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ABSTRACT

An analysis is presented of the application of elements of institutional quality identified in the National Institute of Education (NIE) report, "Involvement in Learning: Realizing the Potential of American Higher Education," in community college settings. Following introductory remarks and general thoughts about the report's strengths, changes in mission and clientele associated with the growth of community colleges are enumerated, followed by a discussion of the problems currently confronted by these institutions. The next sections offer recommendations for establishing excellence in community colleges, focusing on three conditions: (1) increasing student involvement by, for example, expanding the services for and contact with general studies and vocational-technical students, increasing contact between teachers and students, improving guidance and advisement, eliminating student isolation and passivity, and involving part-time and commuter students; (2) realizing high expectations by, for example, specifying the knowledge and skills required for graduation, establishing collaborative partnerships with feeder schools and senior institutions, developing liberal arts requirements for students in different programs, and ensuring that remedial students perform well in subsequent courses; and (3) improving assessment and feedback by, for example, selecting assessment instruments to match knowledge and skills addressed and stated program objectives, training faculty to use assessment as a teaching tool, and using student evaluations of programs and the learning environment as a basis for educational improvement. Tables providing relevant data are appended. (LAL)

INVOLVEMENT IN LEARNING: A VIEW FROM THE COMMUNITY COLLEGE PERSPECTIVE

Prepared for the Study Group on the Conditions of Excellence in American Higher Education

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Involvement In Learning: A View From The Community College Perspective

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The recent issuance of the NIE sponsored report, Involvement In Learning: Realizing the Potential of American Higher Education, injects renewed interest into the debate about reform of American undergraduate education. Defining "quality" or "excellence" in the nation's colleges and universities has always been problematic, given the diverse missions, programs, staff and student clientele that comprise the postsecondary enterprise. I applaud the efforts of the seven member Study Group on the Conditions of Excellence in American Higher Education for having the interest, conviction and courage to initiate a comprehensive examination of research, socio-economic trends and signals which warn of potential decline and to put forth recommendations designed to promote excellence and revitalize the undergraduate learning experience.

Purpose of Paper

The main purpose of this paper is to explore how the elements of institutional quality as presented in Involvement can be applied in community college scenarios. The focus of this paper is on the application and utilization of the report's recommendations. As such, this paper is not a critique of the report in terms of content or process used to arrive at specific proposals. Rather, this paper is intended as a guide to assist community colleges to constructively apply the report's recommendations in their efforts to enhance institutional quality. Consequently, I will propose initiatives and make recommendations which supplement (not supplant) those of the Study Group. The initiatives proposed represent what I interpret (according to my own thoughts and biases) to be logical extensions of those presented in Involvement. I take full responsibility for the content of this paper. In spite of very valuable suggestions I received from my colleagues at NIE, the final product can only be called mine.

Some General Thoughts About Involvement

I liked Involvement for several reasons. First, the responsibility of realizing the potential of higher education is placed where it belongs: squarely on the shoulders of postsecondary institutions. There are no allegations in this report that institutions lack quality because students lack academic skills, score low on entrance exams or don't study hard enough. The Study Group does not argue that adding more money, hiring faculty who have graduated from prestigious schools, or raising admissions requirements for students will make a big difference in enhancing institutional quality. Instead, the Study Group maintains that excellence is a function of how well an institution responds to students, how it contributes to their overall development

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from entrance to graduation, and how it adapts to a changing student clientele and its corresponding needs. As such, the emphasis on quality is not on external inputs into the institution. It is on internal processes within the institution -- the teaching, counseling, advisement, and assessment mechanisms which comprise the critical mass of what an institution of higher education is all about. Institutions are asked to adapt, modify and change when students and the environment change, not the other way around.

I liked Involvement because it speaks to quality and excellence in higher education very positively and constructively. It is unfortunate that the terms "quality" and "excellence" have somehow taken on pejorative connotations in higher education communities. Reserved for use in the broadest sense, the terms make for impressive titles in conference announcements, and college presidents, faculty and deans like to use the terms when speaking idealistically about higher education. But by keeping the definition of terms broad and vague, higher education has lost the opportunity to be specific about its aims, its values, its role in educating the diverse student clientele which partakes of its offerings. Similarly, because the terms have not found favor with researchers who write about education, higher education has had relatively few scholars who have taken the time to study and define what quality is and how to achieve to it. The unfortunate result has been that community colleges and senior institutions have no clear consensus as to how they should go about achieving quality.

I also liked the report because it is simple in style, even though the challenge to begin to take appropriate measures at establishing and maintaining quality is quite complex. This work is not written by scholars solely for use by other scholars. The document can be used by every sector of higher education and by every constituency which is impacted by it -- faculty, counselors, administrators, students, researchers, state legislators, and parents. Thus, Involvement's simplistic style reaches out to all concerned with improving higher education; and because the report is easy to read and understand, its utility is enhanced.

Most of all, I liked Involvement because it reinforces my beliefs in many issues that I have long preached and practiced in my career as a community college faculty member, counselor, administrator and researcher. I have long felt that sharing, collaborating and interacting between and among students, administrators and faculty members can have far-reaching benefits. I have longed believed that postsecondary institutions have an ethical and moral obligation to challenge students to perform at their best and to provide adequate support services to help them perform even better. I believe Involvement is one of the most useful and informative documents on how to define and achieve quality in higher education, one that community colleges can actively use in their efforts to enhance institutional excellence.

