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ABSTRACT

Focusing on the problems of attrition and retention in community colleges, this paper reviews the literature dealing with the causes of attrition, describes promising practices which attempt to deal with the problem, and offers recommendations to enhance retention. First, the characteristics of students likely to drop out of college are described (they include poor academic records, poor study habits and skills, and low aspirations); the cultural, economic, and social factors associated with student attrition are also identified. Next, ways schools contribute to the problem of attrition are discussed, including inadequate testing and counseling procedures, poor teacher attitudes, inappropriate instructional approaches, textbook readability levels that are above student reading skill levels, and unsuccessful efforts to improve students' reading skills. The next section focuses on institutional practices that show promise for increasing student retention, emphasizing the importance of early identification and early intervention and highlighting the characteristics of effective reading and study skills programs. Finally, a series of recommendations drawn from the literature are presented, focusing on assessment and counseling, remedial/developmental programs and instruction, developmental program faculty, and students. (HB)

ATTRITION AND RETENTION OF COMMUNITY COLLEGE STUDENTS: PROBLEMS AND PROMISING PRACTICES

by

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Attrition and Retention of Community College Students: Problems and Promising Practices

In past years, when numbers of students have been high and demand for places exceeded available places, colleges could more or less ignore the problems of underprepared students and the resulting attrition. However, when enrollments are declining, schools are forced to take a second look at those students who exit nearly as quickly as they come in. Estimates of attrition from colleges range from 50 to 75 percent; it is obvious that total enrollment could be enhanced by retaining even a small number of those students.

In the recent past, it has been very difficult to get clear retention data from many colleges, because they have not had it. Chickering and Hannah (cited in Cope and Hannah, 1975) argue:

> The administration and faculty simply do not know how many students are leaving and do not make an inquiry because it always seems the dropout rate is low. The rate seems low because most students leave quietly between terms and over the summer; they do not talk with their counselors, they just do not come back (p. 5).

They add that reliable data on community college dropouts is also hard to find because it is "artfully buried" (p. 2), and that most college faculty and administrators take a "we-would-rather-not-know" attitude toward withdrawal (p. 5).

CAUSES OF THE PROBLEM

CHARACTERISTICS OF THE STUDENTS

As colleges scramble for students, then, it becomes increasingly important to characterize, if at all possible, the potential dropout; to determine the reasons why he or she might withdraw, and to see if procedures or programs could be established to help reduce those numbers that are going back out the open door.

Numerous studies have been completed in the past decade to identify significant characteristics of the college dropout. The most obvious characteristic is lack of academic preparation. The underprepared student has been variously termed "marginal," "educationally disadvantaged," "academically unsuccessful," "non-traditional," "remedial," and now "developmental," and "high risk" (Moore, 1970:3; Maxwell, 1979: 112-113). Maxwell interestingly adds, "misprepared."

Cultural and financial disadvantages work to compound the problems of the student who is educationally disadvantaged. Grant and Hoeber (1978), citing a study in the 1976 IRCD Bulletin, add that these students

> have not acquired the verbal and mathematical an[illegible]ge of cognitive skills required for collegiate level w[illegible]erally the basic skills student is a student whose gra[illegible] the bottom half of his high school class, who has not earned [illegible] preparatory diploma, and is assigned to a high scho[illegible] has a poor record for student achievement (p. 7).

The work habits and attitudes towards school of these stu[illegible]its tend to further inhibit their progress. Maxwell (1979) indicates tha[illegible]nder-prepared students have been underachieving all of their lives (p. 203) [illegible]nd are "rarely self-starters capable of sustained independent work" (p. 381). She adds that they

> usually seek simple cures and are convinced that the cure is a formula, short course, or technique that will alleviate their symptoms and one that will require minimal effort and time. . . . The treatments students suggest usually reflect their desire to remain in a passive, receptive role (p. 55).

These students tend not to know their resources or their weaknesses. They often are most reluctant to take the kinds of courses they need to take to remediate their weaknesses (Maxwell, p. 200). They also are often unwilling even to admit they need help in basic skills, although they might be willing to take a "speed reading" course (Ross, p. 2).

In addition to lack of preparation in the skill areas of reading, writing, and mathematics, these students frequently share one more characteristic, according to Maxwell (1979): "They managed to avoid studying, reading, and writing in high school and do not study in college" (p.303). As a result, participation in class is limited because they frequently have not acquired effective study habits, and they prefer not to raise their hands or respond because of the unhappy experiences they have had in the past (Moore, 1970: p. 59).

Felton and Biggs (1977) say that the typical underachievers expect to fail and often attribute failure to external power sources (for example, a teacher) and a feeling they have no control over their destinies. Or, students will attribute failure to some unchangeable characteristic, such as low intelligence. The underachiever

> sets either inappropriately high or extremely low goals. When she aims for unrealistically high goals, she abdicates responsibility . . . .If she succeeds, she usually does not attribute her success to the effort she has made. She believes, instead, that she has been unusually lucky (pp. 65-66).

Roueche and Kirk (1973) underline all that the above observers have been saying by describing the underachiever as follows:

> Nontraditional students are characterized by feelings of powerlessness, worthlessness, alienation, and inappropriate adaptive behaviors--unrealistic levels of aspiration, lack of problem-solving skills and experiences, hostility, agressiveness, and often delinquency. . . .They typically exhibit less social maturity and autonomy and feel that the only way they can equal or surpass their peers is through occupational pursuits or athletic endeavors. . . . The community college high-risk, then, is often a hesitant, conservative low-achiever with serious self-doubts, lack of confidence, poor mental health, and motivation too low to detect. He asks to be taught but does not really believe he can learn because he has experienced a lifetime of academic failure. While he aspires to self-actualization, he believes that he will fail again (pp. 69-70).

