ABSTRACT

        The purposes of this literature search were to
document the need to increase the number of minority teachers in the
nation's elementary and secondary schools and review recommendations
for designing a teacher education model to meet that need. Community
colleges have proven to be the most successful institutions for
helping Blacks and Hispanics make the transition from secondary to
higher education. Recommendations from the literature provide the
bases for the establishment of a model teacher education program by
community colleges in cooperation with public schools and four-year
institutions. Key components of this model include: recruitment in
middle schools, high schools, non-traditional populations, and
on-campus; support services to include attractive financial aid
packages, academic support, and mentoring teams; curriculum
development that includes multicultural experiences and field
experiences in the first year of study; articulation agreements with
four-year institutions; program evaluation that includes value-added
measures; a multi-ethnic project team; and an advisory committee. A
bibliography containing 48 references is included. (LL)

PREPARING MINORITY STUDENTS TO BE TEACHERS IN THE 1990'S AND THE 21ST CENTURY: A WORKING PAPER

by

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SUMMARY

The purposes of this literature search were to document the need to increase the number of minority teachers in the nation's elementary and secondary schools and review recommendations for designing an exemplary teacher education model to meet that need. In 1980, minorities accounted for 12% of elementary and secondary teachers. By 1990, the number had decreased to 5%. This decrease is occuring at a time when the number of minorities in the school-age population is steadily increasing. At present, more than 30% of students enrolled in public schools are minority and that number is expected to increase substantially in the 1990's and the first two decades of the twenty-first century. A similar profile of minority teachers' availability exists in the greater Philadelphia area.

Many authorities agree that a quality education requires that all students be exposed to the variety of cultural perspectives that represent the nation at large and that such exposure can be accomplished via a multi-ethnic teaching force in which racial and ethnic groups are included at a parity with their numbers in the population. Because of this lack of parity in our nation's schools, the average American child will have only two teachers from any minority group, while many will have none.

In order to substantially increase the number of minority teachers, the education of minority students must be improved throughout the educational pipeline, from kindergarten through graduate school. There are a number of barriers that stand in the way of minorities receiving a quality education, both in-school and out-of-school. If, as demographers predict, we are moving toward minorities being the majority population in this country in the 21st century, they must be included in the economic, political, social, and educational mainstream. All sectors of the society must work together to ensure a quality education for minorities because it's connected to the nation's common future.

Community colleges are in a unique position to help reach this common goal because they have proven to be the most successful institutions for helping blacks and Hispanics make the transition from secondary to higher education. Recommendations from the literature search provide the basis for the establishment of a model teacher education program by community colleges in cooperation with public schools and four-year institutions. Key components of this model includes: recruitment in middle schools, high schools, non-traditional populations, and on-campus; support services to include attractive financial aid packages, academic support and mentoring teams; curriculum development that includes multi-cultural experiences and field experiences in the first year of study; articulation agreements with four-year institutions; program evaluation that includes value-added measures; a multi-ethnic project team; and an advisory committee

PREPARING MINORITY STUDENTS TO BE TEACHERS IN THE 1990'S AND
THE 21ST CENTURY: A WORKING PAPER

I. STATEMENT OF NEED

The Need for Minority Teachers

     The need to increase the number of minority teachers in
elementary and secondary schools has become a resounding
mandate in many quarters of the educational arena over the past
decade. In 1980, minorities accounted for 12% of elementary
and secondary teachers.   By 1990, it is projected that this
number will decrease to 5% (Fields, 1988).   This decrease in
the number of minorities is occuring at a time when the number
of minorities in the   school-age population is   steadily
increasing (Franklin, 1987).

     Overall, more than 30 percent of students enrolled in
public schools are minority.   The majority of students in
American elementary schools are now minority group members.   In
the nation's 26 largest cities, the majority of students are
minorities. Present demographic projections indicate that by
the year 2020, minorities will be the majority population in
this country. This change is largely a result of immigration
and differing birth rates.   This is clearly a change for which
the nation is unprepared and will have a decided impact on the
quality of life in this country (Johnson, et al., 1988; QEM,
1990).

     The decreasing number of minorities in the teaching
profession has been attributed to a number of reasons to
include, increasing college costs, the lure of more lucrative
careers in other fields, lagging college enrollment among
minority students, and failure of minority students to pass
standardized teacher certification   tests (Fields,   1988).
Minority teachers who are hired may find it more difficult to
advance because of the cost required for additional degrees or
they may decide to leave the profession because of relatively
low salaries, lack of meaningful involvement in decisions that
affect their working conditions and pressures to go into more
lucrative fields that are now available to them (Fields, 1988;
Johnston, et al., 1989).

     The educational pipeline through which prospective
minority teachers emerge is fraught with leaks all along the
way. Minority students arrive at the school house door already
"at risk" because many of their parents have poverty level
incomes, a greater rate of unemployment, and are less likely to
have a college education.   In addition, the health care of

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minorities is inferior to whites and they suffer a higher
mortality rate (Bray, 1984; Johnston, et al., 1989).

Some school districts may not be doing all they can to
hire minority teachers, partly due to a lack of commitment to
cultural diversity in their schools (Johnston, et al., 1989;
McLarin, 1990). For example, one superintendent from a
Philadelphia suburban school district recently stated, "I have
never tried to find out if they [teacher applicants] are
minorities or not... I don't care if they are black, red green
or orange. I think the whole topic is vastly overrated." A
local school board president indicates that, ... "teachers are
teachers, ... I don't believe minority teachers are any
different than other teachers" (McLarin, 1990, p. 1A).

This lack of commitment to diversity and/or the inability
to employ minority teachers in elementary and secondary schools
in the Philadelphia metropolitan area is reflected in the small
percentage of minority teachers employed in local school
districts. The School District of Philadelphia, by far,
exceeds most of its suburban school districts in the percentage
of minority teachers in their workforce with 39 percent.
However, there is a belief by many educators that the ethnic
percentage of teachers should match those in the student body.
A 1987-88 report indicates that 76% of the students in the
School District are minority. In contrast to most suburban
school districts in this area, Norristown reports a student
enrollment that is 38% minority and a 20% minority teaching
staff (Hopkins, 1989; McLarin, 1990; QEM, 1990). With such a
low match throughout the country, the average American child
will have only two teachers from any minority group, while many
will have none (Johnston, et al., 1989; McLarin, 1990).

The American Association of Colleges for Teacher
Education's definition of a quality education includes a
commitment to a multi-ethnic teaching force. It states that:

>   A quality education requires that all students be exposed
>   to the variety of cultural perspectives that represent the
>   nation at large. Such exposure can be accomplished only
>   via a multi-ethnic teaching force in which racial and
>   ethnic groups are included at a level of parity with their
>   numbers in the population (Johnston, et al., 1989, p.99).

Loehr (1988) clearly states why there is such an urgent
need to increase the proportion of blacks and other minority
teachers in American schools:

>   ... the problem is primarily a matter of educational
>   opportunity. The presence of appropriate models in
>   schools is crucial for helping minority students see

the academic environment as one in which they can
succeed--and should strive to succeed.

Without close, living examples, many of these young
people will continue to hold a sadly limited image of
success--one that devalues academic achievement.

For the sake of such students and the society of which
they make up a steadily growing portion, policymakers
must develop solid, effective plans to confront--and
solve--this problem (p. 32).

Barriers to a Quality Education for Minorities

A recent report, EDUCATION THAT WORKS: AN ACTION PLAN FOR
THE EDUCATION OF MINORITIES (hereafter referred to as the QEM
Report), underlines the critical need for all sectors of the
society to work together to ensure a quality education for
minorities. It is connected to the nation's common future.
The report outlines a number of barriers that stand between
minorities and a quality education. This includes ten myths
that have shaped the public's perspective (QEM, 1990):

Myth # 1: Learning is due to innate abilities and
minorities are simply less capable of educational
excellence than whites.
Myth # 2: The situation is hopeless; the problems
minority youth face, including poverty, teen pregnancy,
unemployment, drug abuse, and high dropout rates are so
overwhelming that society is incapable of providing
effective responses.
Myth # 3: Quality education for all is a luxury, since
not all jobs presently require creativity and problem
solving skills.
Myth # 4: Education is an expense and not an investment.
Myth # 5: Equity and excellence in education are in
conflict
Myth # 6: All we need are marginal changes.
Myth # 7: Minorities don't care about education.
Myth # 8: Bilingual education delays the learning of
English and hinders academic achievement.
Myth # 9: The problem will go away.
Myth # 10: Educational success or failure is within the
complete control of each individual and in America anybody
can make it (pp. 38-40).

