By the late 1960s, the most offered courses in American community colleges were remedial reading, remedial writing, and remedial arithmetic. The success of the early efforts in community colleges was marginal at best, as is evidenced by a 1968 study indicating that nearly 90 percent of all remedial students failed or dropped out of remedial courses. By 1977, however, the first national study of American college and university programs for low-achieving students revealed that some programs were achieving success. A national study of college and university programs was conducted in 1982 to discover the magnitude, nature, and level of success of literacy and basic skills programs. Based on this survey, it appears that successful remedial programs exhibit the following 11 characteristics: strong administrative support, mandatory counseling and placement, structured courses, award of credit, flexible completion strategies, multiple learning systems, volunteer instructors, use of peer tutors, monitoring of student behaviors, interfacing with subsequent courses, and program evaluation. The successful programs that were isolated during the study can serve as models that document the learning potentials and capabilities of community college students. (MN)
Community colleges long have borne the brunt of adult illiterates in American higher education. With its "open-door" admissions policy that accepts any high school graduate or any adult who can profit from instruction, these institutions have decades of experience in providing "developmental" or "remedial" courses to entering students who do not possess the basic literacy skills needed for academic success in regular freshman curricula. By the late 1960's, the most offered courses in American community colleges were remedial reading, remedial writing, and remedial arithmetic. As many as 50 percent of any entering freshman class were found in need of essential remedial work (Roueche, 1968).

The success of these early remedial efforts in community colleges was marginal at best. In my 1968 study, I discovered that few students who were initially placed in a "remedial course" ever completed class requirements. As many as 90 percent of all "remedial" students failed or withdrew from remedial courses. The courses were being offered (sometimes required), but the results were disastrous. Critics of the open-door admissions policy quickly labeled community colleges "revolving door" institutions. These early programs were poorly conceived, poorly designed and even more poorly implemented. Our evidence documented that these early remedial programs were mostly "watered-down" versions of regular college courses (Roueche, 1968).
In 1973, with support from the Bureau of Research, U. S. Office of Education, Wade Kirk and I identified and described five promising community college programs for low-achieving students. These institutions documented good student persistence to program completion and, best of all, solid evidence that students were learning to read, write, figure, and study well enough to enter and succeed in college programs. These colleges employed only faculty who volunteered to teach remedial courses. Such faculty brought enthusiasm and high expectations to their teaching assignments. They also taught their classes by "hands-on" approaches. These teachers were not lecturing to their marginally literate students; rather they had their students busy involved in reading, writing, and ciphering. These faculty members understood well that the only way to develop basic literacy was to immerse students in the process. Students were spending most of their time reading, writing, and figuring. The results were significant in documenting that low-achieving adults possessed the abilities and motivation to be truly literate; they simply had not been taught before (Roueche and Kirk, 1973).

One might imagine that the discovery and documentation of successful programs would lead to immediate improvements in community college remedial programs. Such was not the case! In the first national study of American college and university programs for low-achieving students (Roueche and Snow, 1977), Jerry Snow and I did discover successful programs in both community college and university settings. These colleges had developed program goals that were tied to student learning successes. These institutions indicated in written statements to students that their curriculum was predicated on the belief that "students could learn." Contrast that with the widely-circulated "right to fail" policy of most colleges. Another finding indicated that successful institutions were
assessing academic skills of entering students to properly place students in courses where they could be helped. By 1977 successful colleges had learned that "open-door" admissions policies must not infer or imply open-access to college level courses.

Sadly, most colleges in 1977 could not document evidence of student success in their remedial programs. Most colleges could not report how many students ever completed a required remedial program; fewer still knew how many low-achieving students persisted from remedial programs into regular college courses and with what success. Evaluation of these multi-million dollar college-based literacy development activities was still limited to a few innovative colleges. In the great majority of the institutions we studied, evaluation was non-existent.

In 1979, the National Institute on Education funded Arizona State University and the University of Texas at Austin to conduct in-depth longitudinal investigations of literacy-development activities in selected Arizona and Texas community colleges. It is important to emphasize here that these parallel research studies were looking at literacy strategies in all community college programs and courses—not just those in required remedial curricula.