Felton and Biggs (1977) remind us that such students have defined themselves in ways that are unnecessarily destructive, and then they close out new, possibly viable, options and ignore anyone who tries to get them to see themselves as any different from the way they perceive themselves. "This is the tragic cycle of the underachiever" (p. 13).

The above descriptions characterize severely disadvantaged high-risk students. When we identify the academically and culturally high-risk students, have we then discovered most of our potential dropouts? Studies show that this is not the case. There is ample evidence that many students of average or better ability are now coming to college ill-prepared or "misprepared" to do the work. The decline in SAT scores in the past decade is of national concern and is reflected in the performance of college students at all types of colleges. When the Advisory Panel on Scholastic Aptitude Scores Decline (1977) looked for causes, it enumerated many that were society- as well as school-related.

School-related factors include the significant reduction in English classes being taken (between 1971 and 1973 enrollment in grades 10-12 English classes dropped between 50 percent as schools "liberalized" requirements), automatic promotion, reduction in homework assignments, and grade inflation (cited in Maxwell, 1979: 18-19). Maxwell adds that one particularly unfortunate consequence of grade inflaction and easy standards is that such practices lull students into thinking that their skills are acceptable and sufficient, and therefore motivation to make a stronger effort is reduced (pp. 376-77).

One other group of studies looks not just at the characteristics of the students but at the quality of the interaction of the student and his or her school, once the student has arrived. Several pieces of research indicate that an important reason for dropping out is dissatisfaction with the quality of life at the college. Medsker (1960) cites a doctoral study done by Jane Matson which

found that although dropouts had about the same characteristics as the persisters, those who withdrew seemed to "lack a sense of belonging to or identification with the college environment" (p. 6). Heaton (1978) agrees, saying that students leave when their goals are uncertain, when they receive little attention from signficant college personnel, and when personal and academic problems go unresolved (p.26). In Bean's study (1978), "not belonging to a campus organization" was one significant characteristic of those who dropped out.

Some of the most informative data related to interaction on the campus comes from a series of six studies done at Syracuse University on the relationship of variables between characteristics and college experience. Like Astin (1975), Terenzini and Pascarella (1980) feel, that there is, at best, a tenuous correlation among dropouts and traditional predictors: "In none of these studies was a statistically reliable difference found between voluntary leavers and stayers with respect to any of a wide degree of characteristics freshmen bring with them to college" (p. 273). Terenzini and Pascarella theorize that the study of attrition may have moved into a potentially more fruitful stage than merely attempting to identify and predict dropout characteristics. They believe that the critical issue is how these characteristics interact with the features of a particular college (p. 271). In their six studies, done between September, 1974, and September, 1976, the constructs of social and academic intergration made statistically significant contributions to explaining persisters and dropouts.

Of particular note is the finding that, "the most striking pattern is the consistent relative importance of informal contacts with faculty members outside the classroom" (p.277). In four of these studies, frequency of formal student-faculty interactions was either the most, or the second most, important single variable (p. 278). The researchers conclude:

> It would appear, then, that there are important determiners of freshman-year voluntary persistence/withdrawal that are not merely reflections of the kinds of students enrolled, but rather are subject to the influence of institutional policies, programs, or conditions that affect students after their arrival on campus (p. 280).

We find, then, when we pull together all the pieces of these studies, that we may be able to identify some characteristics that can give us early warning; the best predictors appear to be poor academic records, poor study habits and skills, and low aspirations at time of entrance. However, of perhaps equal importance, and the one most under the control of the school, is the experience of the student when he or she arrives at school. Let us next consider in what ways a school might contribute to the problems of student attrition, as well as ways it might counteract the problems.

SCHOOL CONTRIBUTIONS TO THE PROBLEM

Assessment and Counseling Procedures

The student's initial, and often only, encounter with the school counselors may well be in the assessment or placement testing procedures. Testing of some kind is now on the increase, with Roueche and Snow (1972), in a survey of 139 community colleges, finding that 82.8 percent did offer diagnostic and assessment services. What sorts of assessment tools are used for admission, how many school use them, and for what purposes?

Roueche and Snow, in the above-mentioned survey, found that 37.4 percent of the colleges said they use the American College Test (ACT); 18.7 percent use the Scholastic Aptitude Test (SAT); 41 percent use the Nelson-Denny; and 51.8 percent use a locally-designed test (p. 137). Ainge, in his 1973 study of 62 California community colleges, found that 52 percent used the ACT and 40 percent used the SCAT. The Nelson-Denny and the Cooperative English tests were also use (p.59).

The common practice of using a general ability test, with minimal feedback to the student, seems almost a waste of time. In their intensive study of basic skills programs across the country, Grant and Hoebel (1978) comment:

> Programs that only use a placement result without performing follow-up diagnostic testing usually end up shooting in the dark in their approach to what areas of discipline they need to address for each student. . . . The time and effort wasted with this method should be obvious (p.26).

There does appear to be an increasing focus on the use of a wide range of tests at the community college. Roueche and Snow (1977) indicate that the trend of the more successful colleges is toward a battery of tests, rather than a single test (p. 28).

Although there are certainly many problems with current tests and testing procedures, writers are increasingly urging that we develop improved ways to assess students initially and provide knowledgeable counseling. Hampton, in a paper presented to the American Psychological Association (1972), said:

> When we know that failure is practically inevitable, why must we push the disadvantaged student into failure deliberately by permitting him to do what we know he can't do. It makes much more sense to find out at what level of subject matter difficulty the disadvantaged student is and help him from there.