The QEM Report (1990) outlines some additional obstacles that prevent minority youth from receiving a quality education in this country. Some in-school obstacles include, low expectations, tracking, inadequate school financing, too few minority teachers, overreliance on testing, poorly prepared teachers, and disregard of language and cultural diversity. Out-of-school obstacles include poverty and hopelessness, absence of an educational legacy, and negative peer pressure.

Goals and Guidelines

The QEM Report (1990) set six goals for the year 2000 that will help to ensure a quality education for minority Americans: 1) Ensure that minority students start school prepared to learn; 2) ensure that the academic achievement of minority youth is at a level that will enable them, upon graduation from high school, to enter the workforce or college fully prepared to be successful and not in need of remediation; 3) significantly increase the participation of minority students in higher education with a special emphasis on the study of mathematics, science, and engineering; 4) strengthen and increase the number of teachers of minority students; 5) strengthen the school-to-work transition so that minority students who do not choose college leave high school prepared with the skills necessary to particpate productively in the world of work and with the foundation required to upgrade their skills and advance their careers; and 6) provide quality out-of school experiences and opportunities to supplement the schooling of minority youth and adults.

While community colleges can serve an important role in obtaining each of the six stated goals, goal 4 is more directly related to the topic at hand--strengthening and increasing the number of teachers of minorities. The writers of the QEM Report (1990) believe that this goal can be achieved if we:

o   Quintuple the number of minority college students newly qualified to teach who enter teaching from about 6,000 to 30,000 by 2000, with a special emphasis on mathematics and science teachers.
o   Triple the number of minority tenure professors in science and engineering fields from 400 in 1985 to 1,200 in the year 2000.
o   Increase by one-third the number of certified bilingual teachers, an increase of about 35,000 by the year 2000 (p. 7)

Some recommended strategies for strengthening teachers of minority students include the following (QEM, 1990, p.70):

o Provide incentives for the best teachers to be available to the students that need them most.
o Pay educators to work 12 months, and have them use that time to prepare for and deliver quality education to students.
o Support and expand the efforts of predominately minority institutions to prepare teachers, including bilingual teachers.
o Develop a more creative recruitment and outreach program for prospective teachers.
o Support alternative paths into teaching from other professions.
o Creative a National Merit Teaching Scholarship Program.
o Develop loan forgiveness programs for high-ability minority students to attract them to teaching.
o Establish a national Doctoral Opportunities Program.

Finally, the QEM Report (1990) recommends a number of guidelines and strategies for an action plan for all sectors of the society to work together to ensure a quality education for minorities. The guidelines include (pp. 53-54):

o Intervene early.
o Restructure the entire educational system.
o Create an environment for success.
o Support what works.
o Respect and value the culture of the child in school.
o Strengthen existing bonds and forge new linkages among all elements of the education system that serve minority students.
o Create nontraditional and life-long learning opportunities for minority youth.
o Create incentives that will make the best teachers available to those who need them most.
o Coordinate existing intervention programs by strengthening the bonds between the schools and other service delivery systems in low-income communities through implementation of school-based services.
o Revitalize the traditional in minority communities and families in the power of education to advance minority children.

Institutions like Community College of Philadelphia are in a unique position to be a vital force in ensuring quality education for minority youth by preparing an increasing number of minorities to enter the teaching force. Community colleges have proven to be the most successful institutions for helping blacks and Hispanics make the transition from secondary to

higher education. Forty-five percent of all blacks and 54% of all Hispanics enrolled in postsecondary institutions attend two-year colleges (Haberman, 1988). To accomplish the goal of preparing more minority teachers, the College will need to strengthen its bonds and forge new linkages with middle schools, high schools, and four-year institutions, develop more creative recruitment and retention programs, and financial aid packages that will attract minority students to the teaching profession.

II. COMMITMENT TO DIVERSITY AND TEACHER PREPARATION

Commitment to Diversity

It is quite clear that a commitment to cultural and ethnic diversity in our schools, colleges and universities is critical to the well-being of this country, now and in the 21st century. If, as demographers predict, we are moving toward minorities being the majority population in this country in the 21st century, they must be included in the economic, political, social and educational mainstream (Green, 1989).

Ernest Boyer states, "I recognize that inequality is rooted in society at large. But it falls on higher education to have an unequivocal commitment to social justice, and in this crusade, the college president must lead the way" (Conciatore, 1990, p. 1). Green (1989) lists some of the problems that underscore reasons why the issue of minority participation in higher education is a major concern (pp. 2-3):

o Higher education's pool of students is increasingly made up of minority youth.
o College attendance by black students has slowed; the gap in participation between whites and blacks is growing.
o The rate of college attendance for Hispanic youth has declined in the last decade.
o College attendance by American Indian students lags far behind black and Hispanic attendance.
o Minority students are concentrated in community colleges and few of these students ever go on to attend or graduate from four-year institutions.
o Black and Hispanic students are far less likely than white students to complete a degree.
o Blacks attending historically black colleges and universities (HBCUs) are more likely to complete a degree than those attending white institutions.
o Black and Hispanic participation in graduate and professional education can best be described as miniscule in the areas of mathematics and the sciences.

In order for any new effort or initiative to be successful, there must be commitment from top leadership on campus. Those institutions that have been successful in improving minority participation have developed comprehensive and institution-wide plans involving faculty, administrators and students. The top leadership established a climate that supported specific activities that translate commitment into results (Green, 1989).

Two comprehensive, institution-wide approaches that receive a lot of attention in the educational literature are The Madison Plan, implemented under the leadership of Chancellor Donna Shalala at the University of Wisconsin-Madison and the one at Miami-Dade Community College under the leadership of President Robert McCabe. President McCabe strengthened his commitment to enhancing the particpation of minorities on campus by announcing that he would evaluate his management team on the criteria set forth and asked that the board of trustees hold him similarly accountable (Green, 1989; Wood, 1988).

The Madison Plan proposes changes and improvements designed to make significant progress in attracting and retaining minoritiy students and faculty. With an allocation of $4.7 million over 3 years, the plan details changes that enhance ethnic diversity in curriculum as a crucial element of educational excellence, and offers a vision that promotes an ethnically diverse, non-discriminatory environment (Conciatore, 1990; Wood, 1988). Various aspects of each of these plans are included in related sections of this paper.

The plan at Miami-Dade, established some twenty years ago, is illustrative of the payoffs of attempts to enhance diversity. Their payoffs include:

o Growth for students, faculty, and staff.
o Enrichment of the educational experience far beyond what any formal curriculum might deliver.
o The satisfaction that comes from providing access to education to all interested individuals and thus the potential to share in the good things this society has to offer (Green, 1989, p. 173).

As a result of his evaluation of Minority Achievement Programs, Herman Blake has developed a list of recommendations that will be useful to colleges and universities as they address the needs of minority students:

o Planning and implementation always take longer than expected. Study the situation carefully to avoid addressing only superficial problems.

o Faculty members need training and support in dealing with minority and disadvantaged students. Techniques and assumptions used with majority culture students are not necessarily applicable to other groups.

o While small classes may provide greater opportunities for contact between individual students and instructors, their impact is greatly reduced if instruction must be directed at the least able students.

o Balancing intensive academic sessions with recreational activities improves student performance and helps build a supportive peer network.

o It cannot be assumed that minorities have a natural affinity with each other; conflicts can arise between students and among students and staff members of the same or different races.

o Peer counseling programs for minority students provide valuable role models, a sense of community support, and familiarity with someone who has faced similar problems. They also offer upper division students an opportunity to participate in a meaningful educational experience that builds their own self-confidence.

o Contact with successful minority professionals can sustain students through difficult periods. Because some minority students have not known any black professionals personally, such contact can dispel career misconceptions.

o Recognize that minority students may need assistance coordinating employment, transportation, and child care, in addition to help with their course work. Offer sessions on how to budget time and relieve stress (Helping, 1985, pp. 11-12).

