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ABSTRACT

This paper briefly examines the key contexts of developmental education as it has evolved in the United States, focusing on historical perspectives; demographics of student diversity; evolving definitions; and the philosophical, political, and financial contexts of developmental education. The first section traces the evolution of developmental education through colonial and pre- and post-Civil War periods, the early 20th century, and recent decades. The next section links the significant increase in the need for developmental education to the dramatic increase in the percentage of the college-age population enrolling in higher education in the last few decades, and the increasing diversity in college student populations in the past 40 years. The paper then looks at the variety of terms used to describe underprepared college students and the curricular offerings designed to offer them special support, and the practical impact of the definitions of these terms. Next, the philosophical contexts of developmental education are considered. The influence of meritocratic and egalitarian positions on access to higher education is discussed in terms of admissions policies and the structural role of developmental programs. In addition, institutional philosophy related to remedial curricula and grading practices are discussed. The political contexts of developmental education are addressed next, focusing on the impact of societal values and external and internal politics. After discussing financial considerations related to developmental education, including operational college income formulas, federal student financial aid, and special grants, the paper gives concluding comments and offers suggestions for future research. Contains 80 references. (KP)

Foundations and Contexts of Developmental Education

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John Losak and Curtis Miles

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FOUNDATIONS AND CONTEXTS OF DEVELOPMENTAL EDUCATION IN HIGHER EDUCATION

John Losak and Curtis Miles *

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Educators, political scientists, and historians agree that the current strength of American society is largely attributable to the expanded access to higher education that has taken place during the last 130 years. No other nation in history has ever attempted to offer higher education on such a broad scale. One consequence of such a goal, however, has been the persistent presence in higher education of significant numbers of entering freshmen who lack the skills required to compete effectively in college-level courses.

The continuous presence of such "developmental" students in higher education transcends glib generalizations. Their presence has much to say about American history, politics, educational finances, values, philosophy, and the like. The controversy and implications of their presence can similarly be understood only by viewing developmental students within the context of such socioeconomic forces. The purpose of this chapter is to briefly examine the key contexts of developmental education as it has evolved in the United States: historical perspectives, the demographics of student diversity, evolving definitions, and the philosophical, political and financial contexts of developmental education.

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HISTORICAL PERSPECTIVES

For many centuries, formal higher education in the Western World was clearly for the upper classes, for those with sufficient wealth to have the leisure time and resources necessary to pursue their particular interests. In such circumstances, "developmental education" could have limited meaning. In America, developmental education has evolved beyond such limitations, and in fact has a history as long as that of American higher education. Developmental education, along with higher education, has evolved over 250 years in response to changing clienteles, changing resources, and changing expectations. This evolution can be traced through five periods: colonial, pre-Civil War, post-Civil War, as well as early decades and recent decades of the 20th century.

The Colonial Period

The Colonial prerequisites for admission to college were mastery of Latin and Greek, with Yale University (and later others) adding mathematics as a requirement in 1745 (Rudolph, 1977). As Rudolph notes, students gained those prerequisite skills "by a variety of roads--prepared by a resident tutor in the South or by the local clergyman in the North, in a private day school or a Latin grammar school" (p. 59). The overall prerequisites, however, were aristocratic breeding and wealth. With these assets, and perhaps the aid of a private tutor, even weak Latin and Greek skills would not bar a student from college success.

The Colonial college's focus on discipline, memorization, and collegiality over intellect implied a haven in which any aristocratic son could overcome initial deficiencies and in which persistence was more important than

knowledge. In this environment, "developmental" education meant development of character, self-responsibility, leadership, and motivation, not remediation of basic skills deficiencies or compensation for a disadvantaged upbringing. These minister- and tutor-driven roots of developmental education are curiously similar in focus to the most avante garde versions of developmental education found in the late 20th century.

The Pre-Civil War Period

The inherent value of education to a democratic society was first translated into law during the pre-Civil War period, initially with the promotion of state development of "seminaries for learning" through the Northwest Ordinance of 1787, and later with the establishment of common schools by the state of Massachusetts in 1837. Many years passed, however, before compulsory public education was accepted throughout the United States. Religious leaders generally opposed the intrusion of government into an area that had previously been the responsibility of the church, and parents objected that they viewed education as parental privilege and not a concern of the state.

Nevertheless, the compulsory school attendance laws which gradually emerged in the United States, though restricted to the elementary and secondary grades, represented the first realization of the American dream for those not born into wealth. The immigrants of the 17th and 18th centuries typically entered the work force as cheap labor, often working 70 to 80 hours a week for barely enough income to physically survive. Compulsory public education provided the initial step for their integration into society and for their participation in democratic governance.

Several significant changes also occurred in higher education during the Pre-Civil War period. The first was the growth, especially in the Northeast, of academies which were designed especially for "college preparation." Such academies, combined with rapid expansion in the number of colleges (each with its own curriculum and each seeking any students it could get), produced college freshmen with far more varied abilities and expectations than during the Colonial period (Tewsbury, 1969).

A second trend was an increase in the overall number of college students--5,400 by 1830 (Rudolph, 1977, p. 61). Such numbers, plus the various social pressures revolving around Jacksonian democratization, undoubtedly increased the number and percentage of college freshmen who were "new money" or even "little money" (Brier, 1984). These newcomers would arrive at college without the built-in elite group spirit and leadership orientation which had aided underprepared students in Colonial times to cope with college (Tewsbury, 1969).

A third movement of significance was the slow, tentative trend towards curricular modification. A "parallel course" curriculum, for example, compressed the traditional course of study while removing Latin and Greek as secondary school requirements. Decisions at Princeton University and Yale University to pretest students on their English grammar proficiency, implemented in 1825, suggested a tentative move towards more utilitarian than classical grounds for admission (Rudolph, 1977).

A related development in the pre-Civil War period was the development of preparatory schools, first implemented in the 1830's. Colleges outside of the Northeast had limited resources for student preparation, with their lack of

elite academies, minister-tutor networks, and so forth. They thus began to create preparatory schools, tied closely to (and often a part of) the college, which would provide interested students with the prerequisite skills for college success.

The impact of all this seemed to be in many cases creation of a freshman year which was increasingly remedial. Rudolph refers to "a freshman year that was often repetitive and often of secondary school level" (1977, p. 60). He adds that in many cases a well-prepared student would simply skip the freshman year and move directly into sophomore studies. Such a system has a very contemporary ring, given that today many developmental students take something like a year to master prerequisite skills and only then move into college-level coursework, while well-prepared students "skip" the developmental year and move directly into collegiate studies.

Post-Civil War Period

This was a time of major change in terms of the underprepared student, as it was a time of major change in so many areas of higher education. A first change was in numbers: from 5,400 students in 1830 to 52,286 students in 1870 (Rudolph, 1977). Given that the population and the academic support system did not expand nearly so rapidly, such increases in student numbers surely increased dramatically the number and percentage who came to college underprepared.

A second change was the emergence of Land Grant colleges, under the stimulus of the Morrill Act. Such institutions had publically-stated and deeply-felt commitments to serve all of those who sought a college degree. The

Morrill Land Grant Act of 1862 was the first direct national legislation in support of public higher education (following the more indirect support of the Northwest Ordinance of 1787). The passage of the Act, a response to demands for greater access and democratization of higher education, created a significant philosophical change as well: a shift from education as a luxury for the affluent or as the avenue of entry into such vocations as the ministry to a more functional, pragmatic focus on the newer fields of agriculture and technology. The American Congress devised the Act with the clear intention of broadening the curriculum and opening the door for more diverse students into higher education (Brubacher & Rudy, 1976).

Collegiate quality was protected during this period of expansion by at least five safeguards. The first was the network of preparatory schools developed prior to the Civil War. By 1870 only 23 colleges in the country did not have a preparatory school to capture students early and to prepare them for college. The second safeguard was broader admissions requirements, including such subjects as history, geography, language, literature, and science. In 1887 Harvard even required a laboratory course in physics as a prerequisite for admission (Rudolph, 1977). The third safeguard was entry testing. Maxwell (1979) notes that in the 1860's, Iowa State University required a pre-test of reading, writing, and mathematics competence prior to admission. By the end of the period such pretesting was apparently common.

The fourth and most significant safeguard for assuring minimum student qualifications was articulation with the burgeoning high school system. In 1870 the University of Michigan became the first college to formally link with the local high school network in terms of accepting as evidence of proper

preparation a diploma from those high schools which it certified as delivering quality learning (Rudolph, 1962). This move had far-reaching effects both on curriculum and on student preparedness for college.

Initially, given the paucity of quality high schools, the new connection caused deterioration in the college curriculum as colleges attempted to articulate with poor high schools by lowering standards. Later in the period, however, such losses tended to be made up as the number of quality high schools grew. Either way, the colleges began to firmly bind their fate to that of public high schools. One example of this binding was the drift towards standardization. For example, in 1892 the National Education Association created the Committee of Ten, which established a set of minimum criteria or goals which should be met by any high school program seeking college transfer status.