Growth, Change and Problems in Community Colleges

Community colleges have made their mark in higher education by playing

a pivotal role in providing universal access and establishing programs and services tailored to diverse student populations with varying backgrounds, skills and needs. Because two-year colleges have established open admissions and low tuition policies, are positioned in favorable geographical locations, and have developed varied academic, vocational and continuing education programs, student enrollments have grown dramatically. In 1960 more than 600,000 students were enrolled in two-year colleges. By 1969 the figure jumped to almost 2 million and in 1982 the figure increased to about 4.7 million students. (Cohen, 1984; Wilson & Melendez, 1984).

Two major changes have been associated with growth of community colleges: 1) an expanded mission and 2) a diversified student clientelle. After World II, the mission of junior colleges shifted from institutions providing a traditional college preparation to flexible people's colleges which prepared students to find a job, adapt to life, and get the most for their money in a short time period, without leaving home and without having to give up a full-time job (Cohen, 1984; Monroe, 1976). The very nature of that broad mission has increased the diversity of the college's student clientele. Consequently, community colleges have now perhaps the most diversified and most challenging student clientele in all of higher education:

- Minority students are differentially concentrated in two- year colleges. In the Fall of 1982, 43% of the black, 55% of the American Indian, 45% of the Asian, 56% of the Hispanic and 36% of the white students were enrolled in community colleges (Table I).

- As a group, community college students score lower on the American College Test (ACT) than four-year college students. In the Fall of 1978, composite scores of freshman students participating in the ACT Assessment Program averaged 15.7 for students in public two-year colleges and 17.5 for those enrolled in public 4-year colleges (ACT, 1980).

- High school averages for students in public two-year colleges are lower than those of public four-year colleges in English, Mathematics, Social Studies, and Natural Sciences (Table II).

- Fall 1982 enrollment figures for all students enrolled in two-year colleges indicated that 55% were women. In four-year colleges and universities, women comprised 49% of the total enrollment (Table III).

- In the Fall of 1982, 63 percent of all public two-year college enrollments were for part-time students. In contrast, 70 percent of all public four-year college enrollments were for full-time students. The disproportionate part-time enrollments in two-year colleges reflect the participation of students who commute and/or who are employed full-time (Table IV).

- o National Longitudinal Study data analyses indicate that less students from a high SES background enter two- year colleges than four-year institutions (Table V).

- o In 1980 the mean age of the community college student body was 29, reflecting the participation of adult learners.

The problems community colleges confront in the 1980s are increasingly apparent and may be catergorized as follows:

1. Declining number of students graduating from high school to enter college.

   Because the percent of students graduating from high school to enter college has decreased, community colleges are now competing with senior institutions who also need students to fill empty desks. In turn, students have become more informed consumers of higher education and generally have a wide choice of institutions from which to select the program best suited for their needs.

2. Loss of full-time transfer oriented students to senior institutions.

   The drop in the size of the college-age population and the inability of the colleges to compete with senior institutions with more elaborate facilities and resources indicates that the colleges stand to lose some of their full-time, transfer oriented students to four-year colleges. Consequently, community colleges face the risk of becoming technical institutes because vocational-technical programs appear most secure due to less competition. If the colleges become essentially technical institutes, they may lose much of their status and prestige as postsecondary institutions which offer college-level courses through their transfer function (Breneman & Nelson, 1981).

3. Criticism of career programs.

   Although career programs have gained popularity, they have not escaped criticism. The programs are challenged for efficiency when graduates do not perform well during employment, and some feel that they lead to low-level, dead-end jobs that perpetuate a stratified class structure, with minorities and the disadvantaged occupying the bottom stratum (Pincus, 1980; Karabel, 1972).

4. High student attrition (particularly with ethnic minorities).

   Several studies (Astin, 1982; Rendon, 1982; Garcia, 1980; Karabel, 1972) question how effectively the colleges have ensured that students attain their educational goals and how well they have prepared students for transfer and employment. The growing disenchantment from minorities is hard to dismiss. According to one minority educator, "In some ways the community colleges are the worst alternative minorities have among the segments and in some ways I wish there was no other choice"

(California's Pipeline Problem, 1983). These words of anger and frustration are directed primarily at the problem community colleges have had in advancing students to persist until they achieve their educational goals. Because minorities (particularly Hispanics and Native Americans) are concentrated in two-year colleges, the institutions' role in promoting student retention is critical. Yet, according to the Final Report of the Commission on the Higher Education of Minorities (1982), "one of the most important factors contributing to the severe underrepresention of Chicanos, Puerto Ricans and American Indians is their greater than average attrition from undergraduate colleges (particularly community colleges)" (p. 17).

5. Declining numbers of transfer students.

According to the same Commission (1982), although three-fourths of community college entrants indicate they intend to work towards a bachelor's degree, their chances of actually transferring to and completing the baccalaureate degree at a senior institution are slim. The situation is serious enough that in California, the state with the nation's highest number of community colleges, the Mexican American Legal Defense and Education Fund (MALDEF, 1983) documented that in 1982, fewer than 700 minority students in the entire state transferred to the University of California. The California State University System received more minority transfers; nevertheless, the MALDEF report cites an actual decrease of 300 minority transfers from 1981 to 1982.