Maxwell (1979) says: "To choose wisely. . . students need solid information about their skills and how they compare with the demands and expectations

of the faculty" (p. 31). She sees early identification of weak students as the essential key to successful basic skills programs (p. 40). Roueche also urges that students be strongly discouraged through "strong, directive counseling procedures" from taking certain courses until they gain proficiency (p.29).

Counseling functions are perceived in a variety of ways by students, but many studies indicate that, contrary to what one might expect, students have found these functions to be inadequate and unhelpful. Garni (1980) cites numerous studies claiming that students use the counseling centers as a last resort, if at all (p. 224). Vinarski (1977) says that the only area in which the early leavers in his study rated the college services lower than did graduates was in veterans' services and in advising (p. 7).

Garni (1980) insists that counselors can no longer afford to depend on "remedial,one-shot, crisis-oriented intervention " (p. 225) and urges a strong program of directive counseling in the admissions programs, with counselors serving as "admissions advocates" for high-risk students. He would like to see a counseling-alert system set up for students with potential major problems and urges counselors, as the students' advocates, to become involved with developmental education programs and curriculum committees. In addition, he sees a special counseling thrust needed just prior to and after mid-term period (p. 225). As with other writers, he decries the evidence that counselors seem to concentrate on working with students only after a crisis has occurred.

Cangemi (1979) also insists that many students might not have dropped out if only they had received more personal attention at critical times during their collegiate experience (p. 11). Pantages and Creedon, in a lengthy examination of college attrition (1978), conclude with a series of recommendations that includes monitoring of entering freshmen, more comprehensive orientation programs, better publicity for counseling services, and an "early warning" system (pp. 94-95). Their focus, they say, is to promote a shift of attention away from the prediction of dropouts to the prevention of them (p. 94).

This argument is also made by Herman (1978), after a study of Kent State freshmen, as he urges a focus on "experimental intervention rather than dropout prediction." Johnson (1980) in her study of non-returning students at one community college, also insists that counselors must become very active in working with new students early in the semester. This activity must continue through the semester, as counselors are often unaware of and uninvolved

with students as they encounter serious problems. Hinrichsen and Schaumberg (1976) cite an Orange Coast College study (1974) which demonstrates that students who drop out generally don't consult with faculty or a counselor prior to dropping (p. 32). Cope and Hannah's data (1975) concurs with this, as they indicate that many colleges know nothing about where most of their dropouts are going or what they are doing (p. 52). Weber (1977) believes that the low satisfaction with both counseling-guidance and academic advising services found in her study indicates that any significant improvement in these programs would substantially aid in reducing attrition.

The bulk of the criticism seems to be directed more at the current ways in which counseling staffs function than at the concept of counselors per se. Studies to be cited in a later section argue, in fact, that effective counseling efforts are at the heart of successful developmental programs. Moore (1977), for example, succinctly sums up his belief in the value of effective counselors:

> There is mounting evidence that in the community college the counselor is the pivotal staff member in the remedial program. . . . He acts as liaison and represents the **core** of any program designed to assist the academically unsuccessful student. Sometimes this **assistance** is more effective in helping students improve than academic courses (p. 86).

There is strong need, then, for improved initial assessment to help guide the student, for informative orientation programs, and, in particular, the development of a continuing, warm, personal relationship with a counselor, one that does not wait for a crisis.

Faculty

If the counselor's role and relationship in regard to the low-achieving student has been subject to criticism, that of the faculty has been equally, if not more strongly, attacked.

Part of the problem grows out of the focus of the community college as as a transfer institution when many of the faculty were hired. Medsker, in 1960, drew attention to the fact that more than half of the community college teachers he had surveyed had expressed a preference for teaching in a four-year school (p. 200), and he warned that the claim of the junior college that it was unique because of its special programs for terminal students was greatly exaggerated (p. 116).

That was over twenty years ago, however, and a great deal has changed since then. What improvements have taken place over the years? Roueche and Pitman (1972) quote a 1966 article by Bossone in which he complains that community college teachers want to teach only those who are already

motivated; that remedial instructors often demonstrate very little knowledge or understanding of what they are to do (p. 10). Bossone had changed his mind very little when he complained in 1969 that misdirected or poorly trained teachers, along with inadequate instructional material, often served as a deterrent to effective learning at the community college (p. 365). He added:

> The inability of many community college teachers to cope with the problems confronting them in remedial classes is dramatically driven home each year by the vast number of students who become discouraged and drop courses. . . . The public, as well as educators, are constantly being reminded that community college teachers generally are inadequately trained to teach the remedial student who is rapidly coming to dominate the community college scene (p. 365).

Moore (1970) also argued that the community college teacher was poorly trained, or rather "self-trained." He said, "Their jobs have been without description, structure, theory, or methodology" (p. 70). Other writers (Blushness and Zagaris, 1972, cited in Roueche and Kirk, 1973; Roueche and Pitman, 1972; and Grant and Hoebel, 1978) also saw the community college teacher as being ill-prepared, with often the most inexperienced faculty member, or even only a part-timer, given the task of teaching remedial classes, with the promise that eventually he or she could "earn" the right to teach "**real**" classes. Roueche and Snow (1977), add that in the development classes of the 1960's":

> Few instructors bothered to find out anything about the abilities of those students they were instructed to teach. Often the text materials written on a 13th or 14th grade level were required of students in remedial programs who could not even pass an 8th grade reading test (p. 9).

But lack of preparation was not nearly as much the real problem as was attitude. Moore complained in 1970: "Too many teachers consider the task of teaching the high-risk student in the junior college to be academic social work" (p. 63). He added that there was little recognition or status from their colleagues in teaching the developmental level, perhaps because the ability of the teacher is often identified with the ability level of the students with whom they work. Roueche (1972) added that community college teachers, like their university colleagues, are often concerned with "status," and that teaching remedial students does not offer it (p. 10).