A final safeguard was severe academic competition and attrition. Students would be admitted and then filtered out on the basis of their performance in the classroom. With all of this, however, it appears that increasing numbers of students entered college unprepared, much as they did in the pre-Civil War period but with adjustment for additional numbers of "first-generation" college students. To a degree, the colleges' response was to maintain a first-year program which was little higher than the high school level (Carnegie, 1979). Of more import, though, was the introduction of formal remedial coursework for those who proved insufficiently prepared on entry tests. Thus, Harvard University established a freshman English course in 1874 (Maxwell, 1979), and Wellesley College established a remedial reading course in 1894 (Cross, 1979). The curricular pattern among open-door or easy-access colleges began to emerge:

minimum prerequisites (often only high school completion), entry testing, and subsequent remedial courses.

Early Decades of the 20th Century

The period from 1900-1950 was one more of amplification and solidification of the trends of the previous period than of major new initiatives insofar as dealing with underprepared college students is concerned. Larger numbers of students were enrolling in remedial programs; Rudolph (1977) indicates that in 1930, nearly one-half of all students were in preparatory departments. However, this is explainable less by having more such students than by having more specialized preparatory courses, making it easier to separate who was underprepared from who was not.

The trend towards standardization continued. For example, the College Entrance Examination Board established its standardized test in 1900 and the Carnegie Unit was established in 1908. The impact of this latter event was remarkable; Rudolph (1977) reports that in 1906 only five southern colleges required high school graduation for admission, but within five years after the introduction of the Carnegie Unit, 160 colleges required high school graduation.

Such expansion of the high school role occurred at the expense of an increasingly unnecessary system of preparatory schools, whose role was being usurped by public high schools. Although in 1915 some 350 colleges had such schools (Maxwell, 1979), the numbers dwindled sharply thereafter. The reduction in preparatory schools did not imply that college remediation was no longer necessary. Rather, it merely demonstrated that preparatory schools were

no longer the first line of defense against underprepared freshman. The example of Wabash College is illuminating on this point. When Wabash ended its preparatory school, it simply did so in name only by translating all of the school's courses into college courses (Rudolph, 1977).

Another accelerated trend during the first half of the 20th century was the emergence of two-year colleges, first as junior colleges and later also as community and technical colleges. The explicit goal for many was to provide the first two years of a bachelors' degree. The impact of this service is suggested by Bogue's estimate that in 1950 about 60% of upper division students at the University of California at Berkeley were transfers, mostly from two-year colleges (cited in Cohen & Brawer, 1982). Cohen and Brawer also noted little disparity in the abilities of those entering two-year and senior institutions. The curriculum of two-year and four-year colleges was also very similar initially, though differences began to be pronounced towards the middle of the century as universities sought to become more exclusive (Maxwell, 1979).

All of these changes paid off for the universities. Cohen and Brawer (1982) indicate that the standardized test performance of those entering college grew steadily during 1900-1950, and very rapidly thereafter until the mid-1960's. Many well-prepared students sought entry into education--almost enough after World War II to overwhelm American higher education. A primary technique for dealing with the over supply of students was classroom competition. It was not unusual for students at the University of Wisconsin, the University of Florida, or the University of Minnesota to be greeted with the same opening day speech: "Look to your left and look to your right; two

out of three of you sitting in front of me today will not be here a year from now."

Within the context of this competition, the college success of the war veterans, who were older students from diverse backgrounds, changed the long-held attitudes of most educators and lay persons who had previously viewed higher education as the exclusive province of the 18-year-old high school graduate. Thirty-year-old college freshmen had seldom before been encountered, Since the passage of the GI Bill, the creation of additional economic support systems for students has filled the halls of academe with increasingly diverse populations of students.

Many colleges followed Wabash's lead in institutionalizing a host of remedial courses. Maxwell (1979) notes that in 1907, over half of those applying to Harvard, Yale, and Princeton failed to meet the entrance requirements. During the 1930's, most colleges set up study skills and remedial reading courses, including Harvard in 1938. Cross (1983) also notes the proliferation of remedial reading and study skills courses. The general tenor of the early 20th century, then, seemed to be vastly more students (2,421,000 in 1950), attending more types of higher education institutions, with generally improving entry performance but with sufficient diversity of preparations and needs to require a growing array of remedial services at most colleges.

Recent Decades of the 20th Century

Two trends of relevance to developmental education seem to dominate the recent decades of American higher education. The first is the dramatic growth

of two-year colleges. The second is declining academic performance of high school graduates. The two-year college in the United States grew rather slowly from its origination in 1901 in Missouri. Initially, the institution was viewed primarily as an alternative first two years of the university system. Most students were full-time, attending the two-year college for reasons of economy or geography. They were likely to be well prepared and intent upon transferring to complete the baccalaureate.

Beginning in the late 1950's, the concept of open access was transferred from the Land Grant colleges to the public two-year colleges. The latter adopted the policy of admitting all students irrespective of prior performance and permitting them to compete in the classroom for the right to remain. At the same time, various state legislatures recognized that access could be further expanded if students were able to attend a "community" college within commuting distance of their homes. Simultaneously, taxpayer costs could be decreased since student housing was rarely provided. As a result, the number of two-year colleges increased dramatically--from 500 in 1950 to 1,200 in 1980. Between 1954 and 1974, a new two-year college was started, on average, every two weeks (London, 1983).

The two-year colleges provided new access to higher education for more high school graduates, particularly those students who could not meet the entrance requirements of the universities. Achievement of high school graduates declined sharply between the mid-60's and the mid-80's. A significant part of the decline of achievement test scores (e.g., ACT, SAT) was attributed to an expansion of the test-taking population, but a real decline in overall performance was also observed (Wirtz et al., 1977). The Carnegie

Foundation 1979) notes that by 1975, 40-65% of the students entering the Univeristy of California System had to take remedial writing courses. In a recent report, the United States Department of Education indicated that between 16% and 25% of all college freshman took at least one remedial course on reading, writing or mathematics and that 82% of all institutions offered at least one remedial course (Abraham, 1987).

By the early 1980's the situation had deteriorated so far and was so widely known that the Presidential Commission report, A Nation At Risk (1983), became an instant best-seller. By that time developmental studies had created a professional faculty of its own, was spreading into subjects far beyond the 3R's, and had researchers such as Richardson, Fisk, and Okun (1983) suggesting that the liberal arts might well be taught as part of a comprehensive developmental studies program. By conservative estimates, as many as three million out of the twelve million students enrolled in an institution of higher education needed some form of developmental education before they could effectively compete in the regular college classroom (Boylan, 1986). Today, at many large urban community colleges, more than 40% of the recent high school graduates are in need of at least one developmental course as determined by the most lenient standards.

What had happened? Maxwell (1979) identifies the causes as including permissive standards, high absenteeism from school, grade inflation, de-emphasis on traditional college preparatory programs, a larger number of culturally different students, financial aid inducements, and fewer well-qualified students each year. Richardson et al. (1983) focuses on a loss of critical literacy (blending of thinking with communications skills). Cohen and Brawer (1982) add the impact of easier subjects and less work required--in

effect, a lowering of standards. Responding to A Nation at Risk (1983), and other calls for reform of the secondary schools, Rittenweyer (1987) argues that the exhortations in these publications to raise college admissions standards have missed the point. He reminds us that attending the decline of performance of secondary students during the past quarter century has been the assumption by the high schools of numerous non-educational roles. For example, he lists serving school lunches and dealing with the social problems of teenage runaways, drugs, alcohol, and crime as new school responsibilities detracting from their primary academic purpose.

In many ways, the current dilemma of developmental education seems to arise from the consequences of several decisions and trends of the past century. One factor is the consequence of the decision by most colleges to eliminate their specialized preparatory schools and to rely on public high schools to produce "college-ready" students. Though undertaken for sound institutional and financial reasons, and though leading to steadily-increasing aggregate academic performance for many decades, as Rudolph notes (1977), the decision essentially handed curricular power over from the colleges to the high schools. That decision never dealt with a fundamental question: What happens if these high schools are unable to adequately prepare all of their students who have aspirations for college?

Today, only about one-third of all high school students are on a college preparatory track, yet about 60% of all high school graduates do eventually choose to go on to attempt some form of higher education (Ravitch, 1989). While the number of college-ready students may not be much different in proportional terms from the level of preparation students demonstrated when

leaving high school a century ago, the absolute numbers have dramatically increased. At the same time, employment requirements and the existence of two-year colleges have significantly increased student interest in and demand for higher education.