Useful to colleges and universities also are the recommendations that Blake makes for funding agencies examining proposals submitted by institutions requesting support:

o Examine proposals for indications of strength in the four conditions identified as necessary for program success:
  - institutional commitment--internal funding, plans to continue activity past grant period, release of project staff from other assignments as appropriate, coordination with campus offices other than minority affairs.
  - program leadership--managerial skills and experience, inspired and imaginative direction, ability to motivate students and serve as role model, knowledge of and sensitivity to minority students' needs and concerns.

- program conceptualization--understanding of the
  complexity of the problem addressed, activities
  appropriate to audience and problem, realistic
  goals.
- faculty involvement--participation by regular
  faculty, in addition to nonteaching staff, in
  planning and instructional activities.
o Coordinate meetings for project directors from
  different schools to discuss common concerns, share
  ideas, and overcome feelings of isolation.
o The importance of early contact with high potential
  students cannot be overstated. Involve elementary and
  secondary schools in activities designed to improve
  students' chances for collegiate success. Precollege
  instructors value exchanges with their college peers
  and gain a new appreciation of their role in students'
  future (Helping, 1985, p. 12).

Commitment to Teacher Education

Johnston, et al. (1989) report that the highest officials
of a college or university must take the lead in the
reconsideration of teacher education as a priority on their
campus. Their effectiveness will be determined, in large part,
by their ability to persuade other administrators, staff and
faculty to take ownership of educational reform. Top
leadership must also exemplify the cooperative and
collaborative spirit needed to carry out the work and they must
stay personally involved in the ongoing process.

Probably the most important challenge in this process is
strengthening the entire campus as an environment for teaching
and learning. This means that good teaching will be valued on
an equal plain with research and publication activities. It
means that support for effective teaching will be rewarded
through sabbaticals for professional development, funds
earmarked for improving teaching and released time. This, of
course, does not preclude good teachers engaging in research
and publication activities. As a matter of fact, effective
teachers are in a good position to add to both research and
practical knowledge about the processes of teaching. For the
most part, Ph.D's who dominate the ranks of college teaching
are trained as researchers and specialists in their fields and
not in college teaching. Colleges that are committed to
teacher preparation programs as a priority must be willing to
earkmark funds and resources to enhance the teaching
effectiveness of its own faculty. In addition, if good teaching
is going to be valued on campus, it must contribute to the
achievement of tenure, promotion, and salary advancement
(Integrity, 1985; Johnston, et al., 1989).

Whether it's teacher education or other undergraduate programs, the Association of American Colleges believes that there are nine elements that are basic to a coherent undergraduate program (Integrity, 1985, pp. 15-23):

o Inquiry, abstract logical thinking, critical analysis
o Literacy: writing, reading, speaking, listening
o Understanding numerical data
o Historical consciousness
o Science
o Values
o Art
o International and multicultural experiences
o Study-in-depth

In a more recent report (Katz, et al., 1988), the Association of American Colleges proposes the kind of college teaching that encourages active learning. Faculty must also become knowledgeable about the ways in which their students hear, understand, interpret and integrate ideas. The report identifies ten teaching methods that will transform students from passive listeners to active thinkers. Teacher educators will need to give serious consideration to these methods as they plan educational reform (p. 28).

o Stimulate active comprehension
o Students and faculty listening to each other
o Collaborative learning
o Using electronic media
o Providing laboratory experiences without laboratories
o Fostering out-of-classroom learning
o Encouraging student reflection on work
o Using undergraduates as teaching assistants
o Promoting undergraduate research
o Collaborative course development

III. RECRUITMENT AND RETENTION OF MINORITIES IN TEACHER EDUCATION

Recruitment

Recruitment of minorities in teacher education must begin early. Ideally, career education programs that introduce teaching as a career option should begin no later than eighth grade. First of all, this will provide students the opportunity to plan with their high school counselors to enroll in the required college preparation courses. Course decisions made as early as the eighth grade can have a permanent effect on a student's college and career projection. Colleges must work with families and trained high school counselors to enable students to prepare for career options that are available to

them (QEM, 1990; Thomas & Tyler, 1984). Secondly, students should have opportunities during the high school years to become involved in experiential activities, such as tutoring younger children that will serve an important function in their decision making about a career in education.

William Blakley (Take, 1987) suggests that if college presidents and chancellors really want to learn about how to recruit highly motivated black students, all they have to do is talk to their football coaches. He states that:

> When Joe Paterno at Penn wants to find a split end or running back with the capabality of a Lenny Moore, Lydell Mitchell, Curt Wadner or D.J. Dozier, he doesn't wait until eleventh grade to begin recruiting him. He starts out looking in the eighth and ninth grades. When he finds someone, he tracks him carefully. He has a package of aid to offer. When he gets him to Penn State, he manages his life. He makes him study as well as play football.

> Universities can go after black students and have high standards at the same time. Eighty-six percent of Joe Paterno's players graduate and 90 percent of John Thompson's do. It just takes lots of work, and lots of support.

> ... Every college and university in the country should develop a feeder system based on relationships with particular high schools. But instead of looking for future split ends, they should be looking for future physicists and poets [and teachers] (p. 41).

Two recent studies underscore the need to introduce teaching as a profession early in the school life of potential teachers. A survey of high school sophomores indicated that they already rated teaching "very low" as a possible career choice. Most of the students, regardless of race or gender, actually "loathed" teaching as a career, especially those students enrolled in advanced classes (Johnston, et al., 1989). A second study of high school seniors in ten southeastern states revealed that 74% of the seniors surveyed had never had anyone--not counselors, teachers, or parents--discuss with them teaching as a career option (Hopkins, 1989).

If colleges are going to be successful in increasing the number of minorities in the teaching profession, teacher education faculty must begin to work with middle and high school teachers and counselors and parents to introduce teaching as a career option. To facilitate this process, teacher education faculty from community colleges can speak in classrooms and assemblies, distribute literature to students and parents, work with high principals, teachers and counselors

to identify students interested in teaching. College faculty can also work as a member of a team to provide preprofessional experiences for interested students to include providing service and tutorial opportunities; encouraging formation of student education clubs, and providing opportunities for enrichment courses and experiences on the college campus (Johnston, et al., 1989).

The QEM Report (1990) suggests that schools of education should mount an aggressive campaign to visit every high school in the 25 largest cities in this country to encourage minority students to consider teaching as a career. During these visits, recruiters should emphasize the pending shortage of teachers, the critical need for minority teachers, the need for minority teachers as leaders in minority communities, and the recent improvements in teacher pay scales and working conditions in all systems.

The Minority Teacher Preparation Program at the University of Wisconsin-Whitewater is an example of one college's attempt to increase the number of minority teachers by working with high school students as well as students already on campus. Some elements of their program include: working through high school academic advisors to identify and aggressively recruit qualified students, attempting to recruit community college students through improved advising, priority registration, guaranteed enrollment at the university; and identifying students already on campus who might, with some encouragement, enroll in the teacher education program. This program provides incentives in the form of special tutorial help, special advising and counseling, and a supportive community (Johnston, et al., 1989).

In its Teaching Opportunities Program, Temple University works with two high schools where students are given the opportunity to join clubs advised by two teachers from their school, club members tutor in their own schools, assist in classrooms, visit other schools to observe special teaching programs and audit classes at Temple. After high school graduation, students who meet Temple's entrance requirements may complete certification requirements in the College of Education and if they teach in the School District of Philadelphia for five years, they qualify for a loan-forgiveness program (Johnston, et al., 1989).

