**Affirmation and Discovery: Learning from Successful Community
College Developmental Programs in Texas
By Hunter R. Boylan & D. Patrick Saxon**

Section One

Introduction

The State of Texas has a long history of supporting developmental

education in its public postsecondary institutions. In fact, Texas colleges and

universities have been considered leaders in developmental education since

the 1970s. The first national study of developmental education cited several

Texas institutions as exemplars of best practices (Donovan, 1974). Texas

institutions were also recognized for excellence in a second national study of

developmental education conducted in 1985 (Spann & Thompson, 1986) and

they are frequently cited in John Roueche's studies of exemplary programs

(Roueche & Snow, 1977; Roueche & Roueche, 1993).

In 1987 the state legislature established the Texas Academic Skills

Program, probably the most advanced developmental education system in

the country at that time. This program required that:

- o students applying to public colleges and universities in Texas take an
  academic assessment battery known as the Texas Academic Skills
  Program (TASP) measuring their skills in English, mathematics, and
  reading,

- o students falling below specified cut scores in any of these subjects
  enroll in developmental courses in these subjects,

- students failing developmental courses be provided with non-course based developmental education such as tutoring or learning laboratories, and

- students failing to pass the TASP remain in developmental courses or non-course based developmental education until such time as they had passed the appropriate subject section of the test.

Along with these features, the TASP also included comprehensive reporting, data collection, analysis, and feedback procedures. At each campus a "TASP Liaison" officer was appointed who monitored student performance and insured that the campus program complied with state requirements.

The TASP remained in effect until 2003 when it was eliminated by the Texas Legislature. At that time the TASP was replaced by the Texas Success Initiative, a program requiring all Texas public colleges and universities to design and implement developmental education programs based on their own unique student and institutional characteristics.

In addition to providing courses and services, the evaluation of developmental education has also been a priority in Texas. The Texas Higher Education Coordinating Board has gathered data on an ongoing basis to evaluate the outcomes of developmental education and done several interesting studies on the impact of the TASP. During the 1990s, two external studies of developmental education were also conducted by the National Center for Developmental Education, one in 1995-96 and one in

1998. Both were commissioned by the Texas Higher Education Coordinating Board and both addressed the strengths and weaknesses of developmental education as practiced in Texas at that time.

It has now been seven years since the last external study of Texas developmental education was completed. Furthermore, during that time the Texas Academic Skills Program has been eliminated and replaced by the Texas Success Initiative. As a consequence of these factors, leaders of the Texas Association of Community Colleges believed that it was time to conduct a new study of developmental education that would identify best practices being implemented in Texas community colleges. The current study was, therefore, commissioned by the Texas Association of Community Colleges with funding from National Education Systems.

The purpose of the study was threefold:

1. to affirm best practices in Texas developmental education that already appear in the research and literature in the field,

2. to discover promising practices in Texas developmental education that have not yet been validated by substantial research, and

3. to learn how assessment and placement is done at community colleges that have been successful in developmental education.

These purposes are consistent with the title of this report "Affirmation and discovery: Learning from successful community college developmental

education programs in Texas." The study is intended to affirm some of the

practices we already know and discover promising new practices.

Section Two

Methodology

For the time period under consideration (2000 to 2003), the measure

most commonly used by the State of Texas to determine success in

developmental education was student success at passing the TASP following

participation in developmental courses. Data used to identify exemplary

institutions were obtained from published reports issued by the Texas Higher

Education Coordinating Board. The measures examined included:

(a) The percentage of students participating in community and
technical college developmental education who completed TASP obligations
in fiscal years 2001, 2002, and 2003 (Legislative Budget Board, n.d.).

(b) The TASP pass rates retake attempts for TASP test subject areas
math, reading, and writing in the academic year 1999-2000. (THECB, n.d.).

(c) The extent to which institutions were representative on the basis of
geographic location, student ethnic diversity, and institution size. Here, a
geographically dispersed sample relative to the state of Texas was obtained.
Representation from institutions of various sizes and missions were also
sought.

Institutions were selected to include rural, urban, and suburban

colleges and both community and technical colleges. The major ethnic

groups represented in the study included White, African-American, and

Latino.

Using data from the Texas Higher Education Coordinating Board, ten institutions were selected with the highest post-developmental education TASP pass rates generally and by subject area. A tally was then compiled to determine the number of times a particular institution appeared on the list from 1999 to 2003. This is shown in Table 1.