One of the most common criticisms running through the work of these commentators is of the traditional instructional approach of the community college teacher to the remedial student. Friedman was complaining in 1969:

"Educators often imply that innovative teaching methods are being used in the community college. However, such methods do not develop in the hands of traditional teachers" (p. 17). He continued to complain that most community college teachers used only the traditional lecture method, and among the worst culprits were former high school teachers (p. 197). Gleazer (1973) also attacked the "conventional instruction with lectures, competitive testing and grading, and research papers," and said these were all detrimental to the student, as clearly evidenced by the high rate of failure and dropouts (p. 66). Roueche, in his 1972 study, criticized "instruction that stresses symbolic systems and almost guarantees failure for the low-verbal-ability students" (p. 66)

Spickelmier (1973) indicated that not the least of the problems was the "compulsion" of some faculty to "cover" their material within a prescribed period of time. Sixty-one percent of those he surveyed believed that more subject matter could be covered if they did not have any remedial students in their classes (p. 172).

Despite the plethora of criticism, however, there does appear to be developing in recent years a much better trained and better qualified, more enthusiastic group of developmental education instructors. As early as 1973 Roueche and Kirk applauded the faculty in their five model colleges as being "caring" kinds of people, for having moved away from standing in front of the classrooms and "talking at" their students, for actively involving the students in the learning process, for using measurable objectives and a rich variety of teaching methods and materials (pp. 66-68).

A desire to work with community college students is a critical quality, and in their 1977 study, Roueche and Snow found that 84 percent of the 139 community colleges claimed to use only teachers in their developmental classes who had expressed an interest in and a desire to work with high-risk students (p. 36). Ainge (1973), in his study of the developmental programs in 83 community colleges, found that 63 percent said they chose only subject matter specialists, 20 percent chose volunteers, and only 6 percent assigned new instructors (p. 61). According to these respondants, many of these developmental teachers had had special training both in the content field and in instructional strategies.

Schools are also beginning to develop fairly elaborate support services. In 1970 only about 40 percent had learning skills or assistance centers; in 1976 Roueche and Snow found about 80 percent had established these centers (p. 31). It would be difficult to find, in the 1980's, a community college that does not have some kind of a learning assistance center.

Tutoring programs have also grown widely to assist faculty in working with the educationally disadvantaged. Wooley (1976) found that 94 percent of California's community colleges had tutorial programs in 1974-75, and all but one of the remaining schools planned on implementing such programs (p.104)

Along with this evidence of growing services and funding, professional organizations--such as the Western College Reading Association, the California Community College Tutorial Assocation, and the California Association for Post-Secondary Educators of the Disabled, to name only a few available in the West--have expanded, have brought workshops, conferences, and a variety of curriculum activities and experienced presenters within the reach of most community college instructors. Slowly a cadre of enthusiastic, well-qualified developmental education teachers is forming.

As Rouece and Kirk warned in 1973, however, one still cannot assume that all community colleges and all faculty are now effectively serving the needs of the educationally disadvantaged student. Although the quality of those teaching developmental courses appears to be improving substantially, there remain on campuses in the regular courses many of the more traditional, academically-oriented instructors who continue to feel that, while underprepared students may have the right to an education, it should not be in their courses. This problem must continue to be addressed. As Cope and Hannah (1975) state: "persistence in college requires the personal touch that only dedicated professors can give" (p. 45). With so many students needing special help in so many ways, the dedication to work with educationally disadvantaged students must reach beyond the developmental classroom door.

Reading and Readability

As indicated through this review of the literature, the level at which a student reads seems to have significant impact on how successful he or she can be at college, and whether he or she ultimately drops out or persists.

There is disconcerting evidence, in the way of results from SAT scores, the National Assessment of Educational Progress, and individual research studies, that the functional reading level of American youth is declining dramatically. Recent studies at the University of Texas by Roueche and Armes (1980) indicate that the average reading level of students entering community colleges is now below the eighth grade, a decline of at least two levels since 1979 (p. 21). But perhaps even more appalling is additional evidence that possibly 20 to 25 percent of these students are actually reading at or below the fourth grade (p.23)!

Even if such studies are wrong by a level or two, the results are dramatic and discouraging.

MacDougall, in a study of 4,610 students at Southwestern College in 1976, found a correlation between reading skills and course achievement in over 90 percent of courses offered at the college. He concluded that a reading test should be required of all students enrolling in any of these courses, with the results communicated to faculty, counselors, and students. He also recommended that each course publish a reading level which would ensure at least 50 percent probability of successful completion (1977). In his study he was able to identify such a score for all courses at Southwestern.

Chadwick (1975), who surveyed all 650 entering freshmen at Cosumnes College with the Nelson-Denny test in the fall of 1974, found that 17 percent scored at grade 8.9 or below. Approximately two-thirds of the group read below grade 7.9, and a third were below grade 6.6. At semester's end, 61 percent of the group had withdrawn, were on probation, or were subject to probation.

The problems of the college student who enters with low reading scores extend into almost every area of his or her academic life. Maxwell (1979) says that for many students, reading is a "laborious, time-consuming activity--in short, sheer agony" (p. 275). Many who have not learned to read are members of the "automatic pass generation." They may disguise their problems well and be reluctant to ask for help or admit that they have any problems. Instructors often will not discover the sources of their problems until well into the semester, if ever (p. 275).

