In Fall 1993, 1,162 freshmen enrolled in college algebra (MAT 102) at the University of Georgia. At that time, MAT 102 was a prerequisite for almost all other core curriculum courses that met the mathematics, statistics, logic, and computer science requirement. Of the 1,162 freshmen participating in MAT 102, 5% earned A's, 12% earned B's, 16% earned C's, 16% earned D's, 20% earned F's, 2% were withdrawn/failing, and 28% withdrew (Office of Advising and Retention Services, 1994). Thus, only one third of the freshmen enrolled earned grades of C or above. In 1993, the Division of Academic Assistance initiated a new policy to allow students who withdrew from MAT 102 before the midpoint of the quarter to file a section change to enroll in an Academic Assistance mathematics course (ACA 098M). This programmatic change was made to enable students to prepare to re-enroll in MAT 102 and to prevent repeated withdrawals. At the current time, some freshmen are placed directly in Academic Assistance (ACA) mathematics courses depending upon test scores. Others are placed in college algebra but choose to enroll in ACA math, often because they have already failed MAT 102.

In Fall 1993, Academic Assistance mathematics and counseling faculty members began collecting affective data and exploring teaching strategies to facilitate student success. The purpose of this study was to examine the value of one teaching strategy, collaborative learning activities, in preparing students for MAT 102.
Method

During Fall Quarter 1993, a counselor and an Academic Assistance mathematics professor teamed together to implement a series of activities to encourage collaborative learning among students within and outside the classroom. Fridays became "fun days"; the counselor visited one section of ACA 098M each Friday to assist in facilitating collaborative activities. Initially students were paired and were allowed to select their own partners. In later weeks, as the students became better acquainted and more comfortable around one another, they were assigned to small groups varying in size from 3 to 5 or 6. The students began to look forward to Friday because the activities provided a break in the regular routine. The activities used were selected to enhance critical and logical thinking, creative problem solving, and visual and spatial skills, while also combating negative attitudes toward word problems. Sources of activities included magazines (Dell, 1993) and books on logic (Post & Eads, 1982; Wylie, 1957), critical thinking (Seymour & Beardslee, 1988), visual skills (McKim, 1980; Winter, Lappan, Phillips, & Fitzgerald, 1986), probability (Phillips, Lappan, Winter, & Fitzgerald, 1986), group dynamics (Johnson, 1972; Johnson & Johnson, 1975) and games.

In addition to the Friday activities, students were given opportunities to work together in class throughout the week. The teacher would answer questions from the previous night's assignment, cover the lesson for the day, and then provide time for students to work together on problems. Students were also encouraged to work collaboratively on homework outside of class. To promote collaboration the students were given a roster of addresses and telephone numbers for the members of the class.

Sample

The sample for this research includes the 23 students enrolled in the experimental section of ACA 098M during Fall Quarter 1993 as well as 67 students who were enrolled in other ACA 098M sections and then enrolled in MAT 102 prior to Fall 1994.

Institutional statistics are also provided for comparison purposes for all freshmen who enrolled in MAT 102 during Fall Quarter 1993 and 1994. The University of Georgia made a number of changes in core curriculum requirements and prerequisites prior to Fall 1994. Although MAT 102 remains a prerequisite for pre-calculus and calculus, in many schools and colleges of the university it cannot be
used to meet the core curriculum mathematics requirement. Thus, for many students, including those in the Bachelor of Arts and Bachelor of Science programs in the College of Arts and Sciences, MAT 102 has become a required elective. Other students are avoiding college algebra altogether and taking courses in statistics and logic to meet core requirements. As a result, only 529 freshmen enrolled in MAT 102 in 1994, fewer than half the number enrolled in 1993.

Instrumentation

Spielberger's (1977) Test Attitude Inventory and the Anxiety Scale of the Fennema-Sherman Mathematics Attitude Scales (1976) were administered to all students enrolled in ACA 098M during Fall Quarter 1993. These instruments were used to target those students who should be referred for counseling to reduce anxiety rather than for research purposes. However, the availability of this data made it possible to eliminate two extraneous variables, mathematics and test anxiety. There were no significant differences between the experimental and control groups for either mathematics anxiety or for general test anxiety.

Results

As indicated in Table 1, 33% of the 1,162 students enrolled in MAT 102 in Fall 1993 earned grades of C or above, compared to 53% of the 529 students in MAT 102 in Fall 1994.

Table 1 also provides the grade distributions for MAT 102 for the students who had previously enrolled in the experimental and control sections of ACA 098M during Fall 1993. The students in the experimental ACA 098M group had significantly higher grades than the MAT 102 students with no previous Academic Assistance mathematics, t(391) = 7.96, p < .0005 and also had higher grades than the control ACA 098M students, t(77) = 7.94, p < .0005.