At the University of Dayton, every spring and fall an orientation session is held for high school seniors on what it means to study to become a teacher. They are introduced to the subjects they would study, attend simulated classes, and advised at recruitment sessions. In the Teaching Professions Program at Coolidge High School in Washington D.C., high school students are recruited in their first or second year. They

take a special program consisting of standard academic work supplemented with special classes in education, speech, computers and humanities. As seniors, they are required to visit a city public school regularly and assist a full-time teacher. Students who agree to work in the Washington, D.C. schools for three years, following the completion of their teaching degree, will be guaranteed substantial financial aid for college (Johnston, et al., 1989).

The Tennessee Higher Education Commission (Report, 1988) proposed the development of a program for recruiting well-qualified students, especially black students, into teacher education. The Commission recommended revitalizing and opening of future teachers/young educators clubs to all junior and senior high students interested in teaching, initiating a mentoring program for minority students and establishing teacher cadet programs where college and high school teachers work together to encourage academically able students to enter the teaching profession. The Commission also encouraged the development of post high school projects to include the recruitment of teacher aides, substitute teachers, community college students, and non-degreed community residents into teacher preparation programs.

Heritage College and Yakima Washington School District also developed a program to recruit persons into teacher education programs who are not currently enrolled in school. The program attempts to interest nonacademic (mostly Hispanic) members of the school district in a special teacher training program for bilingual teachers at the college. Classes are given at times convenient to the staff and the program is designed so that participants can complete a degree in three years without forgoing their preenrollment income (Johnston, et al., 1989).

In collaboration with Pace University and White Plains Public Schools, Westchester Community College (WCC) has launched Project SELECT (Search for Excellent Leaders to Enter Teaching a Career in Teaching), a program designed to address the need for more teachers of good quality. At present, WCC does not have a teacher education program, but through Project SELECT the college finds and nurtures bright, caring potential teachers, encourages the two-year student to continue his or her education, seeks out minority students, and introduces students to a local public school system. Students complete their teacher training at Pace University and student teaching in the White Plains Public Schools which assists them in job placement. Each semester at WCC, students who have a 3.75 and above GPA and selected students on the dean's list are sent personal invitations by the president to attend a Project SELECT reception where they are informed about the program and

invited to take the course,"Introduction to Schools and Teaching" (Schneider & Tan, 1990).

At Eastern Michigan University, teachers make special efforts to recruit math and science majors for the teacher certification program. Just before Thanksgiving, letters are sent to the homes of math and science majors to facilitate discussions with their parents the possibility of planning for a teaching career. Interested students are invited to an informational session upon their return (Johnston, et al., 1989).

A number of precollege programs have been implemented throughout the U.S. with the primary goal of increasing the enrollment of minorities at colleges and universities. While these programs do not target teaching as a career, in particular, they contain many elements that may be useful to teacher educators as they plan precollege experiences for future teachers. DeKalb College, a two-year college in the suburbs of Atlanta, adopted a nearby elementary school where college faculty make special presentations to classes and students and teachers are invited and provided transportation to special events on campus (Nesbitt, 1989). Investing Now is a collaborative effort of Carnegie Mellon, Duquesne University, the University of Pittsburgh and the Pittsburgh Public Schools. High-achieving, black, eighth graders are recruited to participate in classes, workshops, and cultural and social activities throughout their middle and high school years to ensure that they are well prepared for matriculation at any college or university. The program, which includes parental involvement, provides summer and academic year activities (Investing, undated).

In Philadelphia, Dr. Ruth Wright Hayre established a fund to provide for the college education of students in two Philadelphia schools. The Project, called "Tell them We are Rising," administered by Temple University, was slated to hire a coordinator to counsel the students through their junior and senior high school years and to serve as a liaison with the university faculty participating in the project (Former, 1988). Just recently, 30 members of the Omega Psi Phi Fraternity, Inc. agreed to serve as mentors for inner-city boys in the program (Byrd, 1990). With funds from Pew Memorial Trust, The Philadelphia Schools Collaborative Project is restructuring predominatly minority comprehensive high schools in the city. A task force of admission officers from local colleges and universities has been formed to promote recruitment from the restructured schools (Johnston, et al., 1989).

With funds from the William Penn Foundation and the New Jersey Department of Education, Glassboro State College has established the CHAMP Project (Creating Higher Aspirations and Motivation Program) in two high schools in Camden. The project is designed to prepare inner-city youth for college board exams, entrance exams, fill out financial aid forms, obtain vocational guidance, college-selection guidance, tutorial services and provide bus trips to college campuses. Two permanent staff members are employed at each high school, part-time teachers are employed to tutor students and adults· are recruited for the mentoring program to serve as role models and to motivate and counsel students (Ott, 1989).

Davidson College in collaboration with the Charlotte-Mecklenberg school district has developed a program with the goal of increasing the number of of black high school graduates who are prepared for the academic rigors of selective colleges and universities. Each year, 30 black eighth graders, with underdeveloped potential, are invited to participate in a five-year sequential program of academic year and summer experiences that takes the students through their first year of college. The program focuses on English, math, science, test-taking skills and personal development (Johnston, et al., 1989).

In the career education component of the program at Middle College High School, on the campus of LaGuardia Community College, each student is required to particpate in three different internships, one per year. Two quarters per year, the students attend classes in personal and career development. The third quarter is spent in an internship, which is in a school setting for those students interested in teaching as a career. The high school program enrolls "at risk" high school students who are in danger of dropping out of school. Approximately 85% of the students get their high school diploma and 75% go on to college (Callagy, 1989).

As a part of the Madison Plan, the University of Wisconsin-Madison plans to double the number of minority and disadvantaged students served by the Summer Collegiate Experience Program, an eight week-session that helps prepare admitted students for University study and campus life in the summer of their freshman year. The university expects to expand its recruitment efforts in Milwaukee and other Wisconsin areas with significant populations of minority students and to use enrolled University students in minority recruiting efforts (Wood, 1988). Miami-Dade has several programs designed to recruit minorities to the college. The Black Student Opportunity Program provides opportunites through three years of high school. Students are exposed to basic skills testing, prescriptive course selection, test-taking skills development,

career planning and summer work internships. Mentors are chosen from the business community (Green, 1989).

Retention

Once minority students are recruited into teacher education programs, the college faculty and staff must have a comprehensive, well-coordinated, non-fragmented retention program in place. A successful retention program begins with early intervention and ends with graduation and placement. For minority students, assurance of financial security is particularly critical at the point of access to the college or university (Wood, 1988).

Wilson and Justin (1988) indicate that the reasons for minority attrition in higher education are well known and includes limited financing, a hostile campus environment, racism, lack of relevant curriculum and academic difficulties. At Arizona State Univerity, minority students indicated that they left for the following reasons--listed in the order of frequency of response: family problems; money problems; medical problems; work conflicts; accept full-time employment; academic performance; tranferring to another college; and leaving the area (Wood, 1988).

To reverse this leaving trend of minority students, Wood (1988) suggests several key components that link together to comprise an ideal retention program. Included are:

o Early intervention
o Financial aid
o Intellectual integration
o Advising
o Career counseling and placement
o Monitoring and evaluation
o Community service programs

Gutierriez (1988) has also identified factors that are a part of an effective retention program. He indicates that retention programs should be:

o Comprehensive
o Institutionalized
o Situated well in the university organization
o Staffed by competent and dedicated persons
o Non-stigmatizing to participants
o Focused on the early college experience
o Monitored and evaluated systematically

In implementing an effective retention program, Tinto (1988) recommends that the best investment of resources lies in "front loading" of effort--early intervention. He states that this is critical not only because the greatest proportion of leaving occurs in the first year, but also because over half of all students leavings have their roots in the first-year college experience.

Gutierriez (1988) reports that social, intellectual and cultural integration strengthens the students' attachment to the college or university and their commitment to graduate. He calls this process "becoming connected." This integration is mediated through students' frequent use of campus facilities, holding a job on campus and through informal contacts with teachers, students and staff, especially outside the classroom. Faculty mentoring and advising activities are proving to be important retention tools that help to facilitate the process of "becoming connected"(Clay, 1989; Wood, 1988).

A group of faculty and adminstrative staff at Miami-Dade created the Comprehensive Opportunity to Pursue Excellence (COPE) program in response to the significant number of students dropping out of their courses before the end of the semester. Some of the student problems identified were absence of clear career goals, family hardships and a lack of real involvement within the college environment. COPE matched these high risk students, mostly minority, with trained faculty and staff facilitators who meet informally with the students on a regular basis to resolve issues that may interfere with their academic success (Green, 1989).