Even though the studies were conducted independently of each other, major findings were remarkably similar. Both university investigations found that students would be expected to read, write, and figure more in remedial courses than would ever be required of them again in regular community college courses. In sum, the two studies documented that students in American community colleges are rarely expected to demonstrate literacy skills that are normally associated with college level courses and programs (Roueche and Comstock, 1971; Richardson and Martens, 1982). Putting it bluntly, reading and writing assignments of any consequence or depth were rarely made in regular college courses. Many of the students in our two studies never purchased the required
textbook or lab manual for a particular course or program because they had correctly discovered that reading and ending those materials were not necessary for successful course completion in our studies. Many instructors never mentioned the textbook name, much less made reading assignments in the text. Much of the teaching was regurgitated best. Teachers would give to students (orally or in one or two page handouts) bits of information that students would be expected to memorize and regurgitate on the next examination. The prevalent teaching and evaluation procedures were at the lowest levels of cognitive development, rarely requiring students to do more than recollect and produce such fragmented, disjointed pieces of information.

We did find that students in courses with content of more perceived value, use, interest, and relevance to their personal learning goals (e.g., specific function courses) were more likely to go beyond the minimum explicitly-stated literacy demands and engage in implicit others. In courses transmitting more general information and of little perceived value or relationship to other course work (e.g. general education courses), students were inclined to accomplish only minimum requirements, and on average, do them poorly.

Particularly discouraging was the joint finding that teachers in community colleges rarely talk with each other about the literacy requirements of their individual courses and programs. For example, we know that the verbal requirements in courses like accounting, computer science, electronics, automotive mechanics, nursing, all related allied health programs, and various technology programs are among the most demanding and difficult of any curriculum. These courses usually necessitate an entry-level reading score of at least grade 12 or higher. Yet faculty teaching introductory courses knew little about the language requirements and applications in career-related and other academic courses. There was, as a result, little evidence of any application or transfer of language skills to these courses by English teachers in required general education English courses.
We found that required math and English courses were typically taught in isolation from the regular college curriculum. They were frequently taught as "ends" in themselves. Our study even found basic skills instructors (English and math, primarily) surprised to learn how demanding the verbal skills were in community college technical and vocational courses. The skills needed by career students were not being taught in required literacy-development courses and the skills being taught in literacy classes were in slight — if any — demand in other college courses.

Furthermore, the localization (isolation may be a better term) of basic skills instruction — e.g., reading, writing, and math — encouraged other college instructors and administrators to ignore or overlook them altogether. Even courses within the same program frequently overlapped or repeated content — sometimes with conflicting and confusing results — and sometimes had questionable relationships to each other or to the demands made on a certificate or degree holder from that particular program.

Both studies observed the lack of training of most instructors in basic instructional methods, in learning theory, or in strategies for teaching the nontraditional and adult population. Furthermore, the literacy problems that the more nontraditional (poor, disadvantaged, minority) — as well as the increasing numbers of so-called traditional (high school graduates who cannot read, write, or figure) — students brought with them created instructional problems which instructors were unprepared to manage. Most faculty ignored such needs and required mastery of only low-level cognitive skills — e.g., memorizing parts of speech or math rules.

Both of these longitudinal studies demonstrate the need for increased community college attention to the development of reasonable levels of literacy skills in all courses and programs. Colleges should not talk about how to teach without first deciding what is being taught and not deciding on what is being
taught without first deciding why and to whom (Roueche and Comstock, 1981).

Community colleges have followed the university practice of allowing faculty to decide what will be taught to students. Faculty typically and predictably want to offer subject matter that they feel most competent and confident to teach. Rarely have colleges designed courses and programs after carefully analyzing student learning needs. Even more rare is a college that designs courses based on the desired competencies learners should demonstrate by graduation. Education continues to emphasize "process;" even today, there is little enthusiasm to examine what the "product" of our processes should be.

**University of Texas Study - 1982**

During the spring and summer of 1982, Drs. Suanne Roueche, George Baker, and I conducted a national study of college and university responses to low-achieving students. The first of its kind, this study surveyed all community, junior, and technical colleges, as well as all senior institutions, awarding traditional associate, baccalaureate, and graduate degrees. Of the 2508 surveys mailed, 1489 were returned; 1452 were usable responses. Of that total, only 160 institutions reported that they had no basic skills programs, courses or alternatives for serving the low-achieving students. However, it is very important to note, at this point, that of those 160 institutions, several have been featured in professional articles about existing developmental efforts. Several faculty and staff members have been quoted as to their personal and institutional concerns about the growing national literacy problem and evidence of its existence on their own campuses. We can only speculate as to why these particular institutions chose to deny awareness of or institutional response to this problem. But the conflicting reports at least confirmed the very problem that we were researching — that is, that no institutions were escaping the literacy problem.