Table 2 demonstrates the relationship between the grades the experimental group students earned in ACA 098M and the grades they earned in MAT 102. Of the students who had previously participated in the experimental ACA 098M class, 95% earned an A, B, or C in college algebra.

Eight students earned higher grades in MAT 102 than they had earned in ACA 098M. Five students earned lower grades in MAT 102 than in ACA 098M, but only one was more than one letter grade lower.
Table 1 - Grade Distribution in MAT 102

<table>
<thead>
<tr>
<th>Group</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>F/WF</th>
<th>W</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental ACA 098M</td>
<td>39%</td>
<td>26%</td>
<td>30%</td>
<td>4%</td>
<td>0%</td>
<td>0%</td>
<td>23</td>
</tr>
<tr>
<td>Control ACA 098M</td>
<td>19%</td>
<td>22%</td>
<td>24%</td>
<td>10%</td>
<td>7%</td>
<td>16%</td>
<td>67</td>
</tr>
<tr>
<td>Fall 1993 MAT 102 students</td>
<td>5%</td>
<td>12%</td>
<td>16%</td>
<td>16%</td>
<td>22%</td>
<td>28%</td>
<td>1162</td>
</tr>
<tr>
<td>Fall 1994 MAT 102 students</td>
<td>15%</td>
<td>22%</td>
<td>16%</td>
<td>11%</td>
<td>6%</td>
<td>30%</td>
<td>529</td>
</tr>
</tbody>
</table>

Table 2 - Relationship between Experimental Group Grades in ACA 098M and MAT 102

<table>
<thead>
<tr>
<th>ACA 098M Grades</th>
<th>MAT 102 GRADES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>A</td>
</tr>
<tr>
<td>A</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
</tr>
<tr>
<td>C</td>
<td>0</td>
</tr>
<tr>
<td>N</td>
<td>9</td>
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The results of the assistance withdrawal participating encourage thinking. It is significant the results of the study provides a reducing time in college repeating the course.

It is important the experiment value of the study helps to work collect intervening although they are usually.

It is important the study but mathematics whether an approach is.

Meanwhile, the most interesting for this study implemets structured order thinking.

Four other...
Implications and Limitations

The results of this research indicate that students who enroll in Academic Assistance mathematics are less likely to withdraw from MAT 102. The overall withdrawal rate for MAT 102 for 1993 and 1994 ranged from 28% to 30%. Students participating in a section deliberately designed to introduce activities that encourage collaborative learning while also enhancing skills in critical and creative thinking, logic, visual and spatial skills, and solving word problems, earned significantly higher grades than other students enrolled in college algebra. The results of this study indicate the possibility that this collaborative approach provides a successful means for preparing students for the mathematics involved in college algebra, for providing students with a support/study group, and for reducing the number of students who withdraw and re-enroll in MAT 102, often repeating the cycle over and over again.

It is impossible to determine the impact of each activity introduced in the experimental section of ACA 098M. It is also impossible to distinguish between the value of the activities themselves versus the importance of requiring the students to work collaboratively. Finally, it is impossible to eliminate a number of potential intervening variables, including student aptitude and teacher effectiveness, although the student evaluations of the academic assistance mathematics faculty are usually very high.

It is important to note that this project was not originally undertaken as a research study but merely as a trial of new ideas for enhancing achievement in mathematics. These research findings merely reflect an attempt to evaluate whether an experiment was working and worth repeating. A more scientific approach is needed to further explore the value of collaborative activities.

Meanwhile, however, these initial results are very encouraging. Perhaps one of the most important implications of this trial is that activities such as those used for this study can be used in a wide variety of settings. They can be as easily implemented in learning centers, tutorial services, and laboratory settings as in structured class situations.

Four other observations merit mention. First, the students really did begin to refer to Friday as “fun day.” They learned to enjoy mathematics and to rise to increasingly difficult mathematical challenges. They were pushed to use higher order thinking skills. Second, the students seemed to persist longer at analyzing...
a complex problem when working collaboratively; they did not give up. Third, the students gained a new perspective on themselves as learners of mathematics. As they explained concepts and procedures to one another, their confidence in their own abilities grew. Some students were better at logic problems, others excelled in spatial visualization, and others were able to solve the problems that required a creative approach, thinking outside of the usual parameters. They all seemed to find their niche, and they were proud of their accomplishments.