Exacerbating the problem for most of them is the difficulty level of the textbooks they are asked to read. Burford (1969), in a study of earth science course texts, found that the level of the major texts was from 12th to 15th grade level, above the level of approximately 35 percent of the students. Forty-eight percent of the class received a course grade below 69 percent, and there was a strong correlation between course grades and reading level.

Fox (1978) used the Nelson-Denny test on 317 freshmen, then applied the Flesch and SMOG reading formulas to measure their texts. She found that the reading abilities of freshmen are not commensurate with the reading difficulty of their textbooks, and furthermore, that most instructors do not know the problems their students encounter with textbooks that are written at a higher level than their students are capable of handling. A difference of two to three grade levels between the student's reading level and textbook level was deemed significant.

Another study, this one of social science texts, done by Bertalan (1976), found that half of the twenty-eight texts surveyed were higher than the twelfth grade reading level, and eight were above the sixteenth. Of 305 students in social science classes, 23 percent were reading below the text level and received significantly lower grades than those reading at or above the text level; as the student's level increased above the level of the text, his or her grade improved significantly.

The evidence seems overwhelming that one of the most obvious places to begin looking at factors relating to failure and retention of students is with the class textbooks. It is important, of course, to recognize that, as Maxwell warns, readability can be abused (p. 291), that it is only a rough guide to getting at the difficulty of a book, and that there are many additional factors as to whether or not a student can succeed in a particular class. There is, however, consistent enough evidence to show that many textbooks are well above the reading levels of the students who register for the classes. There is also ample evidence that a student who reads two or more grades below a text level will probably have trouble succeeding in that class (Fox, 1978; Roueche and Armes, 1980).

Proposals for remedies vary. Many insist that, until students can read at a level to assure success, they must be kept out of courses in which they are almost certain to fail (Roueche, 1978: 30; Auvenshire, 1978). Another suggestion is to find supplementary materials for courses at different levels (Butler, 1978:46-7) Tutoring may also provide additional help but only if the student is not reading too far below the text level.

Another frequent suggestion is requirement of remedial reading courses. This should not be taken as a universal panacea, however. Maxwell (1979) complains that many reading programs have little hard evidence to demonstrate their effectiveness (p. 294). Ainge (1973), in his doctoral study of guidelines for community college remedial programs, based on a survey of 83 California community colleges, found that 76 percent had no means for formally evaluating their remedial reading programs and only 3 percent were engaged in some form of institutional research (pp. 62-63).

Before we turn from these criticisms of schools and programs to look at ways in which institutions and faculty have been successful with their students, we need to take note that the literature is replete with experimental studies which attempted to deal with the problems but were less than successful. In a number of these studies, experimental techniques did not produce significant

improvement in test scores or grades, but did improve retention rates of students in the experimental group.

There are many variables in these experiments--teachers' attitudes, methodology, materials, etc.--and it is difficult to generalize as to why results were disappointing. Let us consider for a moment some of the difficulties in showing positive results with underprepared students and in assessing the treatment results correctly.

One source of the problem is unrealistic expectations on the part of researchers. It is surely unlikely that community colleges can take adults, even young ones, and remove all the effects of previous poor teaching, inadequate resources, and negative life experiences and the resulting emotional problems in one or two semesters. Maxwell (1979) reminds us that many of the students in reading classes have had years of reading failure, and have little chance of making quick progress, even with several reading classes. "Many of these reading courses represent a token effort, at best, to remediate serious, long-standing linguistic deficiencies" (pp. 294-95). Certainly, as Grant and Hoeber (1978) point out, "piecemeal and bandaid attempts are inadequate, and failure to recognize this almost guarantees program failure" (p. 13). Klingelhofer and Hollander (1973) agree that programs that rely on the single remedial course to turn the corner for the student are courting failure. "The single remedial course is the least effective of all remedial efforts" (cited in Maxwell, 1979:12).

Inept or inaccurate assessment techniques are another source of the problem. Roueche (1968) complains that questionable placement procedures, tests that are inadequate or inappropriate, and lack of real knowledge about a student's reading and writing skills contribute substantially to failure in aiding the student (p. 43). In defense of schools, we must recognize that it is not easy to find tests that assess what we want to know. Many reading tests have cultural biases, and objectively assessing study habits and skills has been nearly impossible. For example, Maxwell (1979) points out that, although study skills inventories may be useful in counseling students who are voluntarily seeking help, they are not very effective in identifying who should be required to take a study skills course (p. 304).

A third source of trouble has been our inability to determine from the data just what has been working and what has not. Maxwell (1979) argues that pre- and post-test data are not very useful tools: they rarely reflect the objectives of a specific skill course; they are designed to be relatively impervious to change, especially over a brief period; and raw scores on equivalent forms

are rarely actually equivalent. In addition, it is difficult to evalute change when one is dealing with a population that will not provide a normal curve; that is, if one is working with the bottom quartile in mathematics, scores will improve just because of regression to the mean rather than effort (p. 191).

However, as the numbers of these students increase in the schools, as our years of experience with them increase, as proficiency of instruction improves, and as the data grow, we perhaps can begin to deal with each of these sources of problems and learn from our failures and successes; and it is to successful practices that we now turn our attention.

PROMISING PRACTICES

ASSESSMENT AND COUNSELING PRACTICES

Again and again the research and recommendations focus on the critical need for early identification and early intervention to prevent heavy attrition of students at the community college. The evidence is strong that intervention activities must begin immediately to provide the insecure and academically disadvantaged students enough reinforcement so that they are willing to give the college experience some effort. Felton and Biggs (1977), Roueche and Snow (1977), Heaton (1978), Roueche and Armes (1979), and Maxwell (1979) are only a few of the writers who urge early identification and thorough assessment of all entering students.