6. Inadequate student support and academic services.

Related to the decrease in the number of transfer students is the fact that the colleges are often accused of providing transfer students with inadequate counseling and a substandard academic preparation. As a result, many students are said to experience a "transfer shock" when entering larger university environments, and in many cases perform poorly at senior institutions with rigorous academic requirements (MALDEF, 1983; Kissler, 1980).

7. Mounting pressure from senior universities to ensure student academic preparation.

Increasingly, senior institutions are exerting pressure on community colleges to ensure that transfer students possess content knowledge and basic skill competencies. For example, in Texas new teacher education requirements mandate that all students pass a Pre-Professional Skills Test (PPST) in reading, writing and mathematics before they gain admission to a university teacher preparation program. Because many two-year college students scored low on the PPST, community colleges were forced to revise their basic skills programs.

8. Changes in student expectations.

In many community colleges reading and writing requirements have been reduced so that students read only to pass quick-score exams, and write only a few pages (if any) in most of their courses (Richardson, 1983). According to studies conducted by the Center for the Study of Community Colleges, students were "required to write papers in one in four humanities classes, one in ten science classes; and under half of the instructors in all of the liberal arts areas gave essay examinations" (Cohen, 1984).

9. Lack of institutional research.

Because community colleges do not consider themselves to be research institutions, they appropriate few funds to conduct institutional research, and consequently lack important information about students who transfer or receive employment. Further, they know little about the variables which account for student learning and persistence. Without such data, community colleges lack information needed to make curricular and support service modifications to strengthen their educational programs.

10. Lack of resources.

Unlike most senior institutions, community colleges do not have large endowments, elaborate facilities, libraries, laboratories and faculty who are actively engaged in academic research (Cohen, 1984). To compound matters, the public now expects higher education to accomplish more with less. State and federal education appropriations cut-backs and laws like Proposition 13 in California convey the message that the public expects accountability and is unwilling to pay for educational "extras."

11. Lack of consensus on how to define and achieve institutional quality

The above problems are exacerbated by the fact that community colleges have no clear consensus about how quality should be defined, and even less agreement exists on how to achieve it. Claims that community colleges promote quality or excellence have been made in numerous ways, including adding more courses and honors programs, raising faculty salaries, adding computers, hiring more faculty with Ph.D.s, failing or more students in an effort to promote academic standards, and securing grants which pour more money into special programs, among others. Yet, as the Study Group suggests, none of these input-related measures convey anything about what and how students learn and how they grow.

In the context of the issues cited above, the most difficult problem that riddles community colleges is how to preserve the principle of universal access and still produce demonstrable, high quality outcomes in terms of student achievement, retention, employment and transfer to senior institutions. The importance of Involvement is that it provides community colleges with a framework for establishing excellence based on three conditions: 1) student involvement, 2) high expectations and 3) assessment and feedback.

Student Involvement

The focus of the Study Group's recommendations for increasing student involvement centers on developing and maintaining a positive, creative institutional climate which fosters the intellectual and social growth of both students and professional staff. This goal can be accomplished by undertaking the following steps:

1. Place top priority on two functions: 1) general studies (including liberal arts and remedial studies) and 2) vocational-technical (including allied-health) areas.

   By now, I feel community colleges realize that they cannot possibly be "all things to all people." By trving to do too much with too little human and financial resources, community colleges risk losing a sense of concentrated focus on a few things that they can do well. By concentrating on two major functions, I believe the colleges will be able to zero in on student needs and to make the best use of resources to address those needs. I am not advocating the elimination of continuing education programs. Rather, I feel these should be given a low priority. In this manner, academic and counseling strategies can be directed at those students who have greater needs and who stand to benefit most from a community college education -- transfer students who want to successfully complete a baccalaureate, remedial students who want to improve their reading, writing, and math skills and occupational-technical students who want to learn skills to perform well in a good-paying job. Furthermore, I believe that less emphasis on community services will have the effect of re-shaping the image of colleges from institutions providing meritorious services, to those providing a high-quality, college-level education.

The following initiatives are examples of what community colleges can do to increase services and the degree of contact and involvement with general studies and vocational-technical students:

- Intense counseling and advisement should provided to:

  -- vocational-technical students, for career advisement; possible transfer to senior institutions; information about job market

  -- transfer students, for proper course selection; information about programs at senior institutions

  -- remedial students, for encouragement and reinforcement; proper selection of remedial courses

- Tutorial services, especially in the areas of reading, writing and mathematics should be made available to academic and vocational-technical students and assessed for effectiveness on a

yearly basis. The tutoring centers should be staffed by professionals, para-professionals and exceptionally competent student per tutors. All peer tutors should be used with the supervision of a professional or para-professional and evaluated every semester.

- o Provisions could be made to allow only faculty who teach remedial courses to teach honors courses. The task of educating students regardless of ability is every faculty member's responsibility. Remedial and honor students need the most sensitive, most enthusiastic, most highly trained faculty members. All too often, classes for remedial students are relegated to faculty members who feel it is beneath them to teach remedial students. To prolong this system of class allocation is to perpetuate inequities in student delivery systems, with disadvantaged students getting the short end of the stick.