Table 1 Tally of Institutions	
Institution	**Tally**
Lamar Institute of Technology	6
South Plains College	5
Wharton County Junior College	4
Alamo CCD NW Vista College	4
Grayson County College	4
North Central Texas College	4
Temple College	4
Weatherford College	4
Texarkana College	4
Midland College	4

For the institutions that were represented more frequently, a final list was selected based on considerations such as location, size, and student ethnic diversity. Given these criteria, the following institutions were selected: Lamar Institute of Technology (Beaumont), Northwest Vista College (San Antonio), South Plains College (Levelland), Temple College

(Temple), and Texarkana College (Texarkana).[1] A detailed discussion of each institution's inclusion in the study follows.

Lamar Institute of Technology

Lamar Institute of Technology ranked 7th in 2001, 12th in 2002, and 5th in 2003 in first year TASP completions following remediation. They also ranked 5th in writing, 7th in mathematics, and 7th overall in TASP retake attempt pass rates for the academic year 1999-2000.

The College has a technical mission focus and represents the eastern most section of the state. Forty-four percent of the students enrolled at Lamar Institute of Technology are ethnic minorities.

Northwest Vista College

Northwest Vista College is a part of the Alamo Community College District. This institution excelled particularly with regard to students passing the TASP on retake attempts in the academic year 1999-2000. It ranked 1st in writing, 2nd in mathematics, and 7th overall for this measure. Disaggregated data for Northwest Vista College were not available from the THECB for years 2001-2003. However, the District Chancellor's Office of the Alamo Community College District recommended Northwest Vista College for a site visit.

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[1] Wharton Junior College was originally selected but declined to participate in the study.

This institution is a comprehensive community college located in southern Texas. It was designated as urban because it is located within the San Antonio City Limits. Fifty-three percent of those attending Northwest Vista are ethnic minorities.

South Plains College

South Plains College ranked 11th in 2002 and 9th in 2003 in first year TASP completions following remediation. It ranked 9th in writing, 6th in mathematics, and 5th overall in TASP test retake attempt pass rates for the academic year 1999-2000.

South Plains is a comprehensive community college. It represents moderate to large size institutions and is located in Northwestern Texas. Twenty-nine percent of South Plains Students are ethnic minorities.

Temple College

Temple College ranked 11th in 2003 in first year TASP completions following remediation. It also ranked 12th in mathematics, 5th in reading, and 4th overall in TASP retake attempt pass rates for the academic year 1999-2000.

Temple College is a relatively small comprehensive community college located in central Texas just outside of Waco. Thirty percent of its students are ethnic minorities

Texarkana College

Texarkana College ranked 8th in 2001 and 9th in 2002 and 4th in 2003 in first year TASP completions following remediation. It also ranked 8th in mathematics in TASP retake attempt pass rates for the academic year 1999-2000.

Texarkana College is a comprehensive community college. It is a relatively small institution located in northeastern Texas. Nineteen percent of its students are ethnic minorities.

Site Visit Methodology

Upon identification of potential exemplary programs, personal contact was made with administrators of these programs to clarify what was found in the review of the THECB reports and to make arrangements for site visits. A letter was sent to each college president explaining the study and soliciting their participation (see APPENDIX 1). Telephone contact was then made with the president of each college. Following initial contact, a listing of administrators and faculty to be interviewed was provided (see APPENDIX 2). The president of each college or someone designated by the president made arrangements for these individuals to be available for interviews during the site visitation.

Two researchers from the National Center for Developmental Education were sent to each institution to conduct the interviews. For purposes of consistency, the same two individuals (Dr. Hunter R. Boylan, Director of the National Center and Mr. D. Patrick Saxon, Assistant Director for Research and Services) made all five site visits.

The data were collected through note taking and audio recording of the interview sessions. Information was collected by meeting with developmental program administrators, faculty, and staff. The visitation team also met with the presidents and deans of instruction at each campus.

A series of structured questions were used guide the interview process. This document was entitled "Questions for Texas Site Visits" (see APPENDIX 3). It was compiled from a series of program evaluation questionnaires that were developed from past National Center for Developmental Education research studies with additional questions included that were intended to be specific to Texas institutions. This document offered general structure and guidance to the interview process, yet allowed for flexibility to examine particular areas of interest that may have been identified during the interview process. Some of the broad topics that were investigated included the organization and administration of the program, program structure and components, and instructional practices.