In the program developed by Felton and Biggs, students were given a wide battery of tests and then met with a counselor and were given the results of the screening and evalution:

> Students were often surprised by the frank and nonjudgmental discussion of their academic strengths and weaknesses. Most of them had used previous confrontations with the realities of their scholastic difficulties as occasions for indulging in merciless self-laceration, perhaps hoping for some expiation, rather than a time for serious consideration of how they might change their behavior to effect a different result. They used this information to formulate clear goals (pp. 60-61).

In addition to urging early identifcation and guidance as a result of effective assessment, improved counseling and interaction programs on campus are seen as essential. Turley (1980) states that the most significant factors in retention strategies are 1) individual counseling programs, 2) developmental programs, and 3) group guidance classes.

Coffey (1976) explains that the highest dropout rate tends to occur in the very first weeks of school. He believes that at least 30 percent of potential dropouts can be identified at registration, using previous grades and testing information, as well as other data and behavior characteristics, such as waiting until the last minute to register and being undecided about a major (p. 6). He also believes that each school should initiate research to begin its own Early Identification Model and keep it updated. Efforts include involving counselors in identification of potential dropouts and providing active services instead of the usual re-active services. Counselors should keep in contact with these students and, among other things, make every effort to help students determine a major. Faculty should also be asked to alert the counselors just as soon as students begin to miss class or show an erratic attendance pattern. Faculty must also be readily available outside of class. Coffey believes these efforts can significantly reduce attrition (p. 38).

Cope and Hannah describe a "Student Alert System" developed in another school, which reduced attrition from 40 percent to 23 percent. Counselors now interview all freshmen and transfer students the fourth week of classes in the fall and let them know they are generally interested in them. In addition, counselors follow up with phone calls to all students who do not make registration appointments for the following term. Resident Hall staff have been asked to notify counselors when they feel there are problems that need a follow-up, and faculty also contact them when a student stops attending class or his or her grades suddenly drop (pp. 88-91).

Grant and Hoeber, in their 1978 survey of basic skills programs, assert that increasingly we are becoming aware of the critical role that students' feelings play in the learning process, even though in the past they have not been deliberately structured as part of learning and have rarely been viewed as objectives in themselves (p. 14).

Roueche and Snow (1977) support Grant and Hoeber's point by claiming that the few developmental educational instructors that have had counselor training bring to a developmental skills program increased chances of success. They add that attaching counselors to a skills program, in a team structure, can make significant differences in dealing with students' problems: "A powerful climate for learning is created when the total staffing community works toward an open sharing. . . in the process of helping high-risk students succeed" (p. 97).

Heaton (1978), in his recommendations for community college remedial programs, urges that several full-time counselors at each college should teach self-concept classes and work closely with the developmental students and instructors (p. 92). He cites Noel (1975): "College student retention is a campus-wide responsiblity which begins with the admissions process. . . . To get students to stay, get them started right." "Right" includes easily available advising, clear program options, and an environment which includes a feeling of belonging, of personal worth, and good self-esteem (p. 27). Heaton also cites Riggle (1975), asking for early placement testing to prevent the negative effects of entering a class in which one cannot succeed, and Glenner (1976), asking for "intrusive" counseling, rather than passive counseling, in which the counselor waits for the student to come to him (pp. 48-50).

Many of the writers make the point, however, that it is futile to provide a strong battery of tests and concerned counselors if services and programs are not available to serve the students once their needs have been diagnosed. It is to examination of effective instructional services that we will finally look.

INSTRUCTIONAL SERVICES

Reading and study skills classes are among those most frequently required or recommended for high-risk students. These courses may be supplemented with guidance courses and/or tutoring. Instruction appears to have moved away from the lecture format toward utilization of wide variety of techniques, such as individualized, self-paced instruction, mastery learning, programmed materials, and mediated materials. None of these approaches, however, is a panacea for long-term learning problems, which tend to include attitudinal, emotional, and self-concept problems as part of the package. Although there are occasional dramatic successes, particularly with some older students who had dropped out of school many years earlier and who can be quickly motivated with some success, for the most part, developmental education is a slow, sometimes discouraging, trial-and-error process. Nevertheless, for the concerned teacher, there are substantial rewards in even the small gains posted.

Where does one start? Starkie (1978) focuses on the need for reading instruction. Roueche and Snow (1977) argue that the place to start is with the development of listening and note-taking skills (p. 84). Butler (1978) urges a motivational program to provide success and self-respect (p. 41). Actually, all of these are important for the high-risk student, and research shows they can all be effective.

Reading is one of the fastest growing programs in the community college. Foster (1979), in a study which included responses from 74 California community colleges, found that 93 percent have a Reading program, and most of the rest were developing such programs. No school reported fewer than two different reading courses, and 34 percent offered four to six courses. In comparing reading with vocabulary, study skills, listening, and writing, 74 percent placed reading as their first priority, with vocabulary second, followed by study skills, listening, and then writing. Programmed materials were used at all schools. The Nelson-Denny was the preferred testing instrument of 65 percent of the colleges. Over 60 percent of the respondants expected continued growth in enrollment and staffing (pp.78-81).

Starkie (1978) concluded from her study that college reading programs are essential for poorly prepared students; she found evidence of a decline in attrition rate and a significant increase in GPA following successful completion of a reading program.

Fairbanks (1974) analyzed a number of reading programs and found that the characteristics of the most successful are as follows:

1. They involved students voluntarily in their own diagnosis.
2. They provided voluntary classes.
3. They combined reading and study skills with counseling.
4. They placed much emphasis on developing the skills for recognizing the main ideas and differentiating fact from opinion.
5. They included more class time for individual practice.
6. They were at least 40 hours or longer.