Finally, many of the students enrolled in the experimental section of ACA 098M were considered at risk. They were placed or elected to enroll in Academic Assistance mathematics because they were not adequately prepared for college algebra. The significant difference between their grades in MAT 102 following their experience in ACA 098M and those of other MAT 102 students is more meaningful when considered in this context.

Dr. Pamela V. Thomas is an assistant professor in the Division of Academic Assistance at The University of Georgia. She has taught mathematics at every level from elementary school to the university. Her primary interest has been in teaching mathematics in a manner that supports positive achievement and shows students that they can do mathematics.

Dr. Jeanne L. Higbee is an associate professor in the Division of Academic Assistance at The University of Georgia. Dr. Higbee has worked in the field of student development since 1974. Her primary research interest is the relationship between affect and academic achievement.

References


gave up. Third, the mathematics. As confidence in their skills increased, others excelled at solving problems that required cooperative learning. They all seemed to benefit from ACA 098M registration in Academic Assistance at The University School to the manner that supports learning.


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By Lisa C. D.

Teaching is a vital role as developing new positions of movements and other forms of minority students calling our school institutions to our students' needs.

When I began teaching in the *Oppressed*. liberatory positivism and bell hooks as well as my awareness of the importance of back out for the minds of students. college can themes more in order to train...
Teaching is a political act. This statement is true especially when we consider our roles as developmental educators. The very nature of our work places us in positions of inheritance and enactment of the ideals of the civil rights and social movements of the 1960's. Today, our places on university campuses are coming under fire as the Federal government continues to cut back funding for basic skills and other types of “remedial” services, particularly those areas geared towards minority students. In light of this, political action—writing letters to Congress, calling our Senators and Representatives, writing grants, proving our worth to our institutions, etc.—becomes an obvious addition to our work. However, before we can take on Congress and our campus funding agencies, I think our first duty is to our students, and to consider the political aspects of what we do in the classroom.

When I began teaching developmental writing a little over seven years ago, my teaching beliefs were formed while reading Paulo Freire's *Pedagogy of the Oppressed*. This Brazilian educator’s seminal work lies at the heart of the radical liberatory pedagogies embraced by such college educators as Mike Rose, Ira Shor, and bell hooks (whose recent work I will discuss below). In each of their cases, as well as my own, education is not simply a means of forcing students to soak up the information poured into sponge-like brains in order to wring that knowledge back out for us. Rather, education is a means of exciting the active and critical minds of students, of breaking through the boundaries of traditional learning on college campuses through authentic dialogue and the critical exploration of the themes most relevant to the students’ lives. Combining reflection and action in order to transform the world is the foundation of critical liberatory pedagogy, a
pedagogy which should be adopted by all educators and especially developmental educators.

In her current work, *Teaching to Transgress: Education as the Practice of Freedom* (1994) bell hooks writes "that our work is not merely to share information but to share in the intellectual and spiritual growth of our students" (p. 13). This can be done when we begin to see ourselves and our students as being part of the same learning process, a process which values all ways of knowing and all experiences which have helped to shape these modes of understanding. In current college classrooms these things can all be accomplished when we understand that

Critical pedagogies of liberation . . . embrace experience, confessions and testimony as relevant ways of knowing, as important, vital dimensions of any learning process. . . . Then we might explore ways individuals acquire knowledge about an experience they have not lived . . . combining the analytical and experiential is a richer way of knowing (p. 89).

As developmental educators, we are in the best position to help our students share their stories of experience and become self-actualized, whole learners. Our place as developmental (often labeled by the academy as “remedial”) makes us the link between our students and the “standards” of academic preparedness expected in college. As the link, we encounter students who are often in the same situation hooks describes. She notes that

The students I encounter seem far more uncertain about the project of self-actualization . . . I walk into classrooms overflowing with students who feel terribly wounded in their psyches . . . They do want an education that is healing to the uninformed, unknowing spirit. They do want knowledge that is meaningful. They rightfully expect that my colleagues and I will not offer them information without addressing the connection between what they are learning and their overall life experiences (p. 19).

Unfortunately, outside of our learning support centers and classrooms, these same students do not often get what they are looking for in the larger setting of the university. Even more lamentable is the fact that even when we try to adopt a pedagogy which will support students’ experience as legitimate and important
ways of knowing, students may not always be comfortable with our change in pedagogical practices.

Even students who long for liberatory education, who appreciate it, find themselves resisting because they have to go to other classes where the class begins at a certain time, ends at a certain time, where all these regulations are in place as modes of expression of power. These inhibit what needs to be done to have some sense of possibility for sustained conversation (hooks).