A second factor is the consequence of the decisions to transform the goal of higher education from that of developing broadly-competent leaders of sound character towards that of developing intellectual processes. College curricula and requirements based on character building, socialization, critical literacy, and the like, seem very adaptable. They can absorb many degrees and types of preparedness or non-preparedness. Curricula and requirements based on intellectual achievement, on maximum content learning, on research, and so forth seem less tolerant and less able to absorb those who lack appropriate preparation.

A third factor is the consequence of the expansion of the "open door" policy. American higher education began formally to become "mostly open door" with the advent of the Land Grant colleges, and became avowedly "open door" with the establishment of public two-year colleges. In practice, most colleges were largely "open-door" throughout their history because of the ongoing economic need to compete for sufficient students to continue operations. However, there was surely an implicit caveat at all these levels that went something like this: We are open to all those (mostly white, middle-class) students who are intellectually interested in ideas and/or socially interested in leadership. Clearly, American higher education is now having to deal with a situation in which this caveat--and others--no longer hold true.

THE DEMOGRAPHICS OF STUDENT DIVERSITY IN HIGHER EDUCATION

Not all so-called democracies share the American commitment regarding broad access to higher education. This is certainly the case with France, England, and West Germany, where access to the highest levels of education is quite limited. For the first 250 years of American higher education, the model was essentially that of the British school system in which the upper classes, those entering the ministry, or those with the time but no essential need to work and not much else to do, were the only people enrolling at the university. In recent decades, however, a societal commitment has evolved to support public access to higher education even for those who begin life in the least fortunate circumstances. In 1910, only 13.5% of the population over 25 had even completed four years of high school education. This increased to 55.2% in 1970 and 73.9% by 1985 (El-Khawas, Carter, & Ottinger, 1988). Over the past forty years, state expenditures for the establishment of local two-year colleges have significantly reduced geographical barriers, and federal financial aid programs have reduced economic barriers to higher education for most high school graduates.

The significant increase in the need for developmental education coincides with the dramatic increase in the percentage of the college-age population enrolling in higher education in the recent decades of the 20th century. As reported by Cohen and Brawer (1989), only 2.2% of the college-age population (232,000 students) participated in higher education in 1900, but 32% of the college-age population (9,114,000 students) had access to higher education in 1985. This increase is greater than the enrollment increase which took place from 1603, when Harvard opened its doors, until 1900 (Brubacher & Rudy, 1976).

In 1989, somewhat over 12 million students are enrolled in American higher education programs, not counting those enrolled in educational programs offered by business, industry, and the military. Acceleration of student diversity across the entire spectrum of higher education institutions has occurred in the last 20 years. As documented by the National Center for Education Statistics (1989), for the period 1970 to 1986, part-time students increased from 32 to 43%; the percentage of women rose from 41% to 54%, and those 25 years old or older rose from 28% to 39% (pp. 42-50).

The issue of denying student access to higher education because of religion has ceased to be a problem in the United States (Sarason, 1973). However, native Americans, Blacks, Hispanics and other ethnic minorities continue to be under-represented in enrollment proportions for higher education. Blacks constituted approximately 9% of opening Fall enrollment in 1984, Hispanics represented approximately 4%, and other minorities (primarily Asians) represented approximately 7% (Andersen, Carter, Malizio, & San, 1989). Asians show a participation rate far greater than for Blacks or Hispanics, and a higher level of college completion, although the absolute numbers are low and their enrollment is concentrated in only seven states (Hsia & Hirano-Nakanishi, 1989).

While it is accurate to state that diversity in higher education has distinguished American academe for 120 years, the most dramatic change has occurred during the last 40 years. Student diversity is a reflection of the diversity in our pluralistic society combined with increased opportunity for access to higher education. Diversity in student enrollment naturally multiplies when students are given access to higher education and allowed to

compete in the classroom rather than having the door locked to them initially because of money, geography, or performance on a standardized examination. During the early 1950's, Land Grant colleges in the United States began closing their doors to some high school graduates by following the path of the private universities in determining admission from standardized test scores. Today, some public universities accept only those students who score in the upper ranges of a standardized entrance examination, with required scores as high, or increasingly higher than, the score requirements in the more expensive, private universities. As noted earlier, one of the major consequences of this change in posture by the Land Grant colleges has been explosive enrollment growth for public two-year colleges. In 1989, approximately half of the entering freshman in the United States were enrolled in public two-year colleges (El-Khawas et al., 1988).

In the early 1950's, the two-year college student was typically a white male; enrollment was about 75% male and not more than 10 to 15% minority (Bonham, 1981). Today, the female enrollment in two-year colleges is about 53% of the total. Minority enrollment is as high as 30 to 40% depending on which definitions of ethnic minorities are applied. By 1990, minorities of all ages will constitute 20 to 25% of the nation's total population, while their percentages among youth cohorts will be over 30%--over 45% in some states, notably California and Texas (Cohen & Brawer, 1989). In the urban two-year college, the white, non-Hispanic student is often in the minority, women outnumber men three to two, two students out of three are part-time, three students out of four are married and working, and virtually all students commute to class (Andersen et al., 1989). The open door also attracts students

who were former high school dropouts and students with emotional or neurological impairments, including the learning disabled.

For the first 350 years of American higher education, college attendance was almost exclusively the prerogative of the young. Students left high school, went directly to a residential college, stayed four years, and graduated. At many two-year colleges today, it is not unusual for the mean age to be in the middle to upper 20s and for people to begin college at forty or fifty years of age or older. The American public continues to enter the higher education market at older ages. The reasons that older persons return to school and that younger persons delay college enrollment directly after high school are many and complex. Often workers find their jobs are not so fulfilling as they had hoped; it is now socially acceptable for women--even those with children--to go to college; people change their views and interests and require retraining to enter new occupations. Nor is it uncommon for people to retire from a specialized line of work and return to college--usually a two-year college--to undergo retraining.

College attendance under such circumstances was quite rare thirty or forty years ago. Comparisons with other countries demonstrate that opportunities for older persons to attend college at the highest level are uncommon elsewhere. The European model remains in effect in most parts of the world, although pressures are periodically applied for more equality in access, as recently occurred in France (McGrath & Spear, 1983) when students demonstrated for less restrictive access. The tendency to enroll in college at any age is among the most striking changes in American college attendance patterns over the past forty years. At the same time, state expenditures for the public two-year

colleges and federal expenditures for financial aid were other significant advances transforming the demographics of student enrollment in higher education.

EVOLVING DEFINITIONS OF DEVELOPMENTAL EDUCATION

A wide variety of terms is used to describe both students who arrive underprepared to effectively compete in the regular college classroom and the curricular offerings designed to offer special support. Students are variously described as remedial, disadvantaged, developmental or underprepared, and programs typically as developmental, remedial or compensatory. For the current discussion, the term "developmental" has been selected to describe programs, and "academically underprepared" to describe students.

Many definitions of "developmental" have been suggested, as is to be expected given the relatively recent emergence of research and publication interest in academically underprepared students. One set of alternative interpretations is given by Clowes (1983). Clowes identifies three major descriptors assigned to the programs designed to assist students not ready for college-level courses:

Remedial Education: Programs designed to diagnose and cure specific basic skills ailments in students. This conception, based on a medical model, tends to portray discrete and isolated aspects of academic "illness" which are treatable by a combination of clearly-defined mathematics, writing, and reading services.

Compensatory Education: Programs designed to compensate for student deficiencies created by socioeconomic problems such as poverty, racism, and a lack of realistic educational opportunity, usually related to home environment. This conception may emphasize enrichment activities in addition to (or perhaps more than) basic skills development as a way to provide a surrogate environment in which basic character traits and background knowledge may emerge.

Developmental Education: Programs designed to offer individual students ways to "mix-and-match" services which will help them become fully-functioning people. The emphasis is on development of the capability of effectively making and carrying through with major life choices, particularly within, but not limited to, an academic setting, with strong attention to value systems, enrichment, and the like.

Most other sets of definitions seem to be fairly consistent with the definitions set forth by Clowes (1983), at least in terms of the distinctions between remedial and developmental education. Cross (1979) states that "if the purpose of the program is to overcome deficiencies. . .then it is remedial. If, however, the program is designed to . . .develop the diverse talents of students, whether academic or not, then it is developmental" (p. 31). Maxwell (1979) suggests a more general and more limited set of distinctions. For her, remedial programs are those which offer intensive help to students with the weakest preparation relative to their peers in a given college, while developmental programs seek to help "average" students improve.

Three distinctions seem to emerge from such definitions. First, "developmental education" is clearly a normative term rather than an absolute

condition. What is developmental or remedial in the context of a major research university will differ from what is developmental or remedial at a small, rural two-year college. Students will be underprepared, and programs will be remedial or developmental, in the context of particular institutions.