The notes and recordings from the interview process were reviewed by research staff to identify common patterns of activity that appeared to contribute to positive developmental education outcomes. During the site visits program brochures, evaluation reports, and other information was collected. Program administrators were also contacted by telephone and email to collect additional information following site visits.

Limitations

Measures of Success

The measure of developmental program success employed for this study may be considered narrow and, to some extent, obsolete. During the observed time period (2000-2003), developmental program success in Texas was defined by student success at passing the TASP test. There are many other measures of program success that were not considered. Therefore, one cannot ascertain with certainty if the programs identified are truly outstanding in all facets of developmental education. We can only say that they ranked in the top percentiles of students' post-developmental TASP test pass rates.

Changes in Assessment and Delivery Practices

Also, during the time data was collected, the TASP was a required assessment for program completion; that is no longer the case. Institutions

now have a choice whether to use the Texas Higher Education Assessment (THEA, formerly the TASP) or some other assessment instrument. Since institutions have been offered the flexibility to change their student assessment and developmental education delivery practices, program performance may have been altered, for better or worse, since the time period under investigation. In most cases, however, it was the consensus of both the researchers and those interviewed that few major changes had taken place in developmental education delivery at these institutions during the past five years.

Self-Reported Data

The limitation of self-reported data is also inherent in this study. The interviewees may have exhibited bias in their opinions or they may have provided incomplete information, misinterpretations, or inaccuracies in their reporting. It is hoped that by interviewing several professionals associated with the programs examined in this study, that this limitation was minimized.

Sample Size

A combination of financial and time constraints limited the number of institutional site visitations to five. The small number of case studies that resulted from this study limited the scope of the findings. However, this

sample is consistent with other published studies of community college developmental education (Boylan, Bonham, Keefe, Drewes, & Saxon, 2004; McCabe & Day, 1998; Roueche & Snow, 1977).

Data Collection Procedures

All data utilized in identifying exemplary institutions were obtained from THECB reports. Whatever limitations exist with regard to their data collection and reporting during the time period under consideration would apply as limitations to this study as well.

Section Three

Findings

The emphasis of this report is on the identification of practices that contribute to effective developmental education. Consequently, site visit findings focus on each institution's developmental education activities rather than on the institution in general.

The findings of this report are presented in two categories: research-based best practices and promising practices. The research-based best practices section describes the major consistent findings of this study generated from site visits. These findings meet the following criteria:

- they are grounded in research and have been cited in at least three previous studies,

- they are present at the majority of the institutions visited, and

- they are considered by campus faculty and administrators to be important factors in the campus developmental education effort.

Promising practices are those not well-grounded in research but, nevertheless, appear to contribute to program success. There is a minimal amount of previous research support for some of these practices. There is no previous research to validate others. However, these practices are considered by campus faculty and administrators to contribute to effective developmental education. Promising practices meet the following criteria:

- they are considered by campus faculty and administrators to be important factors in the campus developmental education effort,

- they are supported by some sort of local data, either anecdotal or statistical, and

- they resonate with the previous experience and observations of the researchers.

Research-based best practices

There was remarkable consistency in the organizational patterns, leadership styles, and support for developmental education encountered at the institutions studied. Each of the study institutions had a relatively flat organizational structure. Their administrators expressed considerable confidence in their faculty, considered them to be professionals, and avoided micromanaging their efforts. These administrators also expressed a high

degree of commitment to developmental education and the success of developmental students.

Flat organizational patterns

Generally, the key academic administrative officers at the institutions studied were the president, the dean of instruction or its equivalent, and three or four division chairs.[2] There were few vice presidents or deans or program directors.

As a result of this flat organizational pattern, there were fewer layers of bureaucracy to deal with before one reached the president's office. At most, a faculty member would have to go through one level of administration to get a hearing from the dean of instruction. This contributed to clear communication from developmental educators to administrators, to faculty perceptions that their opinions were valued, and to a cooperative work environment. All of these characteristics have been cited in the literature as characteristics of successful organizations (Boylan, Bonham, Keefe, Drewes, & Saxon, 2004).

This flat organizational pattern allowed administrators to be quite responsive to the needs of developmental education. As one faculty member put it, "We know that if we have a serious concern, it will either be

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[2] For instance, the person occupying the role comparable to a dean of instruction at one college was titled "Vice President for Academic Affairs," at another that person was titled "Vice President of Educational Services."

addressed or be on the president's desk within forty eight hours." Another stated, "We don't always get what we want but we always feel that we've had a fair hearing."