- o Community college administrators should make every effort to hire faculty and counselors who are sensitive to the needs of minorities, the disadvantaged and the under-prepared.

- o Counselors should identify part-time students and encourage them to attend college on a full-time basis, especially the first year.

2. Extend opportunities for faculty collaboration on teaching and learning projects.

A number of faculty have been engaged in exciting projects working with students with common interests and organizing field trips or individualized learning projects. Part of the college's staff development program can include faculty presentations on the success they have had using active modes of teaching and learning. The sharing of these models and activities can lead to productive, constructive encounters between faculty members across divisions and departments. For example, career education and general studies faculty usually work in isolation from each other. Is it possible to break communication barriers and generate productive encounters between the two faculty types? Can faculty in the transfer curriculum learn how to set up apprenticeship learning experiences from vocational-technical faculty? Can career faculty learn how to teach basic skills in reading, writing and mathematics from general studies faculty? These are the kinds of issues that the colleges need to explore in their effort to encourage active teaching throughout the institution.

3. Use learning technologies to increase personal contact between students and faculty.

Since research demonstrates that student retention is a function of how much the faculty interacts with students in and out of the classroom, it is especially important that community colleges pay close attention to the way they use computers, language laboratories and televised instruction. The key is how to use the technology without isolating the student. To increase student-faculty interaction while using technology, I suggest the following:

- o Students should be allowed to attend training sessions given to faculty and administrators in the use of computers and technologies.

- o Under the supervision of a professional, students who demonstrate particularly strong competencies in the use of computers should be allowed to conduct computer training sessions for other students.

4. Improve guidance and advisement programs to involve student affairs personnel, counselors, faculty and administrators on a continuing basis.

In many community colleges, advisement tends to be limited to registering students, and even then some colleges require that only first-time entering students see counselors for registration purposes. In consequence, the problems of transfer students, minorities, part-time students and the disadvantaged who need help on a continuing basis are not fully addressed. Few academic administrators serve as advisors, and faculty advisement programs have had mixed results.

Community colleges can improve their program of guidance and advisement by undertaking the following steps:

- o A transfer center staffed with special counselors and supplied with information about senior universities should be established. Students who plan to transfer to four-year colleges and universities should be helped with proper course selection and sequence, assisted to select an appropriate program at a senior institution and helped to fill out admissions, financial aid and housing forms. Further, counseling should be provided to students about adjusting to a university environment. Increased attention should be given to minorities, disadvantaged students and vocational-technical majors who experience more transfer difficulties than other students. When possible, counselors should sponsor trips to senior institutions so that transfer students have the opportunity to see a university first-hand, to talk to senior university students about different programs and to talk to faculty, counselors and administrators. These visits should help students make better decisions about where to transfer and give them a valuable opportunity for interaction and for gaining first-hand information from senior university students and officials.

- o Counselors should avail themselves of every opportunity to interact with students outside the office environment. Visiting classes to watch students in the learning process, talking to students in the learning center or cafeteria, sponsoring special events such as university trips or special seminars -- all of these activities make counselors visible and their visibility tells students someone cares about their learning.

- o Every community college should have a faculty advisement program. Because research verifies that student-faculty contact is essential to student retention, this recommendation is very important. Every faculty member should be expected to advise a specified group of students. It is virtually impossible for a few counselors to see several hundred students in more than a perfunctory manner. Faculty

should seize the opportunity to help students students to feel a sense of belonging and to know that someone is interested in their well-being and in their educational success.

5. Create learning communities that help eradicate student isolation and passivity.

Community colleges can benefit from the use of cluster learning models -- academic and vocational-technical programs that work with student clusters who are taught by selected faculty members. For example, several highly successful math/science models have been created to increase participation and retention of minority and disadvantaged students in these fields. These models (Rendon, 1985) can be easily adapted and modified for community college settings. The Mathematics, Engineering, Science Achievement (MESA) program in California, The High Technology High School at San Antonio College, The Professional Development Program at Berkeley, The PRIME Program in Philadelphia -- all these feature some all or most of the following elements that create a positive learning community for students:

- o They are built around a common theme, in the above cases, math and science education.
- o Faculty act as role models and are involved in close working interaction with students.
- o Counselors are assigned to students in the cluster and see students on a frequent basis.
- o Administrators who run the programs interact with students, faculty and counselors on a frequent basis.
- o Because of these interactions, students are carefully monitored and interventions designed to help students succeed occur at the right time.
- o The cluster models build high student expectations.
- o Parents act as tutors, advisors and encouragement agents.
- o The cluster models allow for the creation of student networks and study groups.
- o The models provide for contact with students and professionals already in a math or science-based field.
- o The programs include remedial/enrichment opportunities.

6. Provide opportunities to involve part-time and commuter students.

Research has demonstrated that students who interact with other students in extra-curricular activities develop a sense of institutional affiliation critical to student retention. The overabundance of

part-time and commuter students poses a tough problem in community colleges because it is precisely these students who have little time to participate in curricular programs that can maximize their involvement.