Second, all of these definitions seem to agree on the general distinction between "remedial" and "developmental." Remedial programs focus on curing substantial deficiencies in basic academic skills, while developmental programs focus on developing a broad array of cognitive and affective capabilities. Though not specifically addressed, it seems logical that developmental programs will contain remedial services within them, but will go beyond such services in scope and purpose.

The third, less clear distinction is the limits of responsibility of developmental programs. Remedial programs presumably reach their limit when the student's basic skills competence reaches a specified level. Developing human potential, however, is an open-ended objective with no natural limits, and is the underlying principle for Astin's (1985) notion of talent development. Both Clowes and Cross (1983) suggest that the proper limits transcend academic success and move into realms of human performance beyond the college walls. Maxwell (1979), Roueche and Baker (1987), and Keimig (1983) are more conservative in arguing that such development must be constrained primarily by those capabilities needed to thrive in college. All definitions agree that developmental programs must address affective as well as intellectual areas of student capability.

These differences and similarities provide a context for the definition of developmental education emerging within this resource book. That definition is as follows: "Developmental Education: those services and policies needed to help each student develop the baseline academic, intellectual, and affective capabilities which are prerequisite to achieving her or his post-secondary educational goals."

This definition is intended to suggest several things. First, that developmental education is influenced not just by services (e.g., remedial laboratories, tutoring, counseling, learning/thinking skills courses, etc.) but also by institutional policies and practices (e.g., attendance, course loads, terms in developmental studies, etc.).

Second, this definition suggests that both the range and limits of such assistance are found in comparability with other students in an academic setting, not in broader life settings. Third, the definition is intended to legitimize at least four dimensions of "comparability": intellectual functioning, knowledge base, basic skills, and personal attitudes and habits. Both research and practice suggest the critical nature of all four dimensions if underprepared students are to have a reasonable chance of success in higher education.

Fourth, the definition seeks to emphasize that the goal is not assurance of success, but merely "equal opportunity" to pursue success. The goal of developmental education is assurance that underprepared students have the prerequisites for success, not that they are guaranteed to achieve it. Finally, the definition suggests that for many underprepared students, just as

for many "prepared" students, the legitimate educational goal may be something other than a degree or diploma.

Essentially, this definition suggests both the scope and the limits of responsibility for academically underprepared students. A successful program of developmental education must develop the competencies needed to succeed in college and to give the underprepared student an equal standing with all other students going into college. Losak (1969) suggested "academically underprepared" as the term to describe students not ready for college-level courses because it avoids attributions of etiology which are imbedded in most other descriptors. The neutrality of the term also avoids the pejorative connotations presented by such adjectives as "disadvantaged" or "remedial." Academic underpreparedness is a relative concept, on both an intra-institutional and an inter-institutional level. Those students defined as academically underprepared by the English department at Stanford University are obviously quite different from those students so defined by the English department at a large urban inner city community college.

The most common operational definitions of underpreparedness derive from student performance on achievement measures (usually in reading, writing, and mathematics) selected by each college. Because the tests used as well as the cutscores established are different among institutions, consistent operational definitions do not occur. The authors' best estimate for the overall program is that about one-third of the entering freshmen in higher education institutions across the United States are underprepared in one or more areas of basic skills.

Why are so many students underprepared? At the simplest level of analysis, students are defined as academically underprepared because a college has so determined based on its established achievement test cutscores. Such cutscores are used to determine whether students are placed into regular college-level courses or developmental courses, primarily in the areas of reading, writing, and mathematics. The more difficult question is: Why do the students earn such poor scores or high school grades? One often reads that the poor achievement test scores are a result of "lower ability" (Brint & Karabel, 1989 passim; Cohen & Brawer, 1989). Ability translates easily to intelligence, as reflected in the current dictionary definition: "Ability is a general word for mental power, native and acquired, enabling one to do things well" (Webster, 1989, p. 3). However, there is no research which could be located in which student intelligence has been measured on a one-to-one, clinical basis, and thus shed of reliance on reading power.

Rather, the extant evidence cited relates primarily to SAT or ACT performance for which reading is a sine qua non for earning a high score. Hence, the fallacious assumption must be made that if one does not read well, one is not bright (i.e., has low ability). The same argument holds for scores earned on an achievement test. Considerable research of a nature possibly too expensive to conduct must be carried out to demonstrate that academically underprepared students are "low ability." Emotional distress can and does play a role in reducing intellectual functioning, as do neurological impairments and other learning disabilities, all of which may lead students to earn lower scores on standardized tests. Moreover, scores may be lower for some students because they never learned the material in high school, although they had the ability, and, if given the opportunity could have eventually succeeded. The

fallaciousness of the low-ability descriptor is evidenced by the later achievement of many initially underprepared students. For if intelligence is indeed low, it would appear remarkable that such a quick fix as offered by a few developmental courses could so noticeably improve the student's level of academic performance. We agree with Hardin who writes: ". . . this underpreparedness does not equate with incapable or ineducable" (1988).

On a very limited scale, a study to assess the ability level of underprepared students was undertaken in 1970 at Miami-Dade Community College (Losak, Jefferson, & Sutton, 1970). Fifty-seven low-achieving students were evaluated by clinical psychologists. The researchers concluded that students earn low scores on achievement tests for a variety of reasons, probably the least of which has to do with intelligence. This conclusion is indirectly reinforced through data reported by Medsker (as cited in Brint & Karabel, 1989). He found, when a standardized test of intelligence was used, that only 16% of community college students had IQ scores below average compared to 7% for four-year college students, and that 30% of the community college students scored above the mean for college students. Yet the intelligence test used required a reasonable level of reading to perform adequately. It is precisely this deficit in reading skills that is often found in academically underprepared college students and for which many developmental classes are offered.

PHILOSOPHICAL CONTEXTS OF DEVELOPMENTAL EDUCATION

Cross (1971) has identified three overreaching philosophical positions regarding who should receive higher education: the aristocratic, meritocratic and egalitarian. The influence of these positions can be observed throughout

the historical development of higher education in the United States. In 1990, meritocratic and egalitarian philosophies continue to influence political and financial decisions at all levels of government affecting educational institutions.

The inherent conflict between these two approaches is nowhere more pronounced that in the debate observed on the question of access to higher education. The choice of whether to be "selective" or provide an "open door" for admission has essentially been resolved through the establishment of an educational hierarchy to accommodate the values of each philosophical position. As an example, in the three-tiered California system of community colleges, state colleges, and universities, merit is inferred from the common measures of high school performance and scores on standardized tests. Students gain access to one of the three tiers based primarily on the degree of merit they can demonstrate. Egalitarian values are addressed through the "open-door" admission policy of the two-year colleges and their very low direct cost to the student, as contrasted with the meritocratic values espoused by the highly selective admissions policy at the university level. The state colleges represent somewhat of a compromise between the two extremes, with less selective admissions policies giving easier access than occurs within the universities.

According to a recent estimate by the Southern Regional Education Board (1986), only one-fifth of the colleges and universities across the United States are selective, reflecting the high degree to which colleges have adopted an egalitarian approach to admission of students. Whether this practice

reflects a strong philosophical commitment to open-door access or the outcome of primarily economic decisions is not easily judged.

The fundamental conflicts inherent within the meritocratic and egalitarian positions are at least partially resolved by any college which admits large numbers of underprepared students. Trow (1983) discusses the interaction of economics and educational philosophy and reminds us of the potentially serious impact for institutional survival should restrictive entrance requirements be instituted at colleges which now have open admissions. The extent to which a college is willing to permit its underprepared students to participate in developmental programs undoubtedly is strongly influenced by economics.

In Florida, the State Department of Education has identified the courses to be classified as developmental and has specified a three-term limit on the number of attempts a student is permitted for completion of developmental courses in each of three skills areas (reading, writing, and mathematics)--that is, attempts that are eligible for the typical state funding based on the number of full-time equivalent students. Colleges receive no state funding for student enrollments exceeding the specified limit. This policy applies to all underprepared students irrespective of their initial lack of readiness for college-level courses. The political goals of such limitations reflect a more narrow commitment to egalitarian objectives than desired by most community colleges where the underprepared students are freely permitted or even encouraged to enroll. The political message for higher education administrators requires individual institutions receiving state support to carefully evaluate the extent of their commitment to provide educational services for underprepared students and to assess the extent to which

individual students have the potential to succeed within the restricted time frame permitted by the State regulations.

During the period that Land Grant colleges were open to any high school graduate, few offered comprehensive curriculum support for underprepared students. For most students, the choice was to "sink or swim" as they competed for grades with all other students (Astin, 1985). The "sink or swim" approach is now largely a practice of the past, as educators accept an inherent responsibility to provide special services for underprepared students. Even the most prestigious universities provide "exceptions" to their strict admission criteria for 5-10% of their entering freshmen.