Heaton (1978) compared three groups of remedial students at Clackamas Community College. Group A, which was involved in a guided studies program, attempted a mean of 14.92 units and completed 12.39. Group B, which took the remedial courses but not the counseling, attempted 14.02 units and completed 8.9; and Group C, which chose not to take any special programs, attempted 14.5 units and completed only 5.73. Only 1 percent of Group A dropped out during the first quarter, while 32 percent of Group B and 27 percent of Group C dropped out. Eighty-five percent of Group A enrolled the following term, compared with 27 percent of Group B and 50 percent of Group C. Obviously, not only was the remedial component of some significance, but the addition of a self-concept counseling course was of major significance (pp.71-92).

Driskell and Kelly (1978) looked closely at a guided note-taking and study skills class which was offered to 61 students whose SAT's predicted a GPA of 2.0 or less. Fourteen chose to enroll in the course, and 47 did not. Those in the experimental group finished the term with a mean GPA of 2.55, while the control group finished with a mean of 1.70. Students in the experimental group had a higher GPA regardless of such variables as sex, field of study, reading skill, or verbal or quantitative strengths (p. 331).

One other aspect of assistance for the high-risk student that needs to be at least briefly examined is the tutoring component. Tutoring programs have proliferated at the community college in the last five years. According to Cross (1977), in 1970 30 percent of two-year colleges, nationwide, were offering tutoring services, but the figure had grown to 65 percent by 1974. Seventy-five percent of all California community colleges initiated their tutoring programs in the years between 1969 and 1975, and by 1975, 94 percent of them were offering tutoring services, and all but one planned to begin services (Wooley, 1976: 104).

Tutoring services are usually not limited to disadvantaged students, as recognition has grown that regularly admitted students need tutoring services too, and even colleges such as the University of California at Berkeley and Stanford now offer tutorial services (Maxwell, 1979).

Even though, as with reading and many other remedial services, tutoring programs are rarely formally evaluated, available evidence shows positive results when tutors are utilized. Agan (1971) found that of 67 high-risk students who received tutoring either in biology and English or in math and political science, the tutored groups performed significantly higher than the control groups in biology, English, and political science, although not in math. Yuthas (1971) compared attrition of two experimental high-risk groups in a reading class, one group taught by tutors only and one by regular instructors. These students were compared with remedial level control groups who did not take reading classes. There was no significant difference in persistence between the two experimental groups, but the dropout rate of the combined experimental groups averaged 37 percent, while for the control group it averaged 67 percent (pp.231-234). In a survey made of 126 students being tutored at Yuba College in 1980-81, 82 said that tutoring had made a significant difference in their ability to pass the course (Rounds, 1981).

Are tutoring programs then the key to success for disadvantgaed students? One weakness of voluntary tutoring programs is that the neediest students may not choose to participate (Maxwell, 1979; Friedlander, 1980). Rose (1976) found that EOPS students with a GPA of 2.3 or lower often denied their need for tutoring or gave excuses such as "It doesn't seem necessary," or "I can't fit it into my schedule" (cited in Maxwell, 1979:99). In addition, as Maxwell indicates, when a student is functioning considerably below the level required for a class, no amount of tutoring alone can remedy the deficiency (p. 99).

Despite these drawbacks, however, tutoring remains as one of the most useful services on the campus, both for traditional students and disadvantaged ones. Future budget cuts may have some impact, but it is unlikely that tutoring programs will disappear from the college scene.

Many additional questions remain to be answered in regard to assistance for the high-risk student, despite growing evidence of successful programs. One of the most often asked is whether developmental courses should be required for students scoring low on entrance exams. Hampton (1979) and others argue that they should be; Roueche (1978) says students should be "strongly discouraged" from entering programs until they demonstrate sufficient proficiency (p. 31): and Butler (1978) urges strong counseling away from courses which demand sophisticated reading skills, but also suggests that finding more material at various reading levels in regular courses might be more useful than teaching reading in isolated courses (p. 147). Maxwell (1979) provides a useful summary of both sides of the issue without taking a personal stand (pp. 27-33).

Also under debate are the effectiveness of various teaching methods. Writers are consistent in urging instructors to move away from lecture methods, however. Moore (1970) says that lecturing is "almost disastrous with remedial students" (p. 76). Gleazer (1973) and others support this position. Alternatives such as programmed instruction and mastery techniques also have their proponents and critics. While Roueche and Snow (1977) argue that "at the heart of instruction with high-risk students is the concept of mastery learning" (p.97), Moore (1970) reminds us that considerable self-discipline is involved with self-instructional materials, although he too advocates the use of programmed materials to provide structure and reward (p. 195).

An excellent summary of the possible pitfalls of the widely acclaimed individualized approach is provided by Maxwell (1979):

> Courses for underprepared students taught with mastery learning have yielded more failures than successes, and there is little convincing evidence to support the contention of these experts who travel around the country lecturing that the lecture should be replaced by individualized instruction at every level and in every college program. Evaluations of mastery learning show that the students who learn well are the same students who succeed in traditional lecture courses--that is, the best prepared students. Underprepared students often perform poorly in mastery learning courses or drop out. . . . What seems to matter most. . . is the amount of exposure students get to the course material, the amount of time they spend in direct, structured learning situations, and the skills of their teachers (p. 381).