It is possible that this organizational pattern contributes to successful developmental education by enabling the concerns of developmental educators to be brought to the attention of those who can do the most to address those concerns. It is also likely that this pattern allows key administrators to have a better grasp of the problems and issues confronted by faculty on the "front line." Finally, it is likely that this flat organizational pattern promotes better communication throughout the institution.

Servant leadership styles

All the campuses in this study were lead by presidents and vice presidents or deans whose characteristics exemplified servant leadership as described by Greenleaf (1991; 1996). These characteristics included collaboration, trust, listening, and ethical behavior (Greenleaf, 1991). Research indicated that such leadership characteristics were associated with successful organizations (Kezar, 1998; Schuetz, 1999).

The leaders of these institutions emphasized collaboration by working directly with individuals and groups of faculty members to solve problems. They considered faculty and staff of the institution to be colleagues as well

as employees. As the president of one institution stated, "We believe that we get better solutions to our problems when we work collaboratively. There are no 'lone rangers,' everyone here is part of our team… including me."

The leaders of these institutions listened to what faculty had to say and acted upon it. When questioned about why faculty felt they had responsive leadership at one institution, a vice president said, "They can see it in our actions. We usually do what our faculty recommends, and they can see the results for themselves."

These leaders also inspired the trust of faculty and administrators by talking and acting consistently. Their actions and their words were consistent. One president was described by a faculty member as a man who "not just talks the talk but also walks the walk."

Strong leadership support

The characteristics of flat organizational patterns and servant leadership all came together in support of developmental education at the campuses studied. All of the presidents, vice presidents, deans, and division chairs indicated that developmental education was a major priority for the institution. As one senior administrator stated, "Most of our students are developmental. It'd be foolish for us not to see their needs as a top priority

for the college." Another said, "We are here to provide developmental education. That's why we exist."

As Robert McCabe points out, "developmental education is one of the most important services provided by the community college" (2003, p. 13). Apparently the leaders of these campuses agree with this statement and have acted accordingly. Leadership support is recognized in the literature as one of the keys to successful developmental education (McCabe & Day, 1998; McCabe, 2003; Roueche & Roueche, 1999).

At study institutions, leadership support for developmental education is exemplified by the following:

o developmental education is housed in facilities that are among the best on campus,

o campus leaders are involved in the interviewing and hiring of developmental educators,

o campus leaders regularly offer public praise of developmental educators before faculty and civic groups,

o developmental education has a budget that is at least equal to that of comparable units on campus,

o developmental education is built into the resource allocation process, and

o developmental education faculty are accorded the same status, salary, and privileges of other college faculty.

These characteristics were consistently found at the institutions studied. Furthermore, the leaders of these institutions made it very clear that these characteristics were present because they valued developmental education.

Required assessment, placement, and advising

Texas has had a strong commitment to assessment in its colleges and universities since the late 1980s when it implemented the Texas Academic Skills Program (now known as the The Higher Education Assessment). It was no surprise, therefore, that all of the institutions visited had well-organized assessment procedures.

The NES instrument, THEA, and the ETS instrument, Accuplacer, were the most common assessment instruments used for initial placement. It was also interesting to note that every institution in the study also had some additional assessment, either cognitive or affective, to validate or improve placement decisions.

Most of the faculty members interviewed believed that the THEA did the best job of measuring college level skills. However, they felt that other instruments were easier to administer. Content from the THEA was also used at two campuses for exit testing or to validate instructional objectives.

In addition to well-organized assessment procedures, the campuses in this study also had strong advising and placement processes. During the

1999 to 2003 period from which data was drawn, each of these campuses put a great deal of emphasis on personalized student advising. Each entering student at these campuses spent half an hour or more with an individual advisor before registering for classes. During this time, student scores were interpreted, educational goals discussed, and options for placement considered.

Each campus had written rubrics to guide placement decisions. Each campus made special efforts to train advisors, particularly with regard to placement of students in developmental courses. Faculty and administrators generally considered the training of academic advisors to be an essential feature of successful developmental courses. As one administrator stated, "We want all of our advisors to be positive about placement in developmental education so students understand that it's an investment in their success." The importance of advisor training is validated by a substantial amount of research (Boylan, 2002; Casazza & Silverman, 1996; McCabe, 2000; Maxwell, 1997).