The colleges and universities that choose to offer developmental programs for underprepared students do so for diverse reasons related to educational philosophy, student learning, ethics, expectations of teaching faculty, and especially economics. The strong interaction between an egalitarian philosophy and economics is illustrated by two quotes relating to the entry of underprepared students at Vassar College in Brier's (1985) historical analysis. In the College's 1864-1890 Report, the President took the position that "while it might be embarrassing for Vassar to lower its standards (for admission). . . it would be far more damaging to its image to have no students." From the perspective of a faculty member, "it was a mistaken kindness on the part of colleges to adapt their conditions or their courses to the circumstances of the Sub-Freshman" (pp. 360-361). These differing views regarding admission of underprepared students continue to influence educational policies more than a century later.

The importance of the structural role of developmental programs should also be considered. Perhaps their structure serves the institution and society in a manner resembling the role of the community colleges vis-a-vis the universities: more as a barrier than a springboard. Specifically, Brint and Karabel (1989) suggest that the community college is a place to keep students out of the way of universities so that universities can go about their business of teaching and research with the best and the brightest. To this end, they conclude that "junior colleges have historically been supported by the major universities less to supply them with students than to insulate them from the masses clamoring at their gates" (p. 229). A similar analogy may also exist for those faculty in the two-year college transfer programs who support developmental programs in order to insulate themselves, since the sheer numbers of academically underprepared students threaten to undermine the standards of regular college classes.

By definition, if all of the students in a classroom are in need of remediation, we can clearly label the class as developmental or remedial. If none of the students need remediation, a "regular" college-level class clearly exists. Yet somewhere along the continuum from one type of class to another, a point is reached at which the "density" of underpreparedness affects learning not only for the underprepared students but for their classmates as well. A faculty member who faces only one or two out of thirty students in need of extra support has a quite different task than if there are 15 or 18 students with serious academic deficiencies. One function of developmental programs is to keep the density of academically underprepared students in regular college-level classes at a minimum. Faculty who teach regular college-level courses often support developmental education because of this benefit (Brier,

1985; Cohen & Brawer, 1989). Yet when a third or more of the incoming students are underprepared and many move on to regular college classes still underprepared, faculty may reduce academic expectations in order to teach meaningfully to the level of student readiness.

Today, as the most underprepared students enrolling in higher education concentrate in the two-year colleges (Lederman, Ribaudo, & Ryzewic, 1985) the philosophy is focused on curriculum tracking. Placement into courses or integrated programs of developmental education is the most obvious of the tracking practices. Tracking into "terminal" two-year degree programs was the basis for Clark's (1960) "cooling out" observation and is the target for intense criticism by Cohen and Brawer (1989) as well as Brint and Karabel (1989). Despite such criticism, Woods (1985) found that tracking by colleges into developmental curricular offerings occurred in about 90% of those institutions responding to her survey.

Once a decision has been made to accept academically underprepared students and to track them into developmental programs, differences abound with respect to the manner of the tracking, the nature of the curricular offerings, and the type of instructional approaches. The curricular offerings are primarily in reading, mathematics, and writing, regardless of the type of institution (Lederman et al., 1985). Program structure, selection of faculty to teach the underprepared, and educational objectives also differ considerably (Abraham, 1987) guided by the educational philosophy of the institution as well as economic and political exigencies.

and practice in teaching the academically underprepared student than for any other defined group of students. Humanistic views as applied directly to instruction in higher education are supported by Rogers (1983), Knowles (1978), and by the authors in the Chickering and Associates (1981) publication. Teachers of academically underprepared students may find that the structured, directed practices of behavioral methods are more appropriate for adults whose developmental processes are at the lower ranges, with emphasis on unstructured approaches more practical at the higher stages of intellectual development. Clearly, empirical research is needed into relationships between structure and learning, within and among groups of differing skill levels.

Malcolm Knowles (1978) proposed the application of what he termed andragological principles to the enhancement of student learning, differentiating andragogy from pedagogy on the basis of developmental differences between children and adults. Empirical data related to systematic application of Knowles concepts to the teaching of academically underprepared students is, again, an area in need of intensive research.

Guiding philosophies regarding who should be educated evolved slowly. Institutional and classroom practices in developmental education are also slow to change. The Hilgard and Bower comment on eclecticism is as appropriate today as it was in 1966: "It is natural that in the early development of the relevant sciences the applied users, the technologists, will tend to be eclectic, picking up a plausible idea here and there, and using it somewhat inventively in the practical situation" (1966, p. 265).

Institutional Philosophy

Following from our definition of developmental education, emphasis on both the cognitive and affective aspects of learning should form the basis for institutional philosophy related to curriculum for the academically underprepared student. Perhaps the most comprehensive recent presentation of these theoretical issues of adult developmental processes as they relate to education is found in Chickering and Associates (1981). Within each of the nine major dimensions of adult development, levels are enumerated and analyzed and suggestions for engaging in educational practices which facilitate movement from lower to higher levels are detailed. Perry's chapter (1981) on cognitive and ethical growth deals directly with issues confronted by teachers of academically underprepared students. Examples of systematic application of Perry's theory are found at College of the Finger Lakes (Champaigne, 1982), Alverno College (Mentkowski, Moeser, & Strait, 1983), and at Simon's Rock of Bard College (Goldberger, 1981).

Humanistic and behavioral practices, guided by rationalism and associationism, their respective theories of knowledge, are applied throughout the educational enterprise, though rarely with systematic comprehensiveness. For developmental educators, as for others, eclecticism prevails. In those instances where adherence to theory is implemented, for example, in Keller's Personalized System of Instruction (PSI), the results appear to be promising (Kulik, Kulik, & Cohen, 1979; Ryan, 1974). Instructional approaches to facilitate learning for the academically underprepared student likewise show considerable variation, reflecting differences with respect to views not only of learning processes, but also the etiology of the dysfunctioning, and conflicting philosophies. Consensus is no more apparent with respect to theory

Cohen and Brawer (1989) offer specific suggestions, again from an eclectic perspective, derived from their review of extant offerings for the academically underprepared student and summarize their views as follows: "It is likely that most students can succeed in the collegiate and occupational programs if they are required to supplement their courses with tutorials, learning labs, special counseling, peer-group assistance, and/or a variety of other aids" (p. 250). Evaluation of the efficacy of these endeavors is a relatively recent event. Twenty years ago, a review of literature turned up only twelve published evaluations (Losak, 1969), virtually all of which had occurred since 1950. Research in this area was not valued highly for many reasons. In private colleges, struggling to maintain fiscal solvency, evaluation had little practical value since remedial courses and other support services as needed to keep students enrolled were undertaken with the presumption that they were successful. Many faculty and administrators simply assumed program efficacy, judging from the always available anecdotes describing particular students who succeeded.

Today, program evaluation is more common and rigorous, driven to some extent by the strong social pressures from state legislators who are demanding accountability from higher education. Federal financial aid and other programs of support for higher education usually require evaluation reports. In response to these pressures, educators have developed more sophistication in evaluating the success of diverse student populations. The use of "on time" graduation and college leaving as the sole measures for determining success of programs has evolved to include more focus on the various college missions and on student intentions.

Grading Practices

Philosophies related to student evaluation by faculty for the award of a grade generally follow four models: relational, absolute, growth, and ability level (Terwilliger, 1971). Using a relational or normative approach, grades are awarded in relationship to the performance of other students. With an absolute model, grades are awarded on the basis of the extent to which students have achieved a predetermined level of competence. Following a growth model, grades are awarded on the gains a student demonstrates from course entry to course exit. Finally, using ability level, grades are awarded on the basis of a student's achievement level as related to his or her measured ability level. The fourth model is infrequently used in higher education. Eclecticism is pervasive in practice, with instructors using some combination of the relational, absolute, and growth concepts in arriving at judgments regarding the award of grades. In a more recent article, Terwilliger, (1989) in fact recommends combining the absolute and relational models.

During the period when developmental students were handled in a "sink or swim" fashion, normative (relational) grading was pervasive. Most of the students who were initially weak were quickly washed out. Yet they were few in number. Today, despite some notable exceptions, there is still widespread use of normative grading with far greater numbers of academically underprepared students. One immediate result is that many very weak students are awarded passing grades and eventually baccalaureate degrees, contributing to a crisis of quality standards in higher education (Cohen & Brawer, 1989). Current philosophy encourages, via easily accessible programs of federal and state financial aid, attendance by ever increasing numbers of high school graduates,

which in turn places an enormous burden on the teaching faculty for rigor in examination of student competence.

THE POLITICAL CONTEXTS OF DEVELOPMENTAL EDUCATION

Postsecondary developmental education programs are heavily influenced by politics in its many dimensions. Three dimensions seem particularly relevant: the impact of societal values, external politics, and internal politics.

The Impact of Societal Values

All of education reflects the societal values which surround it: what is important, what is meant by success, how individuals are treated, and so forth. Colonial colleges, Jacksonian democracy, the focus on intellectual achievement, and the open door all reflect such values. Developmental education seems to be a particularly sensitive barometer of the current conflicts in societal values insofar as they are expressed in public, legislative, and educator views of higher education and its priorities.