Recent research (Brophy, 1976) concludes that teachers who produce the best results with their students have well-managed classrooms and have higher expectations of their students. "Well-managed" should not be confused with "over-managed," however, for instructors who were preoccupied with housekeeping details did not produce good results. In addition, "high expectations" must be incorporated into a caring atmosphere that keeps students on task and provides regular feedback on small chunks of material. Opportunity for success in handling the material must also be available to all the students. Direct instruction also appears to produce higher achievement than does self-managed learning, although students who are at varying achievement levels must be given opportunity to master material at their own levels.

Effective teachers are also enthusiastic and interested in their subject matter.

There is obviously no single formula for being effective in the classroom, but structure, feedback, successful experiences, and enthusiastic teaching will do a great deal to ensure achievement.

RECOMMENDATIONS

Attrition of students at the community college is at about the 50 percent level. As enrollment declines, it will be essential for colleges to attempt to reduce that figure; total enrollment could be enhanced significantly by retaining just a small percent of those students who give college a brief try and then disappear from the academic scene. However, ironically, as colleges increasingly attract high-risk students, the probability is that, unless some major efforts are made, attrition figures may climb even higher. What are the best procedures for encouraging students, and in particular, high-risk students, to persist in college?

Moore (1979) has remeinded us that, while high-risk students may appear to have little prognosis for success, "Many of them possess those intangible qualities of creativity, personality, and tenacity which counteract the customary indicators of academic prowess" (pp. 3-4). They are worth making an effort for.

A common approach to working on attrition is to examine the profiles of students who persist and then attempt to see if we can help the potential dropout develop the characteristics of the persister. Astin (1975) identifies the following as the best predictors of the student who will stay at the community college: he is a non-smoking male who is not employed during the school year and has high degree aspirations on entering; his support for college comes from his parents, his own personal savings, or scholarship money. These are obviously characteristics over which the school has little control, although it may identify those students who veer farthest from this model as being potentially the highest-risk.

Maxwell (1979) looks at the characteristics of students who are both high-risk and successful and finds these: a willingness to study hard, the ability to solve personal problems, high goal aspirations, involvement in school, completion of an orientation program, and a feeling of support from significant others (p. 200). This list comes closer to providing clues with which the school can work, but still leaves large questions about ways to assist those who may not have the above characteristics.

Terenzini and Pascarella (1980) insist that the key item is the experiences the students, regardless of specific characteristics, have when they arrive on campus. One frequently identified component in successful retention programs is an assessment and counseling program that provides the students with helpful, specific information about help they need and directions to take. Information is needed early, but courses and programs at the level at which high-risk students are operating must then be available.

Ultimately, however, the faculty and staff remain among the most critical elements in any program. The most successful programs appear to have a faculty with strongly humanistic skills, often with counseling education as part of their training. In addition, counselors themselves are beginning to move into new roles in colleges. In some schools, counselors and faculty work together in developmental programs, and this relationship appears to have significant impact on the degree of success achieved by students in these programs (Roueche and Snow, 1977).

Factors which are within the power of the schools to promote include the following specific recommendations, drawn from the authors reviewed for this chapter:

Assessment and Counseling

1. Entrance exams which correctly evaluate the student and provide for greater individualization.
2. Comprehensive, structured, pre-college orientation programs.
3. Ongoing assessment of students.
4. Recognition of the importance of the first semester, with appropriate budget allocation.
5. Active support services, which are responsible and flexible.

Remedial/Developmental Programs and Instruction

1. A department or division of Developmental Studies, housed in a separate yet central location.
2. Appropriate curriculum offerings in the developmental program, including courses which focus on cognitive, affective, and psychomotor skills.
3. Incorporation of guidance programs to provide a postive environment for the development of a better self-image. (The counseling function of the developmental program is especially important.)
4. Implementation of innovative teaching techniques to accommodate individual differences and permit students to move at their own paces.
5. Systemative instruction, which would include clear goals and small learning modules.
6. Frequent testing, with opportunity for considerable success.
7. Tutoring and other support services.
8. College credit for courses.
9. Comprehensive offerings in the regular program with available access to the developmental student as soon as possible.
10. Faculty awareness of the readability level of their textbooks, as well as the reading problems of any of their students.
11. Non-punitive grading practices.
12. Efforts to ease transition into traditional courses.

Faculty

1. Instructors in the developmental program who have volunteered to work with the non-traditional student.
2. Developmental staff that is highly competent in their subject areas.
3. All faculty effective in their disciplines, all humanistic and fair.

4. Ongoing staff development and in-service.
5. Frequent outside-of-class contact with students, to include social and cultural activities, athletic events, and hospitality in faculty homes.

Students

1. Motivation and persistence regarded as more important than traditional indicators of success.
2. Involved in their own assessment.
3. Encouraged to set goals as early as possible and work toward these.
4. Accepting of major responsiblity for their own learning, including, as feasible, contracts for their accomplishment.
5. Provided with as much success as possible.

In addition, we must recognize that college does not mean the same to all students, that stopping out and dropping out are valid experiences for many and will occur regardless of all our efforts. Many students will enroll only on a part-time or intermittent basis, they will skip semesters, switch institutions, and forego credits (Hunter and Sheldon, 1981). It is up to the college to find creative, non-traditional ways of serving these students.

Although many of the students who come now to the community colleges can certainly be labelled as "non-traditional," and will require different types of services and assistance than instructors and colleges have been accustomed to provide, it appears obvious that there is a great deal that can and must be done to retain these students. It is Moore (1970), in his insightful study of disadvantaged students, who reminds us vividly:

> All the available evidence indicates that the disadvantaged student and the slow learner like education and see its value. The evidence also indicates that those students often hate school (p. 59).

It is those students that we must reach. The community college, with its commitment to serving the whole community, its democratic, egalitarian philosophy, its flexible programs, valuable support services, and "open door," would seem to be the ideal place to change the attitudes of these students.

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