If we can help our students believe that their experiences and insights are important and that our pedagogical practices are sound, then we will be able to help them transform their learning and knowing expectations. We can aid our students when we ourselves acknowledge that

Any classroom that employs a holistic model of learning will also be a place where teachers grow, and are empowered by the process. That empowerment cannot happen if we refuse to be vulnerable while encouraging students to take risks. Professors who expect students to share confessional narratives but who are themselves unwilling to share are exercising power in a manner that could be coercive. When professors bring narratives of their experiences into classroom discussions it eliminates the possibility that we can function as all-knowing, silent interrogators. It is often productive if professors take the first risk, linking confessional narratives to academic discussions so as to show how experience can illuminate and enhance our understanding of academic material (p. 21).

In this way, through the sharing of our students' and our own stories, our politics of humanistic and empowering education become self-evident. When we adopt a critical liberatory pedagogy, we are saying to our students, and to the world, that we believe to educate in meaningful ways is to transgress traditional boundaries, hence to enact a political stand that thrives on the questioning and transgression of existing power structures through critical reflection of our own learning and knowing experiences.

For more on these radical educator's (Mike Rose, Ira Shor, and bell hooks) works, check out the following:


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BOOK REVIEW

THE DREAM OF A COLLEGE EDUCATION

By Judith Schein Cohen, University of Illinois at Chicago

City on a Hill is written by a journalist, James Traub, rather than an educator, but it is a book that should be read by everyone connected to an urban college classroom. In this book, Traub has explored why City College of New York seemed to work so well in the past, how it is working today, and for whom.

In the first part of the book, Traub tells the 150 year history of City College. Since 1847 it has served successive waves of New York students, offering a free or low cost education for those who could qualify academically. In the 1940's and 1950's, "at the zenith of its glory" (p. 34), most of its students were young men (not women yet) from poor but ambitious immigrant families. The College provided a clear path for these students to graduate and enter middle class professions. Traub emphasizes what he calls a critical theme:

City College, as an institution, was incidental to its own greatness. City was a place where bright young men educated themselves. If this is so, then City's history scarcely provides comfort for those who believe the college can educate students who arrive without that desperate thirst for knowledge (p. 31).

Traub carefully chronicles the changes that have come to City over the last 30 years. The national, political, and social changes of the late 1960's were reflected at what is now City University of New York, and in 1970 an open admissions plan was begun. More African-Americans came to the school, along with Latinos and a changing mix of immigrants reflecting the New York City population. The curriculum included more and more courses for less prepared students, many of whom had no idea what to expect in college. Some successfully new programs were developed, including that of Mina Shaughnessey, at least until there was a budget crisis and most of the teachers she had trained were fired. Racial and
ethnic tensions were also a factor, and the debate continues over whether students should be admitted and continue to attend based on their achieved merit or their academic potential.

Traub spent 18 months interviewing teachers, students, counselors, administrators, and others connected with City, and he also observed several classes over the course of an entire term and visited a number of others. He looks at programs and courses of study at a variety of levels, paying particular attention to two remedial/developmental programs that involve at least half of the students, the English as a Second Language (ESL) program and SEEK, for students who cannot meet regular admission standards. These programs appear in sharp contrast with the older and more traditional courses of study, such as the elite and competitive engineering curriculum.

Traub is most effective in his clear reporting of his interviews and observations. For example, he describes teachers like Rudy Gedemke, who has taught since 1971 and who worries not only about students' academic skills but about the passivity that they learned to survive in high school, so that in college they have little passion or hunger for learning. In addition, he spoke with a variety of students and chronicles the almost insurmountable difficulties many face because of their mediocre preparation, their lack of necessary exposure to or instruction in English, and the crushing personal difficulties that threaten to overwhelm even the most desperate to succeed.

I found City on a Hill a powerful book and an important one for those who work in the learning assistance field. Its strength lies in the clear pictures that Traub paints of dedicated teachers and earnest students, often unhappy and frustrated by all that they must accomplish in their classes and uncertain about how to do so. Traub honestly describes the problems facing many students in developmental classes and their teachers.

There are no easy solutions to the problems Traub describes although at the end of the book he suggests some changes. Specifically, he draws on historical perspective to advocate requiring the kinds of rigorous academic preparation before college that entering students had two generations ago. He acknowledges the political realities of making changes, and the difficulty of finding and nurturing the students who do have the drive and capability to succeed no matter
what their background or experiences. By describing a complicated reality, Traub's book can help educators face some difficult issues in urban colleges today.