It is important for counselors to be available after 5:00 p.m. for students needing assistance. The tutoring center and the library should be open at hours convenient to commuters and part-time students. Further, extra-curricular activities for vocational-technical students in the form of student organizations, special seminars and career fairs can be provided.

7. Provide training for part-time faculty.

Over the years the colleges have relied more and more on part-time faculty especially in vocational-technical programs where they are used for their expertise in special programs. In these instances, the use of part-time faculty is a necessity. However, the colleges must strive to ensure that part-timers develop an increased commitment to teaching coupled with a sense of institutional affiliation. Colleges should provide at least short, but intensive training to all part-time faculty regarding community college philosophy, strategies for dealing with students with basic skills deficiencies and ways and means of establishing contact with students, especially minority and disadvantaged students who experience difficulties weaving through the institutional system and adjusting to academic lifestyles. Opportunities for part-time faculty to interact with full-timers need to be provided by inviting and encouraging them to participate in staff development sessions, asking them to make presentations about their teaching methodology, and encouraging them to sponsor student organizations. The idea is to involve and integrate the part-time faculty into the learning community to strengthen their commitment to the college.

Realizing High Expectations

In an effort to set an environment conducive to a college-level learning community, the institutions must strive to set appropriate student expectation in terms of content knowledge and skills that students need to master upon course completion and/or graduation.

The following steps are proposed to help community colleges set high expectations:

8. Specify and disseminate the knowledge, capacities and skills that students must develop prior to graduation.

The Study Group notes that research on effective elementary and secondary schools strongly suggests that well articulated, detailed statements of knowledge, capacities and skills expected of students is positively related to student achievement. It follows that divisions and departments in community colleges should specify the knowledge, capabilities and skills they expect from students. For example, the math department likes to prescribe that students be able to be good problem solvers. But what exactly is problem-solving and what skills should students demonstrate to indicate that they possess this competency?

Social science faculty talk about how important it is that students be "good" readers. What does it mean to be a good reader? Does it mean that students should demonstrate competency in map and chart reading, interpret statistical tables or explain historical trends? If so, how can these skills be taught in the classroom?

When faculty clearly communicate what they expect, students will know what it is they need to do to perform better. These expectations should be written in division and department objectives and disseminated to students, faculty and administrators.

9. Establish collaborative partnerships with feeder schools.

Specific student expectations should also abe disseminated to high school personnel to assist them to develop curricular programs to prepare student for entry to college. Community colleges often blame high schools for poor student performance in college, but do little in the way of coordinating efforts to help high schools do a better job at educating students. Coordination can take place by having college faculty and students visit high schools to talk to faculty, counselors, and administrators about specific skills and content prerequisites they require of entering freshman students and by inviting them to college meetings and staff development conferences where discussions about these requirements are taking place. Further, high school personnel and students may be invited to visit college classes so that they can get a feel for what goes on in the college learning environment. These examples of high school-community college coordination should be systematic and on-going, a part of a mutually agreed upon articulation agreement of sharing and collaboration between the two institutional types.

10. Establish articulation agreements with senior institutions.

Community colleges not only receive students from high school; they send students to four-year colleges and universities. The expectations that senior institutions set for their students are oftentimes at odds with those set by community colleges. Consequently, students who transfer often experience a "transfer shock" their first semester at the senior institution as they try to adjust to a larger university environment and to rigorous, intellectual requirements. To address this issue, community colleges should coordinate their efforts at setting clear expectations of knowledge, capacities and skills with senior institutions which receive their transfer students. Articulation agreements between community colleges and senior institutions should clearly spell out the knowledge and skills expected of students in different courses to ensure that students do not lose credits when transferring as well as to give students an appropriate college-level preparation to allow them to compete fairly with other students when they transfer.

11. Develop specific liberal arts requirements for students in different programs.

The Study Group strongly recommended that bachelor's degree recipients have at least two full years of liberal education. The expansion of liberal arts requirements was intended to assure that students develop skills in analysis, problem-solving, communication and synthesis and that students and faculty be able to integrate knowledge from various disciplines. While this is a worthy goal, the issue does generate controversy in community colleges.

Expanded liberal arts requirements mean that students will have to stay in college longer. Many students don't want to spend extra time or money taking courses which they may perceive as having dubious value. Many students avoid majors in the liberal arts because they feel that they will do better if they concentrate on developing technical skills needed to work in high paying jobs in business and industry. At some point, community colleges need to come to terms resolving the following issues:

- Should the associate degree be expanded to three years in order to accomodate additional liberal arts requirements?

- Should students in occupational-technical fields such as nursing, data processing, radiological technology etc. be required to take additional liberal arts courses such as "The Sociology of Hospitals" or "Ethics in Business" at the risk of having senior institutions not accept the courses for transfer credit?

- If one accepts the notion that being good with one's hands should not be mutually exclusive with being good at working with one's head, should some form of liberal arts instruction (teaching of ethics, values, communication and synthesis) be required to be taught to students preparing for narrow careers in welding, electronics, auto-mechanics, and refrigeration, among others?

- How many liberal arts courses should constitute an appropriate requirement for transfer and non-transfer students?