As part of its retention program, the University of Wisconsin-Madison proposed a campus-wide program to track and assist minority freshmen and sophomores. The purpose is to foster contacts and interaction with faculty and staff who have shown interest in being involved in regular, informal relationships with students (Wood, 1988). Descriptions of other retention programs and components are included in the sections on two-plus-two programs and support services.

IV. TWO-PLUS-TWO PROGRAMS IN TEACHER EDUCATION

Model Programs

A few two-year colleges have developed programs with the purpose of preparing minority students for the teaching profession. Milwaukee Area Technical College (MATC), in cooperation with the University of Wisconsin at Madison, Whitewater, Milwaukee and Oshkosh, has established the Cooperative Urban Teacher Education Program (CUTEP). The primary goal of the program is to help talented and interested

minority students continue in four-year teaching programs.
Students earn the associates degree at MATC and continue with
junior level standing at the University of Wisconsin. MATC
worked closely with the four-year institutions to design new
curricula and identify support services required to help
talented and interested minority students complete the
bachelor's degree in education (Baez & Clarke, 1989-90).

The CUTEP assures the success of its students through a
series of steps that include (Baez & Clarke, 1989-90):

o A complete curriculum articulation and coordination of
coursework between MATC and the universities.
o Achievement of standards of academic performance that
provide a basic foundation and an academically sound
preparation for completing a bachelor's of science in
education degree.
o Students are prepared by MATC to pass the state
required Pre-Professional Skills Test (PPST) in
reading, writing and math before being accepted into
the program.
o Financial support for students in the program through
scholarships, grants, loans, work/study, and other
forms of financial assistance.
o The full range of faculty advising and student
counseling services.
o One-to-one tutorial assistance.
o Other academic support services including reading,
writing and math laboratories.

The program includes dual enrollment at MATC and one of the
four-year institutions, a paid internship and a bilingual
teacher fellowship program.

A similar urban teacher program began in September, 1989,
at Wayne County Community College (WCCC) (Baez & Clarke,
1989-90; Bradley, 1990; Lyons, 1989). This program is a
cooperative effort of WCC with Eastern Michigan University
(EMU), Wayne State University (WSU), three Metro Detroit area
school districts, and the Michigan Department of Education.
Students are assigned mentors (public school teachers) and
begin working in the classroom in the second semester of their
first year. The majority of the 70 students enrolled are older
black adults, including ten men. One innovation that deserves
special attention is that except for a one-semester residency
at the four-year institution, students will take all of their
courses on the campus of the community college. To support
this program, a $300,000 grant has been received from the
Michigan legislature, $115,000 from the state department of

education and $67,000 from the federal Fund for the Improvement of Postsecondary Education. In fall 1990, Kent State University and Cuyahoga Community College in Ohio expect to begin a similar program (Bradley, 1990).

Tranfer Opportunities

Rendon and Nora (1989) report that "unless community colleges can raise the numbers of minority students who persist and transfer, far above historic levels, there will not be a significant increase in the number of minorities earning undergraduate and graduate degrees" [in teacher education as well as other programs] (p.13). Estimates of transfer rates range from 5 to 15 percent and may decline to about 3 to 5 percent. In order to prepare an increasing number of minorities for the teaching profession in this country, community colleges must place the transfer function at the top of their priority list (O'Brien, 1989; Rendon & Nora, 1989).

Rendon (1986) reports that community college faculty must work with four-year institutions to help students avoid "transfer shock," which is marked by a GPA decrease and a feeling of alienation during the first term of upper division enrollment. She identifies several factors at the four-year institution that may contribute to the difficulties students experience in the new environment:

o A larger, more impersonal environment than found in most community colleges.
o Rigorous grading system.
o Courses which cover content not taught before.
o Increased demands placed on study time.
o Lack of faculty/student interaction.
o Different procedures and policies related to calendar system, enrollment policies and grading practices (p.7).

Rendon and Nora (1989) make a number of recommendations to states that will help to facilitate successful transfer of community college students to four-year colleges and universities. They recommend that states develop academic colleges, fund middle college concept and support grants and scholarships for minority transfer system, state transfer student monitoring system, institutional incentives, academic partnership programs and reform assessment.

To ensure transfer of minority students, Rendon and Nora (1989) have made the following institutional recommendations:

Support Services
o Year of the Transfer Student. An Agressive campaign should be launched by both state agencies and community colleges to promote opportunities for transfer students.
o Transfer Catalog/Newsletter. The college should issue a special Student Catalog which includes a step-by-step guide to transferring, a description of the differences between entering a general education and a vocational-technical track, an explanation of different programs of study, and examples of general education requirements, among others.
o Transfer Centers. Students should have access to Transfer Centers, central places where students can get counseling, information and assistance throughout the transfer process.
o Financial Aid and College Awareness. Access to information about financial aid and college opportunities should be widely available to minority students and their parents.
o Visits to Four-year College Campuses. Two- and four-year colleges should work collaborately to sponsor field trips so that prospective transfer students have the opportunity to visit universities and interact with students and faculty.

Freshman Year Experience
o Cluster Programs in Major Field of Study. Freshman students in selective majors should take 2-3 courses in their program together each semester and be assigned a mentor who can assist them in every phase of their community college experience.
o Faculty Transfer Mentors. Each transfer student should be assigned a faculty transfer mentor--someone who knows and understands the major the student has selected.
o Extracurricular Activities. Students should be afforded opportunities to be socially integrated in an academic environment.
o Transfer Student Orientation. Special orientation for transfer students should be made available, both when students enroll for the first time and at the time students prepare to transfer.

Faculty Involvement
o   Faculty Development. Institutions should allocate a
    special fund to help faculty develop new curricula and
    materials, conduct classroom research, serve on articu-
    lation committees, participate in academic alliances,
    and/or present classroom teaching research and
    instructional innovations at state and national
    conferences.
o   Articulation Committees. Faculty should be supported
    to participate in articulation committees to hammer out
    core curriculum requirements in selective programs of
    study with faculty in senior institutions.
o   Student Assessment. Resources should be available to
    help faculty obtain, use, interpret, design, and apply
    tests to evaluate and improve their classroom
    practices, as well as to assess student performance
    from the beginning to the end of the semester.
o   Faculty Incentives. Special funding could be made
    available to faculty who participate in developing
    articulation agreements with four-year college faculty
    (pp. 24-26).

Rendon and Nora (1989) also recommend program-by-program
articulation with both high schools and senior institutions as
well as evaluation and research efforts to document student and
institutional outcomes.

V. SUPPORT SERVICES

Financial Aid

      One of the most critical recruitment and retention tools
needed to attract high-ability, low-income, minority students
to teacher education programs is an attractive financial aid
package that ensures financial needs to graduation. The type
of financial aid available is also an important factor in
students' decision making. Findings on the effects of grants
and scholarships are generally positive, but the effects of
loans are mixed (The Commission, 1982). The possibility of a
large loan obligation may actually discourage low-income
students from attending college. Loans required to complete
the college degree may possibly be larger than their family's
total yearly income.

      Both legislators and educators believe that strengthening
the grant system, along with loan forgiveness programs, will
encourage many more needy minority students to enroll in
teacher education programs.   Two bills recently introduced to
congress focus on providing funds for loan forgiveness programs
for students who pursue teaching degrees, especially minorities
(Bills, 1990; Dervarics, 1990). One example to reduce the loan

obligations of students is included in the Madison Plan which
established a financial aid package that allows low-income
students to attend Madison without borrowing more than $800 per
year. And to date, 40% of the students who have taken
advantage of the aid are minorities (Conciatore, 1990).

Workstudy, paid internships and bilingual education
scholarships are additional sources of financial aid for
minority students. The Commission on the Higher Education of
Minorities in California (1982) report:

> Perhaps the more consistent finding with respect to
> financial factors is that holding a full-time job while
> in college has unfavorable effects. Minority students
> who enter college expecting to work full-time at an out-
> side job are much less likely to persist to baccalaureate
> completion than those who enter college with no such
> expectation. On the other hand, part-time work seems to
> facilitate persistence, especially if the job is located
> on campus (p. 24).