Learner centered philosophy of operation

Developmental educators at each of the study institutions had an intensely learner centered philosophy that governed their interactions with students. They were not simply student centered but learner centered.

Instructional, policy, and administrative decisions were made based on the decision's potential impact on student learning. Decisions ranging from the arrangement of tables in classrooms to the type of software used in laboratories were made based on the question, "How will this help or hinder student learning?"

This philosophy appeared to be pervasive at the study institutions. Faculty interviewed frequently expressed their commitment to student learning and were able to back this up with examples of how they put the learner first in making classroom decisions. As one faculty member put it, "We do whatever is necessary for our students learn." Another said, "When I ask my dean for something… 'how will this help students learn better,' is what he always says." At the study institutions faculty were held accountable for student learning rather than just being accountable for teaching.

The use of such a learner centered philosophy is supported by the research on developmental education. This research consistently indicates that outcomes are improved when a learner centered philosophy is central to program operations and decision making (Boylan, 2002; McCabe, 2000; Siliverman & Casazza, 1996).

Consistent formative evaluation

Each of the study institutions placed a great amount of emphasis on data collection and analysis. They also put great emphasis on formative evaluation. Formative evaluation takes place when faculty and administrators use data to find out how well they are doing, to identify ways of improving what they are doing, and using data to see if the changes implemented have worked or if modification is needed. Formative evaluation has frequently been found to contribute to successful developmental education (Boylan, Bliss, & Bonham, 1997; Casazza & Silverman, 1996; McCabe, 2000)

At study institutions with institutional research offices, these offices frequently worked with developmental educators to identify data necessary to make decisions. Most of the faculty teaching developmental courses had at least a general knowledge of pass rates and retention rates for developmental students and were aware of any campus studies done on developmental education. Several of the faculty interviewed kept their own records on student persistence, grades, and pass rates in developmental courses which they used as a baseline to evaluate their own performance. One faculty member said, "I try to get as much information as I can about my students' performance… that helps me evaluate my own teaching."

Data and evaluation reports were regularly shared with developmental educators who were also asked for their opinions in analyzing this data. One department chair made sure that everyone received data on their students' grades and pass rates and then had a discussion with faculty individually and in groups at the end of each year to help everyone understand the meaning of this data.

Careful hiring of developmental educators

Every administrator interviewed emphasized that careful hiring of developmental educators was a critical element in the success of developmental education at their campuses. As one administrator put it, "Most people think that anyone with a college degree can teach developmental courses. I think that, if we hire someone who can teach developmental courses well, they can teach anything well." This sentiment was echoed by faculty members who served on hiring committees.

There was a rigorous hiring process at the study institutions. At most of these institutions prospective faculty members were asked to give a demonstration presentation as part of the hiring process. They were also frequently asked to direct this presentation to a hypothetical audience of developmental students. Usually the president or the dean of instruction would attend this presentation.

Candidates for developmental education faculty positions were always interviewed by the president or the dean of instruction. They were also interviewed by a panel that included developmental educators. During interviews, candidates were regularly asked about their views of developmental education and developmental students and their experiences in teaching these students.

Careful hiring of developmental educators has support from the literature. A benchmarking study by the Continuous Quality Improvement Network (2000) suggested that only those who were interested in teaching developmental students should be assigned to do so. Roueche & Roueche (1999) argue that community college developmental programs must "Recruit, develop, and hire the best faculty (p. 32)" if they are to be successful.

Ongoing communication among developmental educators

At each of the institutions studied, there was a great deal of communication among those who taught developmental courses. This was true in spite of the fact that most of the study institutions had decentralized developmental programs.

The lack of centralization at these campuses is more than compensated for by the fact that all those teaching developmental courses

have regular communication with each other. Such communication is essential to successful programs (Boylan, 2002; McCabe & Day, 1998; Casazza & Silverman, 1996). This communication takes place through formal and informal meetings, email, and hallway discussions. At each study institution there are regular formal meetings of developmental education faculty within and between disciplines.

Faculty at these institutions also appeared to be genuinely interested in communicating with each other about students and about teaching and learning issues. As a consequence, there was not only strong communication between developmental educators there was strong communication between developmental educators and other campus faculty.

The emphasis on collaboration exemplified by the leaders of these institutions also characterized the developmental education faculty and staff of these institutions. There were many instances of inter-disciplinary programming and innovations at study institutions. Such collaboration would be unlikely to take place if good communication were not present to begin with.