The American Association for Community and Junior Colleges has tried to address some of these issues through a policy statement on the Associate Degree. The policy prescribes that all associate degree programs reflect what constitutes an educated person--an ability to understand and appreciate culture and the environment; the development of a system of personal values based on accepted ethics; and the attainment of skills in analysis, communication, quantification and synthesis (AACJC, 1984). The problem is that community colleges need to translate this broad policy statement in into specific liberal arts requirements for the associate degree. Which courses should teach an appreciation of culture and the development of values? How should these behaviors be taught? How many courses which deal with these areas should a student working on the associate degree be required to take?

What does attainment in analysis, communications, quantification and synthesis mean, and which courses should teach these skills and at what minimum levels of performance?

12. Engage in a local and national process of self study to examine and adjust the content and delivery of the curriculum to match knowledge, capacities and skills expected of students.

To establish standards for knowledge and skill requirements, I believe that community colleges need to undergo a local and national process of self study.

At the local level, all community colleges should re-assess their educational programs in much the same way they conduct institutional self-studies for accreditation. Issues they can address may include:

- What are the minimum standards of performance which should be required for the associate degree in reading, writing and mathematics?
- What set of skills: critical thinking, problem solving, synthesis, etc. should be taught? In which courses? At what level of proficiency?
- What content should be covered in different disciplines? What is the best way to cover the content? How can content knowledge be assessed?
- In which courses should essay examinations and assignments be required? By what set of criteria should essays be graded?
- How can reading and writing be taught across the curriculum? Which models exist that have had success in this area? Can these models be adopted?
- Should community colleges add a requirement for computer literacy? If so, what will be taught, and how will it be taught? With what level of proficiency?
- Should there be a different set of minimum standards in reading, writing and mathematics for transfer and vocational-technical students who seek a one-year degree or less?
- How can the progress of continuing education students be measured? What set of expectations should be established for these students?

Because these issues are so important and because they cut across all of the nation's community colleges, I propose that the American Association of Community and Junior Colleges take the leadership at convening a national panel of experts in curriculum development, testing, teaching and learning methodologies to give a national sense of direction for America's community colleges. A careful, systematic

analysis of community colleges needs to be conducted to assist the colleges to use the research on teaching and learning to make modifications in the content and delivery of the curriculum and to establish a national policy of what knowledge, capacities and skills should be expected of students in transfer and career programs.

13. Examine and make adjustments in remedial courses and set standards to enable students to perform well in subsequent courses.

Community colleges can strengthen their programs of remedial studies by undertaking the following steps:

- o An extensive diagnostic testing program to assess for preparation in reading, writing and mathematics should be implemented, and every entering student should be required to take these tests prior to enrollment in courses. Students testing at less than 12th grade level in each of these skills should be enrolled in remedial courses.

- o Remedial students should be allowed to enroll in no more than four courses per semester; one of these courses should be a human potential course taught by professional counselors. This course should cover aspects related to developing study skills, using time effectively, making appropriate career decisions, developing test-taking strategies, reducing math anxiety, filling out job applications, selecting courses for different majors, developing communication skills (speaking, listening, presenting one's self to others), and relating to people.

- o Exit competencies should be established for all remedial courses. Examples of exit competencies which may be set to exit from a reading course include:

  --Read and synthesize ideas (orally and in writing) in selected chapters of college-level science, history, math, and literature books. This will require, of course, that reading faculty work closely with faculty in other disciplines to determine which concepts should be reinforced in the reading class.

  --Read and synthesize selected articles from magazines such as Scientific American, Psychology Today, and Newsweek. Emphasis should be placed on having students interpret charts and graphs, explain ideas, concepts and terminology, and interpret statistical data, symbols and formulas.

  -- Use new vocabulary to explain ideas and concepts orally and in writing.

  -- Pass a standardized or teacher-developed exit proficiency reading exam at the 12th grade level.

- o Examples of exit competencies required to exit from a remedial mathematics course include:

-- Add, subtract and divide whole numbers, and fractions

-- Use percentages

-- Solve word problems

-- Use the metric system

-- Apply mathematics in a "real life" situation, for example, compute a bank statement balance, the percent of interest on a loan, the tax due on an IRS form, the number of square feet in building, etc.

-- Use introductory algebraic concepts

-- Pass a teacher-developed proficiency examination in the above skills with a score of 70 percent or better.

o Examples of competencies required to exit from a remedial English course include:

-- Write a 3-5 page essay with less than five grammatical errors

-- Present written ideas orally in front of an audience

-- Explain ideas (orally and in writing) that have been communicated by a speaker.

-- Explain the ideas expressed in selected chapters in college-level science, history, math, and literature books (orally and in writing). Again, this will require collaboration among English teachers and those in other disciplines.

-- Use the library card catalogue, Reader's Guide to Periodical Literature, reference books, microfiche/microfilm, periodicals and government documents.

-- Pass a proficiency examination covering the above skills with a grade of 70 or better.

o The exit level competencies in reading, math, and English should be the prerequisites for taking college-level courses in these fields.

o Credit should be awarded for remedial courses and counted in computing the student's, GPA, but not counted for graduation or transfer. Using this policy has benefits for both the students and the institution. Students will be motivated to perform well in remedial courses because a passing grade will boost their GPA. Further, the policy has the effect of legitimizing only college-level courses as requirements for graduation and transfer.