At center stage is the question of access to education and its fruits. It is no coincidence that civil rights pressures, community colleges, and developmental education programs all mushroomed during the same period, from the early 1960's through the late 1970's. Two-year colleges paved the way for the increased access to higher education which was one outcome of the civil rights movement. Increasing numbers of underprepared students, the political mandate that the minorities among them be retained, and their generally weak academic skills combined to encourage developmental education services.

The trend has continued until it seems to be a more-or-less accepted part of educational politics. In the almost three decades since the launching of the landmark Civil Rights legislation, many groups of "new students" have tapped on the door of higher education: blacks, chicanos, native Americans, Asian Americans, women, unemployed and underemployed workers, retirees, the disabled, the handicapped, and the illiterate.

The issue of access, whether stated as the dichotomy of equality versus excellence or as the choice of "higher standards" or "higher retention," resonates throughout the past several decades so loudly as to need little amplification. Our society, in the form of both its legislators and its educators, values excellence. Simultaneously, it espouses equality of opportunity. And yet, from a third perspective, it confronts mediocrity in its students and much of its educational system. Most of the friction seems to have arisen from disagreements not on the nature of the problem arising from these conflicting values, but from how to respond to them.

McGrath and Spear, in an article entitled "The Politics of Remediation," (1987) see four main responses to the dilemma. According to them, the liberal response is to provide massive amounts of special services which will help individual students successfully compete in a meritocratic environment. The vocational response is to "opt for a pedagogy of training . . . within a rigid professional hierarchy" (p. 19): the professionalization of education, with vast numbers of discrete competency-based skills to master. A third option, espoused by social activists, seeks to legitimize minority differences while simultaneously seeking to change the system through political action.

McGrath and Spear's fourth response is that of developmental education. They argue that, in attempting to reconcile high standards with low performance, developmental educators have essentially abandoned intellectual rigor in favor of immediate personal relevance. Focusing on language use, they further suggest that "the consequences for the institution are that the norms of literate activity are renegotiated downward, ultimately altering the entire intellectual climate of the school" (1987, p. 19). Their solution is the retuning of the educational enterprise to place mastery of language as a powerful intellectual tool at the educational center, at whatever cost is necessary to those unable to make the climb.

Such arguments echo the historical evolution of developmental education definitions explored earlier. Is education to develop top leaders, able to guide the fate of a complex society at its many levels of operation? Prepare graduates for productive work and the resulting broad economic development? Mainstream those populations who are disadvantaged because of prejudice, isolation, immigration, and so forth? Rebuild egos and self-images and personal behavior? Develop minds keenly tuned to use of language as a tool for investigation and discovery of truth? Depending on the answers, then developmental education should be one or another, and its current status will be judged as good, bad, effective, useless, or indifferent.

External Political Forces

Competing societal values can be viewed as the long range perspective on the politics of developmental education. The more pragmatic short-term view must begin with an inspection of the external political forces which affect developmental education on an immediate basis. Clearly, external forces are

having an increasing influence on developmental education. As Shroyer (1982) concludes:

> Our institutional commitment to developmental education has always rested, like New Orleans itself, on thin, shifting ground. The patterns of subsidence depend, of course, on a complex of volatile and contrary pressures, pressures from the larger world outside the university, from a social system which seems incapable of seriously addressing the grave crises of poverty, racism, and illiteracy; our institutions are flooded with students whose poor skills are the direct products of that system. (p. 72)

Three such political forces seem of particular import, in unequal degrees: legislators, bureaucrats, and associations.

Legislators (and their constituents) have often taken a skeptical view of developmental education. Some see the open-door policy as a waste of money. Some criticize colleges for letting students do whatever they like for as long as they like. Jensen (1988), after tracing the tale of the Jan Kemp case and its aftermath in Georgia, concurs with the conclusion that developmental programs "tend to be viewed as temporary solutions to transient problems . . . Many politicians and academic administrators seem anxiously to await the day that remedial programs can be phased out" (p. 30). Abraham (1988) adds that "remedial education at the collegiate level has been questioned and vilified in ways that other programs have not" (p. 2). There are indicators, but little hard data, that such judgments are beginning to change.

The roots of such judgments are complex. Certainly there is a strong cadre of legislators who find it both fiscally sound and politically astute to resist any suggestions of "paying twice" for the same education. What should have occurred at the K-12 level need not be delivered again. Many are clearly influenced by the arguments that the United States can emerge from its economic doldrums on the international scene only by dramatically escalating the quality of the educational experience--even at the cost of penalizing those unable to move so far, so fast.

Many, however, may reflect more of an experienced skepticism, echoing the observation of reform-oriented Florida State Senator Jack Gordon (Hackworth, 1985) that "we legislators are getting a little smarter about the decisions that are being made in our colleges and universities. As a result, we are paying more attention and seeking to change the way things are done there" (p. 16).

To which Richard Richardson would rebut (Clowes, 1986) that "Taxing bodies have not seen fit to fund realistic (progress) objectives; so students who read at the fourth, fifth, and sixth-grade levels are expected to correct deficiencies accumulated over 12 or more years of schooling, and they are given only one or two years to do it. A very small percentage of those who enroll in developmental programs are able to do this" (p. 20). To which Roskelly (1985) would add: "easy answers will not do. Pressures for accountability increase even as understanding of complexity decreases" (p. 28).

A countervailing force to traditional political skepticism is emerging from within the business and industrial community, who increasingly view their

long-term viability as depending heavily on the adoption of quality-oriented management processes. The key to these processes is the assurance of employees capable of effective communications, problem-solving, learning, teamwork, and similar behaviors.

These expectations, outlined in such publications as Workplace Basics: the skills employers want (Carnevale, Gainer, & Meltzer, 1989) and The Education of the Renaissance Technician (Rosenfeld, 1986), relate clearly to developmental education. The political influence accompanying such business and industry demands is beginning to be felt in states such as South Carolina and New York, where recent legislation allies higher education and local business and industry in efforts to rapidly and substantially raise the level of basic skills performance (widely defined) among the current workforce. Such initiatives hold promise of providing developmental education with significant political support.

The second great external political force is that of state bureaucracies. Tillery and Wattenbarger (1985) note the pattern that "locally-controlled education, as represented by the junior colleges, has yielded during the years since World War II to state-controlled education." Vaughan and Associates (1983) add that educational leaders are well aware of the shift in funding, and thus power, from localities towards states. This latter observation, in tying funding shifts with power shifts, finds support in the comments of Deegan and Gollattscheck (1985), Martorana and Kuhns (1985), and others. The literature of political activity seems to be dominated by the trend of shifting control from localities to the state.

Dressel (1981) cites pre-audits, expenditure controls, and centralized admissions standards as examples of state-level infringement on local control. Tillery and Wattenbarger (1985) similarly cite enrollment caps, course limits, and testing requirements. Martorana and Smutz (1981) comment more broadly that colleges are being heavily affected by state-level actions seeking to control all state agencies rather than higher education specifically.

The implications of such shifts in power are viewed primarily, but not entirely, from a gloomy perspective. Dressel (1981) cites state-coordinated program reviews--being inherently more value-laden than financial audits--as particular threats to local autonomy. Martorana and Smutz (1981) are concerned with the dynamics established by local colleges being increasingly plagued more by minute laws and regulations than by broad state policy: the spectre of state bureaucracies. Tillery and Wattenbarger (1985) offer a particularly heavy list of negative implications, including state-local infighting, passage of laws to deal with one situation without consideration of its impact on other colleges, and overall lessened diversity and greater mediocrity among colleges.

The shift is not without its defenders, however. Martorana and Kuhns (1985) suggest that college administrators and faculty must simply become more politically oriented in reaction to these trends. Mundt (1978) states that local community colleges, while sacrificing total independence in making these accommodations to state-level governance, in effect trade off degrees of local autonomy for stability and predictability, particularly of funding.

Developmental education is at the forefront of this shift towards state control. Several states, such as Ohio and Florida, have mandated that only

two-year colleges can provide developmental education. Others have implemented statewide standardized testing. Florida's College-Level Academic Skills Test (CLAST) for all practical purposes dictates the priorities and direction of basic skills instruction as does the Texas Academic Skills Program (TASP) for Texas. New Jersey, California, Texas, Florida, New York, and other states have gone beyond requiring that all colleges test their students, with mandatory placement in developmental education when cut-off scores are not reached. They are also specifying what test(s) can be used and what cut-off scores will be required. New Jersey has even developed its own mandated tests and has constructed an elaborate substructure which compares exit performance across the public colleges on an annual basis.