Our survey sought answers to these questions: What is the magnitude
of the literacy problem that colleges and universities are facing? What institutional efforts are in place to develop basic skills? How effective are these efforts? What are the common elements of reportedly successful programs and courses?

Sadly, we had difficulty in identifying successful programs; institutions were most inconsistent in collecting and reporting retention and other follow-up data. Most responses gave us cause to suspect that retention information was someone's best guess; those institutions that collected retention data typically recorded only program retention figures and not the subsequent figures for courses taken after completing basic skills courses. We did, however, perform additional survey procedures to further research those programs reporting 50 percent or better retention in developmental programs, and we used that additional data to infer some elements of success — i.e., those elements (1) that appear to be most predictive of success with low-achieving students and (2) that are most characteristic of reported successful basic skills development efforts.

In the final analysis, we identified eleven elements common to those developmental programs reporting the most complete and promising retention data: strong administrative support, mandatory counseling and placement, structured courses, award of credit, flexible completion strategies, multiple learning systems, volunteer instructors, use of peer tutors, monitoring of student behaviors, interfacing with subsequent courses, and program evaluation (Roueche, Baker, Roueche, 1983). In brief, we found the following to be successful program characteristics.

Successful programs have administrative support; that is, board policy manuals, the college catalogs, and the student handbooks carry written statements as to institutionally-shared responsibility for student success. These statements are translated, for example, into initial student assessment and placement in appropriate courses as well as direct college interventions at the first sign of poor academic performance by students.

Many institutions provide even stronger support by requiring mandatory assessment and placement; that is, students must be tested for basic
skill development and then must be enrolled in courses appropriate to the outcomes of that assessment. Students with reading and writing and math deficiencies are not allowed to enroll in courses where those skills are required until those skills are developed to appropriate collegiate levels. Many institutions make the testing and the subsequent placement conditions for enrollment. And, as important, students must successfully complete the assigned developmental work prior to enrolling in other academic courses.

Administrative support provides a framework where students are counseled and permitted to take only the number of credits that their individual family and work responsibilities, as well as their skill deficiencies, will allow. The more traditional route — enrolling the student in a full-time schedule — is ignored when time and ability constraints will place the student in academic jeopardy.

Institutions are no longer able, or willing, to use the high school grade-point averages as indicators of student ability or true performance. They are more likely to use standardized tests — e.g., SAT, ACT — as measures of student potential (without interventions) to be successful in college. Because these tests provide only indications of problems — by identifying students with reading, writing, and figuring skill deficiencies, on-site testing for more targeted and in-depth analysis of these deficiencies is conducted during orientation and/or registration or once the student is enrolled in the developmental classes. Frequently, the tests are constructed through the joint efforts of developmental and representative freshman-level instructors as a means of validating actual skill levels required in follow-on courses.

While the size of the institution is a major factor in determining the programmatic structure of the developmental effort — that is, where developmental work is housed — developmental courses are structured and organized. That is, the courses meet at regularly scheduled days and times, and there is careful monitoring of student performance — strict attendance policies and attention to individual progress. Grading systems often contain one non-punitive grade (a "progress" grade, for example) that is awarded in the event that the student is making
progress but is not yet meeting exit requirements. The progress grade will, in fact, protect the student from academic suspension until such time that his skills have met course criteria. The courses may be housed in separate developmental departments, but are more frequently housed in separate academic departments. In the larger universities, the developmental service is offered within large learning or resource centers that serve other institutional needs as well.

Without exception (and early on the issue was a subject of some controversy), the developmental courses were awarded transcript credit. Initially, there were strong arguments that these courses were not college-level and, therefore, could not be awarded credit. As the numbers of such courses increased (accompanied by similar arguments that beginning courses offered at the college level were also offered at the high school level), the argument became moot. Credit is now awarded although institutions do differ as to whether the credit will be elective and counted toward specific degrees or will be transcript credit only.