So then, in order for minority students to persist to
graduation, they must be provided with enough aid so that they
will not need to work more than half-time and whenever
possible, on campus.

Wood (1988) indicates that financial aid should not only
be a concern of minority students' access to the college but it
should be closely tied to early intervention as well. He
identifies some of the concerns that deserve attention:

o Packaging of aid--reducing students' potential loan
   obligations with the use of institutional scholaships
   and grants.
o Communication and assistance--using a variety of
   methods to remind them that they must apply for
   aid and there is a deadline for application.
o Work assignments--working on campus enhances minority
   student retention.
o Assessement of barriers--complexiety of the application
   process, late applications and perception of indebted-
   ness.

Academic Support Services

In addition to the full range of academic support services
such as tutoring in reading, writing and math, academic
advising and personal counseling offered by many two-year
colleges, those establishing programs to recruit minorities
into teaching are adding workshops, seminars and courses in
test-taking skills with a focus on helping students to pass

proficiency tests required to be admitted at junior level to teacher education programs at senior institutions.

One of the most widely used tests is the Pre-Professional Skills Test (PPST) developed by the Educational Testing Service (ETS). Since the PPST is a state requirement in Michigan and Wisconsin, both the urban teacher training programs at Milwaukee Area Technical College and Wayne County Community College have developed a series of courses, workshops and/or seminars to enable their students to earn a passing score on the test by the end of their first two years in the program (Baez & Clarke, 1989-90). The same test is also required for admission to the teacher education program at Temple University which is a major transfer institution for graduates of Community College of Philadelphia.

Since the PPST is required in several states, many senior institutions have developed programs designed especially to enable their high risk, nontraditional students pass the test. An ETS study (Salinger,1988) reported on the efforts of four institutions, the University of Texas at El Paso, Northern Arizona University, Tennessee Technological University, and the University of Nebraska. The findings indicate that capable students whose skills might be rusty or whose prior educational experiences had poorly prepared them for testing would benefit from assistance provided through courses, seminars or workshops.

Mentoring Activities

Mentoring, which is being used widely in elementary schools, middle schools, high schools and colleges to encourage minorities to stay in school, is an important support service to include as part of programs designed to increase the number of minority students entering teacher education programs. Classroom teachers, college faculty and other education professionals can play a critical role in mentoring programs for future teachers. The Faculty Mentor and Student Mentor programs at the University of North Florida is one example of a mentoring program in teacher education. Smith (1989) reports some of the details of the programs (pp. 8-9):

> The Faculty Mentor Program will assign volunteer College of Education faculty to each of the students in the program. Inservice sessions will be conducted to train Faculty Mentors. The faculty mentor's responsibilities will include conducting an initial career awareness conference for each student, monitoring the student's academic progress and social adjustment to campus life, and hosting at least one social event (a dinner, a concert, a sporting event, etc.) for his student(s) per

semester. The faculty mentor will serve as an advocate for the student, arrange referrals to various student services on campus, and seek ways to help the student effect a smooth transition to university life. Faculty mentors will keep a record of contacts and mentoring activities in a pre-prepared folder.

The Student Mentor program will consist of the scholastic leadership stars in the program. These Pacesetters will receive additional stipends beyond those received by regular students in the program and will be employed through workstudy and OPS finds in tutoring capacities in the Enrichment Skills Center, advising capacities in the College of Education, Office jobs in the Office of the Dean and the Division Offices in the College of Education, assistant positions in the COE Learning Laboratory, and as junior recruiters. By precept and example, Pacesetters will provide a student-to-student communication network and will lead other students in the program toward advisement services, academic skills services, wordprocessing support and various offices where assistance with problems may be found. Training sessions on their responsibilities will be provided for Pacesetters.

Two mentoring programs have been established at the Community College of Philadelphia that have included some of the activities described in the University of North Florida's program. The first is a part of the Minority Initiative and the second is in the Business Division. The primary purpose of each is to improve student retention.

VI. RECRUITING AND HIRING MINORITY FACULTY AND STAFF

Minority students enrolled in teacher education programs need to see a commitment to cultural and ethnic diversity on their campuses evidenced by the presence of minority faculty and staff. Clay (1989) points out some of the reasons why this commitment is important:

> Students want minority faculty present on campus as a symbol of institutional commitment and as potential mentors; minority group organizations are concerned that the important roles played by faculty members in American society outside the classroom is less available to minorities or their communities (p. 1).

Green (1989) further emphasizes the need for minority faculty on college campuses in his statement that:

> A diverse faculty is essential to a pluralistic campus. Faculty create the curriculum and determine the quality

of experiences in every classroom. They serve as
teachers, advisors, and role models. In a word, faculty
are the core of the institution. Without the contribut-
ion of minority individuals, no faculty or institution
can be complete (p. 81).

Blacks constitute 11% of the U.S. population and 9.4% of
the college population. But less than 4% of all college
faculty are black (Clay, 1989). Various reports indicate that
the percentage of all minorities in the nation's colleges and
universities is slightly more than 2% (Moore, 1988). Wood
(1988) reports that "at a minimum, each university should have
numbers of minority faculty, professional staff and
administrators that match the percentage of students in each
ethnic group on campus"(p.446). He states that considerable
attention should be given to the retention of minority faculty
and to the development of their professional careers. Green
(1989) points out that "increasing the number of minority
faculty does not end with the recruitment process. Ensuring
their success through promotion and tenure is a vital component
of the effort"(p. 83). In our nation's colleges and
universities, minorities should be represented in all types of
positions, at all levels, not only in "minority" positions,
part-time, short-term, non-tenure track positions, supported by
soft funds from outside funding agencies (The Commission,
1982).

College officials, like public school administrators,
often report that they cannot find "qualified" minorities to
fill available vacancies, the reason being the pool is too
small. T. Edward Hollander, Chancellor, New Jersey Department
of Higher Education states, "You have to start at the top in
changing attitudes, . . . our commitment is to do that [hire
minorities]. Everything else has fallen into place. . . .
Institutions unable to find qualified minority candidates for
leadership positions are simply not looking hard enough"
(Evans, 1989, p. 19). In New Jersey, five out of nine of the
state's public four-year institutions are headed by minority
group members.

Strides made in recruitment of minority faculty at the
University of Wisconsin-Madison demonstrates that minority
faculty can be found. The Madison Plan called for 70 new
minority faculty members by 1991 and to date, the university
has hired 57. Conciatore (1990) reports on the strategy used
by Chancellor Shalala to reach that goal (pp. 12-13):

On this front Chancellor Shalala had some help in the
form of 100 new faculty positions granted by the state to
improve student/faculty ratio. She decided to hold some
of the positions back, telling department heads they could
have them if they hired minorities.

Bonnie Ortiz, former Affirmative Action Director, said Shalala's clear stance on the diversity issue motivated faculty who previously said they could not find faculty to hire. "Deans and department heads are smart people. They're pretty perceptive in seeing what's going to get rewarded and what kinds of values and behaviors are expected here. So we weren't getting excuses."

Likewise, in 1987, President McCabe of Miami-Dade mandated that 50% of all new faculty and professional staff hires be minority. This was done with full approval of the board of trustees (Green, 1989).

Moore (1987-88) identifies practices that account for the small number of black faculty on predominately white college campuses to include: actions of the faculty who control access; institutional practices; focus on race; and the college environment. He indicates that faculty are the gatekeepers, they determine who is qualified and who is not, what rules to apply, break or modify as it suits their objectives. Some of the examples of institutional practices used to exclude blacks and other minorities from college faculty include the following (p. 120):

o Institutions have an unofficial policy of not hiring their own graduates, but hire their own white male graduates on a regular basis.
o Institutions that require the terminal degree to be in hand before a candidate can be hired, but waive the requirement for young white applicants who have dissertations in process.
o Institutions that provide opportunities for non-minority persons in the institution to be developed, thereby making them "heir apparents" to faculty positions.
o Institutions that conduct exhaustive searches when the candidate to be chosen has already been selected.
o Institutions that provide insider information through the "old boy" network, a network which includes very small numbers of minorities and women.