In such instances the formulation of academic support policy, which used to be the prerogative of the colleges, has been partly usurped by state government. The implications of this shift for developmental education are mixed, however. State-level control is tending to narrow options and limit flexibility in certain areas, such as test selection. On the other hand, the data of Abraham (1987, 1988) and others suggest that "common practice" in testing, placement, and developmental instruction may be spotty at best. State-level mandates can be welcome levers in assuring at least a minimum of consistency and quality across a state, to the benefit of many students and educators.

The third external political phenomenon which has a lesser but noticeable impact on developmental education is the proliferation of national and regional associations and groups with an interest in the field. At least three developmental education associations have emerged in the past two decades: the

National Association for Developmental Education, the College Reading and Learning Association, and the National Council of Equal Opportunity Associations. In most states, a state-level developmental education association has also been established. Each works to produce its own standards of excellence and comprehensiveness in developmental education with the intent of impacting the field.

Such focused associations are joined in their effort to affect developmental education by segments of a growing variety of other associations: the American Personnel Guidance Association's Commission XVI, the Southern Regional Education Board, the College Board, the American College Testing Program, the American Association of Community and Junior Colleges, the National Council of Teachers of English, and other associations and organizations. The Center for Developmental Education, located at Appalachian State University, has for more than a decade sought to lead and influence the evolution of developmental education across the nation.

Cumulatively, these three general forms of external political pressure, combined with those lesser forms of external influence, represent the largest single set pressures on developmental education during the past decade or two. Their influence can only increase, particularly as the drive towards accountability and centralization accelerates.

Internal Political Forces

Political forces also affect developmental education from within individual institutions. In the majority of colleges and universities,

developmental studies programs are somewhat uneasy bedfellows with traditional academic departments, concerns, and faculty.

Roskelly (1985) documents the travails of a developmental writing program at the University of Louisville over a ten-year period. The saga, related by seven different directors during that decade, typifies the optimistic, persistent, uncertain, fearful, and frustrating campaign for acceptance and legitimacy which has been experienced by so many developmental programs. So, too, does it typify the outcomes, with Roskelly's conclusion that "ten years later we're still not sure how we convinced a department, an administration, students, and teachers to support and extend the functions of the Writing Center. . . The history of this writing program, and maybe the history of many writing programs, is a story of recognition" (p. 29).

Jensen (1988), also viewing developmental education from a writing perspective, concludes that "basic writing programs were developed for the most part to reduce the strife between such factions" as minority groups and traditional academicians. Such programs, he judges, are often seen by faculty and administration as continual political liabilities and "a threat to the 'character' or 'image' of particular institutions" (p. 30).

Faculty status has tended to reflect this ambiguity of position. Abraham (1988) cites findings which suggest that "institutions have used remedial instruction as a threat and punishment for faculty" and that developmental faculty are rarely tenured, rarely funded from line item appropriations, rarely have doctoral degrees, rarely receive usual faculty "perks", and rarely have special training (p. 12).

The internal forces which tend to keep developmental education faculty and programs in such ambivalent positions seem to arise most strongly not from malevolence but from frustration. As Shroyer (1982) states, "Inside the university, those faculty and administrators who urge closed admission policies suffer understandable and deep frustration about the chasm between their expectations for the university and the reality of its urban location and mission. In their frustration they see the world outside as the enemy and would like to build a moat around the campus, permitting entry only to a select group" (p. 72).

Such observations aside, there is another internal political reality which seems to be less well documented in the research literature. Developmental education has a degree of credibility and acceptance which grows rather than shrinks. There is an undercurrent of judgment that increasing numbers of faculty and administrators are beginning to accept the reality that developmental education is neither temporary nor trivial. Developmental education absorbs and retains a large percentage of college students at present. These students, emerging from an increasingly diversified population of adults, females, minorities, workers, and non-workers, represent groups whose needs will not vanish in a year, a decade, or perhaps another century. Increasing numbers of colleges, not just at the two-year college level but across the higher education spectrum, may be starting to come to grips with this reality.

THE FINANCIAL CONTEXTS OF DEVELOPMENTAL EDUCATION

Certain economic, philosophical, and political theories suggest that "money makes the world go 'round." Whatever the truth of such conclusions,

there is no doubt of the link between money and developmental education. The financial context of developmental education is far more straight-forward than many of the other contexts. It can be viewed from three perspectives: operational income, financial aid, and special grants.

Operational College Income

The most obvious link between developmental education and finances is in the area of college income. Generally, college funds arise from five sources: federal, state, local, tuition/fees, and other (gifts, auxiliary services, etc.). Two sets of data indicate both the relative weight of each of these sources and the direction of changes in their relative importance. Garms (1977) reports the national distribution of higher education income for 1971-72 while Cohen and Brawer (1982) report on the distribution of income for the 1980-81 academic year. Their data are as follows:

Source Of Income	Garms 1971-72	Cohen 1980-81
Federal	5%	5%
State	44%	60%
Local	33%	11%
Tuition/Fees	14%	15%
Other	4%	7%

Several conclusions emerge from such data (other than the fact that the Cohen and Brawer figures come up 2% short). First, state-provided income is growing rapidly in importance for collegiate operations. As one example, state revenues to community colleges in 1975-76 were 2.1 billion dollars and increased to 5.2 billion dollars in 1984-85 (El-Khawas et al., 1988, p. 30). Second, local funding is shrinking. All other sources seem to be remaining relatively stable.

The primary relevance of such data for developmental education lies in formula funding, the mechanism most often used to generate state funds which are the major source of institutional income. Wattenbarger (1985) examines the concept of formula funding, in which the state annually or semi-annually provides a set amount of funds (for personnel and sometimes other uses) per full-time equivalent (FTE) student. He identifies two types of formula funding. One of them provides a flat rate per FTE; each student is "worth" the same no matter how expensive or inexpensive the program of study. The second type varies the rate of reimbursement in terms of the type of program (e.g., an FTE in health programs, being more expensive to operate, generates more state reimbursement than does a business program FTE). Florida, for example, reimburses at from .8 to 1.7 of the average rate, depending on the program.

Deegan and Tillery (1985) estimate that most states only provide the single-rate formula funding system, with only an estimated ten states providing funds on a program-differential basis. The pattern is a crucial one for developmental education. As Richardson et al. (1983) and many others have observed, colleges and universities seek to expand their resources by attracting ever-larger numbers of students, with the assumption that the resulting FTE-driven state funding and tuition/fees will offset increased expenditures, plus a bit more.

Brier (1984) has noted that such a pattern is nothing new. Looking back to the 19th century, she has concluded that "first among the reasons for admitting inadequately prepared students to higher education was the financial structure of the colleges. Colleges needed enrollment to generate the revenue required to operate" (p. 4). As Rudolph (1977) stated more bluntly, throughout

American history "the colleges and universities knew what they were doing. They were laying their hands on every young man and woman they possibly could before their competitors did" (p. 160). So long as about 75% of postsecondary educational income is generated through FTE-driven funding and tuition/fees, underprepared students (within the context of individual institutions) will always be recruited and developmental education in some form will always be needed to the benefit of those who view America's long-term interests as being well-served by assurance of quality education to all citizens rather than just to a limited number.

Interestingly, the negative effects of FTE-generated funding formulas are assaulted both by those seeking to dramatically elevate the quality of higher education and by those seeking to increase the effectiveness of its open door role. Trow (1983), in arguing forcefully for the drastic elevation of standards at public research universities, maintains both that developmental education courses should not receive FTE-related credit and that the FTE-driven funding formula system itself should be viewed as a major barrier to educational quality. In the same volume, a Florida Community College President examines the best ways of developing genuinely effective means of helping underprepared students to succeed in college settings, and cites as a primary enemy "the stifling strangulation of enrollment-driven funding formulas" (McCabe, 1983, p. 11).

Given that formula funding remains the predominant financial mechanism, how does developmental education currently fare? Abraham (1988) concludes that "funding for remedial/developmental programs should reflect the fact that it can require comparatively greater efforts and costs to develop instruction and

programs for teaching students who are academically deficient. Funding should at least be at a level commensurate with lower divison non-remedial courses and students" (p. 6).

The auguries are somewhat mixed as to whether or not this is in fact the general case. Shirley Chisholm (Keeter, 1987) reviews the situation and concludes that "for quite some time now, colleges and universities have failed to budget a fair and reasonable percentage of money for remedial and tutorial programs" (p.19). The general weight of scanty evidence, however, seems to be that developmental programs tend to be funded neither much better nor much worse than many other collegiate programs. The issue merits much research.

Piland and Pierce (1985) reports on a state-level survey which indicates that average funding for developmental education programs, on the basis of credit hours and FTE's, was approximately the same as that for other programs, and specifically for vocational and liberal arts programs. He acknowledges, however, that many states could not isolate and analyze separate data on developmental education.