Judith Schein Cohen is an Academic Skills Specialist at the University of Illinois at Chicago. She has taught English, reading, and communications at the elementary, high school and community college levels and administered tutoring and fine arts programs. She is currently enrolled in the doctoral program in literacy education at University of Illinois at Chicago.
MCLCA

Eleventh Annual Conference
October 2-4, 1996
OMNI Severin Hotel
Indianapolis, Indiana
Keynote Speakers:
Dr. Martha Casazza & Dr. Sharon Silverman
Pre-Conference Speakers:
Dr. Milton "Bunk" Spann & Dr. Nancy Spann

CONFERENCE FEES:
Pre-Conference Institute: $60
Conference Fee for Members: $150
Conference Fee for Nonmembers: $190
On-Site Registration: $190
Institutional Rate: $465
Fee for One Day Only: $95
Student Rate: $85
(Registration fee includes keynote addresses, presentations, one continental breakfast, one luncheon and one dinner)

For Conference Registration Information:
Luanne Momenee, Chair
Phone: (419) 530-3140

Circles of Learning
As an official publication of the Midwest College Learning Center Association, *The Learning Assistance Review* seeks to expand and disseminate knowledge about learning centers and to foster communication among learning center professionals. Its audience includes learning center administrators, teaching staff and tutors as well as other faculty and administrators across the curriculum who are interested in improving the learning skills of postsecondary students.

The journal aims to publish scholarly articles and reviews that address issues of interest to a broad range of learning center professionals. Primary consideration will be given to articles about program design and evaluation, classroom-based research, the application of theory and research to practice, innovative teaching strategies, student assessment, and other topics that bridge gaps within our diverse discipline.

1. Prepare a manuscript that is approximately 12 to 15 pages in length and includes an introduction, bibliography, and subheadings throughout the text.

2. Include an abstract of 100 words or less that clearly describes the focus of your paper and summarizes its contents.

3. Type the text with double spacing and number the pages. Follow APA style (*Publication Manual of the American Psychological Association, 4th edition, 1994*).

4. Include your name, title, address, institutional affiliation and telephone number along with the title of the article on a separate cover sheet; the manuscript pages should include a running title at the top of each page with no additional identifying information.

5. Submit all tables or charts camera ready on separate pages.

6. Do not send manuscripts that are under consideration or have been published elsewhere.
7. Send three copies of your manuscript to the following address: Dr. Karen Quinn, Co-Editor, The Learning Assistance Review, Academic Center for Excellence, University of Illinois at Chicago, 1200 West Harrison, Suite 2900, M/C 327, Chicago, Illinois 60607-7164.

You will receive a letter of acknowledgment that your manuscript has been received. The review process will then take approximately three to six weeks at which time you will receive further notification related to your work. If your manuscript is accepted for publication, a computer disk will be requested.
What is MCLCA?

The Midwest College Learning Center Association (MCLCA) is a regional organization dedicated to promoting excellence among learning center personnel in 12 midwestern states: Illinois, Indiana, Iowa, Kansas, Michigan, Minnesota, Missouri, Nebraska, North Dakota, Ohio, South Dakota, and Wisconsin. MCLCA defines a learning center as a place where all students, from entering freshmen to graduate and professional school students, can be taught to become more efficient and effective learners.

What Does MCLCA Do?

The MCLCA Constitution identifies the following objectives for the organization:

- To promote professional standards for learning centers through education, curriculum design, research, and evaluation.
- To promote support for learning centers by acting on issues affecting learning assistance programs.
- To assist in the development of new learning centers.
- To assist in the professional development of personnel in learning assistance programs by providing opportunities for sharing professional methods, techniques, and strategies.
- To provide an annual conference for the exchange of ideas, methods, and expertise in learning assistance programs.
- To publish educational information and research in the field.
> To develop and expand a communications network among learning assistance professionals.

> To coordinate efforts with similar professional groups.

**How Can I Participate?**

The MCLCA Executive Board is anxious to involve as many learning center professionals as possible in achieving its objectives and meeting our mutual needs. Therefore, we invite you to become a member of the Midwest College Learning Center Association. The membership year extends from October 1 through September 30, and annual dues are $40.00. Membership includes the *MCLCA Newsletter* and *The Learning Assistance Review*, discounted registration for the annual MCLCA Conference, workshops, in-service events, and announcements regarding upcoming MCLCA activities. We look forward to having you as an active member of our growing organization.
MCLCA Membership Application

Name: 
Institution: 
Address: 
Phone: 
Fax: 
E-mail address: 

Send application form and a check made out to MCLCA for $40.00 to:

Susan Witkowski
MCLCA Membership Secretary
Alverno College
P.O. Box 343922
Milwaukee, WI 53224-3922
414/382-6027

(MCLCA Membership Application
(journal subscription included)