Moore (1987-88) also reports that overcoming racism in hiring requires putting to rest some myths that serve as barriers in the hiring of minorities. Some of the myths he identifies are (p. 120):

o Our department will have to lower its standards.
o The pool of blacks is so small that there are not enough blacks to go around. ("We can't find any qualified blacks.")

o You need extra resources to deal with the problem.
  ("We can't solve the problem without more money.")
o They would not fit well in this community. ("Since
  there are few, if any, blacks in this community,
  they would not be happy here.")
o This administration's hands are tied. ("The faculty
  makes all the decisions.")
o What would the black colleges and universities do
  if we recruited their best and brightest faculty?
o We believe we'll get a better payoff by letting
  normal faculty interest surface for identifying,
  recruiting, and selecting blacks than if we attempt
  to influence by other internal and external means.
  ("You can't pressure the faculty.")

Some minority faculty who work on predominatley white
campuses will not encourage their minority colleagues to apply
for positions on their own campuses because of the negative
climate they themselves are experiencing (Conciatore, 1990).
Those minority group members who do join the faculty ranks
often do not get into the academic and social mainstream of the
institution as rapidly as their white counterparts. Black
faculty, for example, rarely carry on any social activitiy with
their white colleagues away from the institution, are not often
asked to join in research projects and other academic pursuits
and they do not attract mentors from among their senior white
colleagues (Moore, 1987-88).

Clay (1989) indicates that the traditional approaches to
achieving faculty diversity are not working and only adding a
miniscule number of minorities to the faculty ranks of American
colleges and universities. He proposes a ten-year action plan
that would produce up to 8,000 new minority scholars to be
added to college faculties. His plan, designed to accomplish
this goal, include the following (pp. 29-30):

o To identify and encourage minority undergraduates
  capable of rigorous work to become associated with
  a program as sophomores that supports their preparation
  for graduate work and encourages their pursuit of
  academic careers.
o To promote the recruitment and retention of minority
  students to the 40 largest research institutions for
  Ph.D. work in the sciences, social sciences,
  humanities, and professions (business, social and
  public policy, engineering, etc.).
o To provide aid for doctoral students that supports
  a research and academic apprenticeship appropriate
  to the student's discipline.

o To provide students with external support and
   information addressing the personal hurdles they
   face as they consider career options, and as
   universities work to improve the racial climate on
   their individual campuses.
o To provide incentives and assistance for institutions
   to recruit, prepare, employ, and support minority
   faculty members, and to support their development as
   scholars.
o To provide external support (mentoring and sponsoring)
   to assist young minority faculty members with the many
   career and strategic choices they face as they seek to
   gain access to the discipline and the profession.
o To develop a network of minority scholars active in
   teaching who will provide mutual support to each other,
   offer outreach and intellectual service to their
   community, and provide mentoring and support to young
   scholars, graduate, and undergraduate students after
   the action plans ends.

VII. PROGRAM EVALUATION

When starting any new educational program, it is advisable
to begin with a pilot phase that includes an assessment
component that locates flaws that can be corrected before the
program goes into full operation. And once the program begins,
a longitudinal study should be launched to follow program
practices over time (Katz, et al., 1988).

Katz et al. (1988) suggest the use of questionnaires and
representative interviews at the end of each undergraduate
year, near graduation, and some after graduation. They also
recommend six guiding principles that will be helpful in
planning assessment programs:

o Assessments are most useful when they are "formative"
   in nature, that is, when they entail observing the
   learning process and using the information that is
   generated to improve its effectiveness.
o Assessment should be performed through the use of
   multiple methods, e.g., questionnaire surveys,
   individual and group interviews, and tests.
o Assessment should include multiple sources of
   information, e.g., administrators, students and
   faculty.
o Quantitative as well as qualitative information is
   needed.
o The program as a whole and each of its major
   components should be assessed.
o Interpretation of the data will be more illuminating
   if they are viewed in relation to similar data from
   comparable campuses (pp. 53-53).

Astin (1983), Vaughn and Templin (1989) suggest that community colleges should consider using the "value-added" approach to measuring the effectiveness of their programs. Astin (1983) indicates that the idea behind the value-added approach is that higher education's primary educational mission is to develop talent and assessment should focus on change or improvement over time. He believes that institutions should be interested in whether and to what extent, their students are learning over time. This approach also attempts to remedy programs through the use of repeated measures that reflect changes or improvements over time.

Astin (1983) suggests the use of the following procedures as part of the valued-added approach to assessment (p. 2).

o Test newly-admitted students to determine their entering levels of competence for purposes of counseling, course placement and baseline against which to measure later student progress.
o Following appropriate course of study, administer same or similar tests to measure student growth.
o The difference between pretest and posttest performance would provide faculty and institutions with critical feedback on the nature and extent of student growth and development.
o All types of assessments should be used--objective tests, essays, interviews, departmental exams, work samples and performance exams.

Astin (1983) underscores the value of this approach in his statement that:

True excellence resides not in resources, money, prestigious faculty, how bright entering students are, but in the ability of the college to affect its students favorably to enhance their intellectual development, and to make a postive difference in their lives (p. 2).

The value-added approach highlights the belief that any educational investment in a student is "paying off" as long as the student continues to show progress (Astin, 1983).

Rendon and Taylor (1989-90) suggest that, on an annual basis, colleges should collect student data to assess student outcomes in terms of retention, achievement and performance. This data provides opportunities to make modifications to

improve programs and services of the college. Some of the retention/attrition questions that should be posed include (Rendon, 1980, p. 14):

o What is the attrition rate of freshpersons compared to sophomores?
o What are the causes of high absenteeism and poor grades?
o Is there a correlation between entrance exam scores and college persistence and success?
o What majors are students selecting?
o Do students who initially say they intend to transfer actually do so?
o Is the stop-out, stop-in phenomenon a prominent enrollment pattern?
o Are most students full-time or part-time students?
o Do certain study fields have higher attrition rates than others?

Needs assessment questions should also be posed to determine the following (Rendon, 1980, p. 14):

o Where are most students coming from? High Schools? GED Programs? Working students?
o Do they still represent the 18-24 age cohort?
o Are more students going to four-year institutions that are recruiting more aggressively?
o To which four-year colleges do most students seem to be transferring?
o Is the college getting a large number of reverse transfers?
o Is the college serving a sizeable majority of minorities?
o What are the needs of students?
o How can the college curriculum, counseling and student support services be better organized to reflect these needs?

Rendon and Taylor (1989-90) suggest that data should be collected on student GPAs, scores on pre- and post-test assessment instruments, student achievement reflecting differences by gender, age, ethnicity, and student and community assessments of the college's academic, vocational-technical, and continuing education programs. They also recommend follow-up studies of students who leave the college. Data collection should include: number who secure employment; employer ratings of former students; number who transfer to senior institutions; and student GPAs and retention at senior institutions. This composite, yearly picture will be helpful to administrators, faculty and counselors as they plan their departmental priorities.

VIII.   SUMMARY OF RECOMMENDATIONS

In a review of the literature, Smith (1989) indicates that creativity and experimentation will be necessary to stem the minority teacher shortage, that short-term solutions are not enough, but must be accompanied by long-term solutions beginning with kindergarten classes as a potential pool from which teachers will be recruited thirteen years later. He has summarized recommendations for increasing the number of minority teachers into the following sixteen categories (pp. 53-54):

1. Image of the Teaching Profession. The image of teaching as a professional career must be improved and this positive image must be communicated to minority youth.

2. A National Message. A national message will be required to stimulate and undergird state and institutional efforts to increase the number of minority teachers.

3. Collaboration, Community Building, Networks. Collaboration, community building, and networking are essential characteristics of recruitment, selection, retention, and teacher preparation programs. For program planning and implementation, collaborations are recommended among universities, colleges of education, state agencies, and public schools; between HBIs (historically black institutions) and PWIs (predominately white institutions); and among corporations, businesses, communities, universities and colleges of education.