Flexible completion schedules allow students who are unable to complete the prescribed work in one semester to continue into the following semester, enrolling again in the developmental course and continuing to work on personal course requirements. These students are not obliged to begin the sequence again; they merely continue to work toward completion of their individual course requirements. Furthermore, many colleges have flexible exit schedules that allow students who have completed their required work in less than a full semester to leave the course with their earned grade. While early exits are more common, there are some institutions which allow students to enter courses at any time during the semester. Institutions, by and large, have adopted some predetermined and reasonable maximum time frames during which students are allowed to continue their work. Persistence without observable and profitable progress is countered with redirection into academic or career alternatives through professional counseling.
Instruction in these developmental programs is characterized by multiple learning systems. Students work from prescriptions that have been carefully written from the analysis of initial assessments; they are engaged in learning activities that are drawn from performance-based objectives, they are using self-paced modules of instruction, they are engaged in group instruction, and they use pre- and post-tests to indicate sequential movement through their prescribed work. In essence, instructors do not confine themselves to a lecture method or to self-paced instructional modes; they vary their instructional strategies for increased student interest and accommodation of diverse student learning styles.

Students are not allowed to proceed willilly-nilly; rather, their performance is monitored by frequent — usually daily — checks. The use of peer tutors (who have been selected by performance criteria, are further trained to work with these students, and are evaluated regularly), allows for increased individual contact both during class sessions and out-of-class time blocks. Performance checks identify student problems at times when intervention strategies will be most helpful. Excessive absences, failure to produce assigned work, failure to produce acceptable levels of work are signals for interventions. Intervention strategies include calling students who have been absent, bringing them up to date on assignments, and providing whatever tutoring services or recycling necessary to continue their work as uninterrupted as possible.

A traditional characteristic of successful programs has been that of using only instructors who volunteer to teach basic skills courses. These instructors — after meeting predetermined curricular and instructional criteria — choose to teach these students. Different courses make different demands upon faculty;
individual faculty members may be more inclined to teach some courses than others. Developmental courses make very special demands on faculty — both at the training and preparation levels and in the classroom itself. An acute awareness of those demands, a willingness to meet them, and a belief that they can be met are essential to creating the proper instructional climate.

Successful programs do not make assumptions about the content that students must have mastered or skills that will be required in subsequent courses. The faculty of these basic skills courses conduct modified needs assessments to determine requirements of generic and specific discipline courses and use the results of those assessments to design course content and learning strategies. Frequently, the exit criteria reflect these assessed demands and must be mastered for successful course completion.

Finally, successful programs recognize the need for improving data collection procedures for program evaluation and for developing improved retention strategies. In addition, they plan to improve preassessment strategies for the identification of low-achieving students prior to enrollment, to improve intervention strategies during critical first months and semesters to counter potential failure and/or dropout situations, to improve interfacing strategies between developmental courses and academic/vocational courses, and to refine exit interviews for determining major problem areas for those students who do not successfully complete basic skill or subsequent academic courses.

This is all to say that successful programs — as do even those with less encouraging results — recognize that program evaluation is important; but they simply do not, presently, employ adequate procedures for collecting and analyzing the retention data by which to determine whether or not they do the job they believe they do. Data that have been collected are typically inadequate to describe program or course achievements or failures. Sadly, data that are collected are of program completion only and not of performance in further academic
the final and most critical evidence of real success!

Many institutions may be lax in evaluating programs because they fear what they will find; it is very likely that many of them would be disappointed to find their fears confirmed! Evaluation procedures are important for identifying success; it is nice to know that you're doing good work. However, evaluation is strategic for identifying failures in order to get on with rethinking and remodeling the developmental process. External threats — from legislators, state boards of education — are increasing; internal threats — from increasing numbers of students entering without acceptable skills and unable to perform at college levels — are increasing also. The earlier academic discussions of whether or not basic skills intervention are moot; intervention is now a subject for immediate and thoughtful action.

In conclusion, American community colleges are well experienced with adult literacy needs. Putting it another way, these institutions are caught between a rock and a hard place. As curriculum literacy requirements escalate at a frightening pace, students are enrolling today farther and farther behind in those basic academic skills so critical for success in college-level courses.

A few community colleges have developed programs that identify students with academic skills deficiencies and place them in remedial/developmental programs that bring students to college-level skills in short periods of time (Roueche, 1983). The models exist, and they document the learning potentials and capabilities of community college students. They can learn and be proficient in a wide variety of academic programs. They simply have not been taught!
Bibliography