- Policies encouraging attendance and commitment to stud should be implemented. For example, colleges can consider allowing students to withdraw from courses with a grade of "W" no later than the end of the fourth week of classes. To help students make a decision about withdrawing, faculty should have given at least one exam before the end of the fourth week and talked to students who failed the exam before they decided to withdraw from the course.

- A good remedial program requires excellent teaching. To this end, I recommend that:

  -- At least two yearly workshops to train faculty to teach students with basic skills deficiencies should be held. The training sessions should involve such topics as developing course objectives, teaching multi-cultural students, developing proficiency examinations in reading, writing and mathematics, and establishing content/skill requirements.

  -- Incentives such as release time or extra compensation should be provided to faculty members who devote their efforts to work with remedial instructional projects or conduct research on factors that account for success of remedial students.

  -- Exemplary teachers who work with remedial students should be videotaped and their teaching styles and techniques shared with other faculty members.

Assessment and Feedback

Assessment and feedback are critical issues in higher education. Students need information to determine their educational progress and institutions need data to help them make modifications to improve their programs and services for students.

The following suggestions are proposed to assist community colleges to improve assessment and feedback:

14. Design and implement a systematic program to assess student knowledge, capacities and skills.

    This recommendation proposes that entry and exit criteria be set to assess student learning and growth from entry to graduation. Further, this recommendation suggests that community colleges collect valuable information on the long range impact of education on students. To this end, the following recommendations are proposed:

    - Every faculty member throughout the college should revise course syllabi to include clear, measurable objectives which give students an indication of exactly what it is they should learn at the end of the course. For example, an auto mechanics instructor who feels that students should be able to read through a book of automobile parts can indicate that students in the class are required to read a specified book, that they will be tested on their knowledge of

the terms in the book, and that in order to pass the course they will have to pass this test with a grade of 70 or better.

- All courses should specify minimum entry and exit learning skills to determine at what level a student can enter and finish a course. For example, an entry level skill required for college freshman English could be that students be able to read at the 12th grade level. One exit learning skill in this course could be that students be able to write an 8-10 page essay with less than five grammatical errors. The exit level skills required in college Freshman English would become the entry level skills required at a higher level of English and so on.

- Entry assessments for special populations should involve a wide range of techniques. For example, students with limited English proficiency may require more than a pencil-paper test. In these cases, an oral language assessment using an interview process, in combination with a teacher-developed pencil-paper test may give a more comprehensive profile of the students' oral, aural, written, and reading proficiency. This kind of assessment is used in areas with large numbers of students from second-language backgrounds . For Example, the San Diego Independent School District and the Border College Consortium Institutions in Texas, Arizona and California which have developed their own assessment test for bilingual students.

- Institutional research should be conducted to document student outcomes. Although community colleges are primarily teaching institutions, research is essential to give the colleges an idea of how well they are accomplishing what they are supposed to accomplish. Further, research can be used as the basis for making needed curricular and programmatic changes to improve student learning. Institutions can collect data on:

  -- student retention rates

  -- student GPA's

  -- scores on pre-and-post-assessment instruments

  -- student selection of major fields of study

  -- follow-ups of students who leave the college, (i.e., number of students who transfer, names of colleges to which students transfer, student GPA's at senior institutions, number of students who secure employment, and employer ratings of program graduates.)

  -- student achievement comparisons reflecting differences by sex, age and ethnicity.

  -- student and community assessments of academic, vocational-technical, allied health, student support and continuing education programs.

13. Select assessment instruments and methods to match for (1) knowledge, capacities and skills addressed and (2) stated program objectives.

Consider the fact that many community colleges are using the Nelson-Denny test for reading assessment. Is this the appropriate test to use for Hispanic, Native American or black Students? Do other tests exist that are more appropriate for these populations? The same can be asked of ACT and SAT exams. Further, some faculty have developed their own placement tests, but have not checked them for validity or reliability. Few faculty in higher education, let alone community colleges, are testexperts. For this reason, faculty will need to be assisted by consultants to select appropriate tests and to assist them to develop their own tests as well as to check for reliability and validity.

Faculty also need to guard against excessive use of quick-score exams which do little or nothing to assess higher order learning skills such as critical thinking and synthesis. Essay examinations and interviews are probably the best methods to measure these skills and should be used more extensively than multiple-choice, true or false or matching exams.

16. Train faculty to use assessment as a teaching tool.

At least one 1½-2 day intensive workshop per semester should be held to provide training for faculty in all phases of the testing and assessment process. The structure of such a workshop could be that a small group of selected faculty members representing different departments would attend the first semester workshop and return to their departments to train other instructors. The process should continue until all faculty had an opportunity to be trained and to act as trainers. Examples of topics to be covered in these workshops include:

-- How to create teacher-developed tests

-- How to judge the appropriateness of standardized tests for culturally different students

-- How to select appropriate standardized tests in English, math and reading for transfer and non-transfer students

-- How to use interviews and qualitative techniques for student assessment

-- How to check for test reliability and validity

-- How to use assessment as a teaching tool

17. Use student evaluations of academic programs and the learning environment as a basis for strengthening the quality of education.