4. Development of Minority Recruitment Pool. The present pool from which minority teachers are drawn must be expanded by cutting deeper down into the minority pool to recruit both those who might have pursued other careers and those who might not otherwise have gone to college. Emphasis must shift from searching only for qualified candidates to qualifying more candidates.

5. Early Identification. Early identification of minority students who may be recruited into the profession of teaching is essential.

6. Mentoring. Mentoring programs should be developed that provide good teaching role models in the communities, schools, colleges and universities. These programs should concentrate on early identification, group support, and nurturance through

personal relationships along the educational pipeline from cadet programs through teacher education and beginning teacher programs. Inherent in this recommendation are mandates for colleges of education to recruit and hire minority faculty.

7. Alternative Pools, Non-traditional Populations. Non-traditional minority populations must be cultivated for the teaching profession. These populations include early retirees and second-career persons from the military, business, and industry; teacher aides; mature adults with college degrees or some prior college level credit; former college graduates with liberal arts and sciences, business, and other majors who desire career changes; and two-year community and junior college students.

8. Historically Black Institutions. Historically black institutions must be used as national resources to increase the number of black teachers.

9. Community College and Four-Year University Linkages. In order to ease the transition for minorities, the link between two-year institutions and four-year institutions must be strengthened through better articulation, support services, dual enrollment programs, and Introduction to Education course offerings at two-year institutions.

10. Fiscal Support. Substantial fiscal support must be provided for the development of minority teacher recruitment and retention programs. Substantial fiscal resources must be targeted to schools where minorities are located--public schools, community colleges, HBIs and other institutions--to provide minority students with sufficient academic skill levels throughout the educational pipeline and through attainment of full professional status in teaching. Financial aid to minority teacher candidates must be provided in the form of scholarships, grants, and loan-forgiveness programs from state and federal governments, colleges and universities, school districts, corporations, and businesses.

11. Admission and Certification Requirements. The use of admission and licensure tests that are technically indefensible, that do not have psychometrically sufficient validation evidence, and do not meet the 1985 STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTING must be discontinued.

12. <u>Recruitment and Retention.</u> Recruitment must be implemented as fused programs on the same continuum. Either without the other is not likely to prove effective in increasing minority success in teacher education programs.

13. <u>Colleges of Education.</u> Colleges of education must restructure their priorities to include symbolic and substantive changes that are conducive to effective recruitment and retention of minority teachers. Some of these changes include: establishing an advisory board of key individuals from community agencies and businesses, public schools, community colleges, and college of education faculty and advisors; focusing the content of teacher education curriculum and field experience learnings on effective minority education and multiculturalism; and tying the reward system of raises, merit awards, and promotion and tenure of faculty and administrators to increases in minority enrollment and faculty positions.

14. <u>Accreditation of Teacher Education Programs.</u> State, regional, and national accrediting bodies must have standards regarding a commitment to creating a multi-cultural teaching force.

15. <u>Research.</u> Recruiting and retention programs must have a strong research and evaluation component. State departments of education should collect and report data needed to study and monitor the minority teacher shortage to include pass-fail data on admission and certification tests. Research must be conducted: on developing more effective processes for identifying teaching talent among minority students; that focus on experimenting with different patterns of extended preparation and the effects of these patterns on minority teachers; to stimulate informed curriculum development that incorporates diverse approaches to making the college experience for minority students effective; that determines the sensitivity of minority students to change in the rewards and incentives of the teaching profession; that results in the development of value-added measures to assess the effectiveness of minority educational experiences.

16. <u>Demonstration Models.</u> A variety of demonstration models must be established to provide impetus and guidance for resolving the national shortage of minority teachers.

Smith (1989) states that four of the sixteen recommend-
ations hold special promise for increasing the number of
minority teachers. They are: improving the image of teaching;
creating a national message; building of collaboration into
recruitment efforts; and using historically black institutions
as national resources to increase the supply of black teachers.
For institutions developing exemplary programs, he recommends
designing a model that is comprehensive, developmental and
collaborative. A comprehensive model taps all special
populations for induction into the teaching profession.
Developmental means developing a variety of programs to
identify and nurture talent beginning not later than the middle
school years and continuing through college graduation.
Collaborative means building and strengthening both horizontal
and linear linkages with other institutions and agencies that
have the same goal such as school districts, four-year
institutions, state departments of education, businesses and
foundations.

Based on the findings in the literature, the following is
proposed as the major components of an action plan for
increasing the number of minority teachers in elementary and
secondary schools to be conducted by the Community College of
Philadelphia in cooperation with the School District of
Philadelphia and selected four-year institutions:

1. RECRUITMENT

o Middle Schools. Work with the School District of
Philadelphia to organize "Teachers of Tomorrow" clubs for
students in grades 5 through 8. Students will tutor first and
second graders and assist with other tasks in the classrooms.
Teacher education faculty from the college will make
presentations in classes and assemblies and middle school
students and their teachers will be invited to attend special
events at the college. During the 8th grade year, college
staff and faculty will work with middle school teachers and
counselors to help plan high school course selection for
students who are interested in a career in teaching.

o High Schools. Work with the School District of
Philadelphia to organize "Future Teachers" clubs in grades 9
through 12 for those students who are interested in teaching as
a career. In addition to the activities recommended at the
middle school level, high school students will be invited to
participate in academic year and summer enrichment activities
on the college campus. During the senior year, students will
be invited to enroll in courses at the college where they will
receive both high school and college credit.

o   **Non-traditional Populations.** Develop strategies to recruit future teachers from among early retirees from the military and other careers; teacher aides; homemakers returning to or entering the work force and/or college for the first time; and liberal arts, business or other majors who desire a change.

o   **On-Campus.** Recruit from undecided majors, students enrolled in STEP-UP and other special programs, General Studies and students in other majors who may have never seriously considered teaching as a career option.

2.   SUPPORT SERVICES

o   **Financial Aid.** Develop an attractive financial aid package with focus on scholarships, grants, loan forgiveness and jobs on campus.

o   **Academic Support.** In addition to the whole range of regular academic support services that includes tutoring, advising and counseling available to all students, courses, workshops or seminars will be developed to enable students to pass proficiency tests required for admission at junior level in teacher education programs at selected four-year institutions.

o   **Mentoring Team.** During the freshman year, each student will be assigned a mentoring team that will remain with her/him through graduation with the bachelor's degree. Each team will consist of a community college faculty, a public school teacher, and a faculty member from the college of education at the four-year institution. Each mentor will work with the student to negotiate the system (at her/his institution), develop a personal relationship with the student and help to resolve issues that may interfere with the student's academic success.

3.   CURRICULUM DEVELOPMENT

o   The Pre-Education Curriculum at Community College of Philadelphia will be strengthened and/or reformed to include multi-cultural experiences in courses, methods that encourage active learning and a field experience in the public schools during the first year of study.

4. ARTICULATION AGREEMENTS WITH FOUR-YEAR INSTITUTIONS

o The college will work with selected four-year institutions to develop 2+2 articulation agreements, guaranteed enrollment in the teacher education programs for those students who successfully meet admission requirements, dual enrollment, and encourage the development of support services as noted in item 2 above, including special assistance required to enable students to successfully pass Pennsylvania teacher certification tests.

5. PROGRAM EVALUATION

o Develop an evaluation plan that: assesses each major component of the program as well as the program as a whole; is both formative and summative in nature; tracks the students' progress from college entrance through graduation and job placement; and includes value-added measures.

6. PROJECT TEAM

o Work aggressively to assemble a project team that reflects or matches the ethnic/racial background of students enrolled at the college. The most recent college data (February, 1990), reveal a student body of 50% white and 50% minority as compared to a full-time faculty of 83.8% white and 16.2% minority. Twenty-five percent of the administrative employees are minority. There needs to be a commitment from the college to substantially increase the number of full-time minority faculty in order to provide the role models and mentors needed to successfully carry out the proposed program.

7. ADVISORY COMMITTEE

o Establish an advisory committee for the program that includes key people from the college, public schools, selected four-year institutions, state department of education, businesses, corporations, and foundations.

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