Such limited data aside, it is clear that the dependence of postsecondary education on FTE-generated formula funding and tuition/fees has an enormous and undoubtedly continuing impact on developmental education--its existence, its scope, and its prospects. For many colleges and universities, dropping their developmental education programs, or having them dropped out of funding formulas, would result in extremely heavy state income losses (Sanchez, 1982). Given demographic, social, and economic trends which suggest increasing reliance on often underprepared adults as enrollees in higher education, such a dependency will probably grow rather than shrink.

Federal Student Financial Aid

The second fiscal area of most import for developmental education is that of federal funding. Though Cohen and Brawer (1982) indicate that only 5% of higher education income is derived from federal sources, this figure is misleading. That 5% represents mainly contracts and grants for research, consultation, and development. The preponderance of federal aid in fact goes to individual students as a means of enabling them to attend college, and is thus represented in the 22% of higher education income which Cohen and Brawer attribute to Tuition/Fees and to other income sources.

Federal financial aid for individual students only began after World War II, as two Carnegie Commission Reports (1973, 1975) indicate. The catalytic event was the Servicemen's Readjustment Act (the GI Bill) passed in 1944, which provided support for millions of veterans to attend college as a way both to deal with a national problem of potentially massive unemployment and to develop a national resource of educated workers and citizens (Frances, 1980). The National Defense Education Act legislation of 1958 was another step in providing federal assistance to students as a vehicle for meeting urgent national needs.

The commitment to federal student aid as a way to serve national interests was superseded by the commitment of such aid to serve the needs of individuals beginning with the Higher Education Act of 1965. This Act began a torrent of legislation over more than a decade to provide direct financial assistance to individual students who needed such help in order to attend college: college work-study, basic educational opportunity grants, supplemental educational

opportunity grants, vocational loan insurance programs, and the like (Frances, 1980).

The next phase in the evolution of federal financial assistance to individuals occurred with the Middle-Income Students Acts of 1978. The legislation of the 1960's and early 1970's was concerned simply with access to higher education for disadvantaged students. Legislation, policies, and repayment formulae were all concerned merely with allowing such students to afford the most economical college available to them. The Acts of 1978 shifted the emphasis from access for all towards choice for all, and particularly a choice of colleges for the middle class (Frances, 1980).

The impact of such federal aid can scarcely be overestimated. Federal aid to individual college students was 15.4 billion dollars in 1986-87. Federal programs provided assistance to slightly more than one quarter of the undergraduates at all public colleges and universities, (Andersen et al., 1989). It is difficult to know precisely how such assistance affects developmental education. Obviously, the bulk of such federal aid goes to those from low or moderate income groups. Arguably, a large percentage of those students requiring developmental assistance are members of low or moderate income groups. This suggests what personal experience confirms: the percentage of underprepared students who receive financial assistance is larger than the percentage of such students in the college or university. However, there appears to be no hard research data to substantiate such conclusions, or to provide more clear pictures in terms of percentages. Again, a targeted research agenda is called for.

Faced with a lack of hard data, only general speculations can be made. First, many developmental students obviously could not attend college without financial aid. Such aid combined with developmental education must represent the first step in "the way out" of a lack of marketable skills, poor educational attainment, and a cycle of poverty.

Second, many of these students who might be able to find temporary or dead-end jobs to finance their education should not do so, particularly at the outset. They need to focus on studying, on adjusting their attitudes and perceptions, and on closing the gap between where they are and where they need to be in order to have the likelihood of achieving their educational goals.

Thirdly, financial aid clearly relates to course selection for many developmental student. "Full-time status" is a critical dimension for many students on financial aid. On the realistic level of transportation and child care, many students can afford to continue in college only to the degree that they receive assistance as full-time rather than part-time students. The consequences of over-streched academic workloads must frequently give way to the pragmatic need for financial aid.

Special Grants

A third area of financial impact on developmental education has been that of governmental grants. Federal revenues to higher education for two-year colleges in 1975-76 were 420 million dollars or about 8% of total federal dollars to higher education, increasing to 1.4 billion dollars in 1984-85 or 10% of the total (El-Khawas et al., 1988, p. 31). It is hard to overestimate the degree to which such grants have stimulated the emergence of developmental

education services: skills labs, tutoring, counseling, supplemental services, study and learning and thinking skills programs, and the like. Almost every major form of federal educational grant assistance in the past several decades has at some point focused on how to best help the underprepared student. This is partly because many such grants emerged as a means of resolving social problems (e.g., Title III, the TRIO programs) and partly because less-focused grant programs (e.g., Fund for the Improvement of Postsecondary Education (FIPSE)) were at certain points deluged with proposals which in essence identified underprepared students as higher education's most severe problem.

Piedmont Technical College, in Greenwood, S.C., offers a graphic example of this interdependence. Piedmont's developmental education program emerged from a federal right-to-read grant program in the 1970's. By 1980, an expanded version of this component, directed at all three basic skills, was being funded through institutional funds. However, at that time there were also two similar programs being operated independently on the campus, one through CETA and one through a combined state/federal adult education program.

There was also a federally-funded Special Services grant serving a predominantly minority population with counseling, tutoring, and other supplemental services. A major effort to develop student reasoning/thinking skills as a basic success competence had arisen through a grant from the Fund for the Improvement of Postsecondary Education and later through grants from the National Science Foundation and the EXXON Education Foundation. Finally, the college was operating a federal Title III grant, with one component focused on basic skills success.

By the mid-1980's, Piedmont had centralized many (but not all) of these overlapping services. The college had also added others: tutoring (Title III and Special Services, and later operated with institutional funds), computerized management and delivery of developmental education (Title III and various state grants), Talent Search (federal), and a variety of women's reentry programs (federal and state grants).

This complexity of grant programs is perhaps atypical in its intensity, but not in its direction. Those colleges and universities which have not relied on external grant funds to conceptualize, develop, and refine major components of their developmental education programs are almost certainly a minority.

SUMMARY

Developmental education and underprepared students have long been present in higher education, reflecting an expanding commitment to democratize higher education in the United States. The philosophical positions related to who should attend higher education have evolved from a totally aristocratic approach to a hierarchical system that seeks to balance meritocratic and egalitarian values in determining how educational institutions should respond to underprepared students who enroll, what educational practices are used, and whether curricular tracking is employed. Tracking was found to be endemic, not only in the two-year colleges where academically underprepared students predominate, but also in the overall system of higher education, including the most prestigious colleges and universities.

Has developmental education succeeded in creating a working fusion of excellence and equality? If longevity is a criterion, certainly the answer is "yes." Other criteria for success include both societal and institutional perspectives. For the institutions, developmental education has clearly been a successful means for coping with enormous numbers of academically underprepared students, and for offering them the opportunity to gain the academic skills which are necessary to complete a program of higher education. At the same time, developmental programs have enabled both public and private institutions to increase enrollment and thereby enhance funding. For society, developmental programs have continued to expand access to nontraditional groups of students, and to provide a higher level of employability skills. For the faculty at large, developmental programs have been, in general, a successful filter through which fewer underprepared students flow into their regular college classrooms. For the students, access has been provided for a chance to succeed, although the eventual outcomes are less clear as addressed in another chapter in this book.

Although a disproportionate share of developmental education is currently focused in the two-year college, four-year colleges and universities are far from exempt. Students' underpreparedness reaches all levels of the collegiate enterprise, affecting even our most prestigious universities. However, it is clear from our review that Cohen and Brawer's (1989) judgment is accurate: the relative impact of student lack of preparation is far greater in the two-year college. The level of preparedness of these high school graduates seeking higher education appears to be declining, and calls for reform of the secondary schools during the 1980's have been numerous.

Several questions and topics for further research in developmental education emerge from this overview.

1. An examination of processes used to assign grades is needed. The broader question might be: to what extent do grades predict future achievement?

2. What proportion of developmental education students followed a college track program in high school?

3. What are the views of faculty who do not teach developmental education toward both developmental education students and programs?

4. What are the non-cognitive outcomes for developmental education students and are they different than for non-developmental education students?

5. Research should be conducted on the etiologies of underpreparedness.

6. What are the ability levels of developmental education students?

7. What are the effects of total immersion vs. permitting students to simultaneously take work outside of developmental education?

8. What are the funding patterns for developmental education in comparison to funding for other types of instruction?

9. What are the relationships between developmental education and student financial aid programs?

Perhaps most important for the future is a need to focus on the multiple purposes of developmental education and to more clearly relate questions of success to those purposes, both explicit and implicit. The continuing low level of academic preparation exhibited by many high school graduates, the economic pressure to maintain the financial support afforded to institutions of higher education by enrolling underprepared students, and the relativistic nature of academic preparation all combine to assure an extended future for developmental education. General acceptance by higher education of the need for developmental work remains a certainty when as noted earlier 82% of all United States institutions report having at least one course in developmental education (Abraham, 1987).

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