Community college students and alumni can be helpful in providing information about their overall learning experiences to help the colleges

make modifications on their student delivery systems in the following manner:

- Students could be assigned to work with college committees which make critical decisions about curricular and programmatic changes.
- A yearly reception at the college could be held for alumni to visit with students, faculty, counselors and administrators to share their academic/work experiences and to provide feedback to the college community regarding the value of their college experience in their present careers.

Summary

In summary, perhaps the greatest contribution that Involvement makes to community colleges is the identification of criteria which provide parameters for defining institutional quality. To move toward educational exeellence, community colleges will need to implement institutional infrastructures where students, counselors and administrators have the opportunity to be actively involved in the learning process. Clear expectations and standards of performance will have to be established in each course and pre-and post-examinations will have to be administered to test for proficiency in specified areas. Improvements in learning gains made in reading, writing and mathematics will need to be documented. The colleges will also need to verify improvements in student retention, transfer, and job performance after graduation. To achieve these reforms, community colleges will have to operate efficiently and in a cost-effective manner. Strong leadership coupled with careful institutional planning, the setting of long- and short range goals and priorities and the judicious use of funds can give colleges the organizational capabilities to undertake systematic improvements.

The significance of Involvement is that the Study Group presents a model for excellence which may be modified and adapted in any sector of postsecondary education. This blueprint for creating conditions of excellence around student involvement, high expectations and assessment and feedback provides community colleges with an educationally powerful vehicle for undertaking a comprehensive review of existing educational programs and services and for launching concrete initiatives to upgrade the undergraduate learning experience. Simply stated, Involvement tells community colleges: get involved and students will want to learn and stay in school; set high expectations and students will want to perform at their best; provide assessment and feedback and students will want to perform even better. Community colleges would do well to heed this simple message to undertake what may well be the most complex challenge of their educational history.

TABLE I

ENROLLMENT IN INSTITUTIONS OF HIGHER EDUCATION, BY ETHNICITY AND INSTITUTIONAL TYPE
50 STATES AND D. C., FALL 1982

Institutional Type	Non-Resident Alien	Black, Non-Hispanic	American Indian/ Alaskan Native	Asian or Pacific Islander	Hispanic	White, Non-Hispanic
Total, all institutions	331,301	1,101,499	87,700	351,001	519,250	9,997,117
Doctoral-level	138,443(42)	159,426(14)	12,462(14)	91,336(26)	73,006(14)	2,553,503(26)
Comprehensive	80,754(24)	268,632(24)	17,628(20)	69,431(20)	110,953(21)	2,285,552(23)
General Baccalaureate	27,203(8)	139,958(13)	6,165(7)	15,172(4)	25,029(5)	967,488(10)
Specialized **	21,399(6)	43,812(4)	1,768(2)	15,417(4)	16,688(3)	475,388(5)
2-Year	62,184(19)	478,274(43)	47,893(55)	158,188(45)	288,742(56)	3,628,555(36)
New	1,318(4)	11,397(1)	1,784(2)	1,457(4)	4,832(1)	86,631(8)

* Numbers in parenthesis indicate percentages which may not add up to 100 because of rounding.
** Those with a programmatic emphasis in one area of study.

Source: Broyles, S. G. Fall Enrollment in Colleges and Universities.
U. S. Government Printing Office: National Center for Education Statistics, 1984, p.65.

TABLE II

HIGH SCHOOL AVERAGES FOR TWO-AND FOUR-YEAR COLLEGE FRESHMEN, FALL 1979

Institutional Type	English HSA	Math HSA	Social Studies HSA	Natural Science HSA
Two-year	2.85	2.57	2.91	2.74
Four-year	3.09	2.77	3.14	2.94

Source: ACT, College Student Profiles: Norms for the ACT Assessment. Iowa: ACT Publications, 1980

TABLE III

FALL 1982 COLLEGE ATTENDANCE BY TYPE OF INSTITUTION AND GENDER

College Type	Men	Women	Total
Two-year	2,077,625(45)	2,586,211(55)	4,663,836
Four-year	3,921,618(51)	3,802,414(49)	7,724,032

Source: Broyles, S. C. Fall Enrollment in Colleges and Universities. U. S. Government Printing Office: National Center for Education Statistics, 1984, p.65.

TABLE IV

FALL 1982 COLLEGE ATTENDANCE BY ENROLLMENT STATUS

College Type	Full-Time	Part-time	Total
Two-year	1,616,857(36)	2,847,088(63)	4,463,945
Four-year*	3,667,235(70)	1,564,907(30)	5,232,142

*Includes doctoral-level, comprehensive, general baccalaureate, specialized and new institutions.

Source: Broyles, S. C., Fall Enrollment in Colleges and Universities 1982. Washington, D. C.: National Center for Education Statistics, July, 1984.

TABLE V

Fall 1973 College Attendance: Percentage By SES and Type of School

Type of College	SES Low	Medium*	High	All Levels
Four-year	15.7	26.1	57.8	31.6
Two-year	11.2	21.2	19.6	17.0
Total	26.9	47.3	77.4	48.6

*Includes middle two quartiles

Source: Bailey, J. P. & Collins, F. F. Entry Into Postsecondary Education, Washington, D. C.: National Center for Education Statistics, 1977. ERIC Document Reproduction No. ED 146 871

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