Limited use of adjuncts

Two of the institutions studied used adjuncts to teach developmental courses only sparingly. At one institution, the president proudly affirmed

that, "Ninety percent of our developmental courses are taught by full-time faculty." It appeared that, to the extent possible, the study institutions tried to staff developmental courses with experienced full-time faculty.

Although all the institutions in this study employed adjuncts to teach some developmental courses, they made very serious efforts to orient and train these adjuncts. Each of the institutions had either a formal or an informal mentoring program for adjunct faculty. In these programs, adjunct faculty members were paired with experienced full-time faculty who served as their mentors. These mentors met regularly with adjuncts, visited their classes, provided constructive feedback, and were available to answer questions.

The study institutions had both formal and informal orientation programs for adjunct faculty. Most of these institutions also had manuals available for adjunct faculty that described the institution's teaching philosophy, provided guidelines for instruction, and explained campus policies and procedures.

The research is consistent in recommending that adjunct faculty not be the primary providers of developmental education (Boylan & Saxon, 1998; McCabe, 2000). It is also consistent in recommending that adjunct faculty teaching developmental courses be carefully trained (Boylan, 2002; Grubb

and associates, 1999; Neuburger, 1999). The institutions in this study have taken these recommendations seriously and acted accordingly.

Aggressive professional development

Professional development for developmental education personnel is generally considered to be one of the most important characteristics of successful programs (Boylan, Bliss, & Bonham, 1997; Grubb, 1999; McCabe, 2000; Roueche & Roueche, 1999). All of the institutions in this study emphasized professional development for developmental educators in particular and for faculty and staff in general.

Each institution made funds available for developmental educators to attend professional conferences. Almost all of them had sent faculty to participate in one or more professional training institutes. Each institution sponsored regular professional faculty development workshops that emphasized innovative instructional methods. These institutions also used local faculty to run mini-workshops for developmental education instructors.

One institution had a "Developmental Education Update" each semester describing issues, trends, and techniques in the field. Another institution established a local email network to discuss instructional issues, methods, and techniques. As one developmental educator explained, "The dean has always found resources to support our (developmental educators')

professional development." Another said, "Training counts here. We get supported and rewarded for it."

The institutions in this study were very serious about developing the professionals who worked with developmental students. They used a wide variety of techniques, invested institutional funds in conference and workshop attendance, and rewarded participation in professional development. As noted earlier, they also paid a substantial amount of attention to orientation and training for adjunct faculty teaching developmental courses.

Promising Practices

Connecting with high schools

Although Rainwater & Venezia (2003) have described several approaches to improved high school/college collaboration, there is little evidence as yet to suggest that these result in improved student performance. Faculty and administrators at many of the institutions in this study, however, believe that making connections with high schools can reduce the need for remediation. As one administrator put it, "We may not completely eliminate the need for recent high school graduates to take developmental courses but we can at least try to make sure they place into the highest levels of developmental education."

Institutions in this study had various sorts of liaisons with local high schools that were designed to clarify college requirements and reduce the need for developmental education. At one institution, developmental education faculty met with high school faculty from "feeder schools" to discuss college-level requirements in English and mathematics. The objective of these discussions was to insure that high school students would not be "surprised" by college level requirements. Another institution sponsored meetings of high school and college faculty in an attempt to promote better alignment between the high school and college curricula.

Some institutions in the study allowed high school students to take the college placement test in their sophomore or junior years. The results pointed out student's academic shortcomings in time for them to take advanced mathematics or composition courses during their high school years, thus insuring they were better prepared for college.

Limiting class size in developmental courses

There is at present little research indicating that smaller class sizes in developmental courses contribute to better student performance. However, many of the faculty and administrators interviewed believed that smaller classes do contribute to the success of developmental students. As a Dean of Instruction explained, "Having lower class sizes in developmental education

allows our faculty to give more individual time to the students who need it most. That's a priority for us." As a result, many of the institutions in this study made it a point to deliberately limit the enrollment in developmental courses.

Typically, enrollment in developmental reading and English classes at these institutions ranged from fifteen to twenty students. Enrollment in mathematics courses were often higher, usually around twenty-five. These enrollment numbers are three to five students lower than reported by Schults (2000) as the national average for community college developmental courses. It is also worth noting that the enrollments for developmental writing classes at these institutions are also consistent with the recommendations of the Conference on College Composition and Communication. An association position paper states specifically that, "No more than 20 students should be permitted in any writing class. Ideally, classes should be limited to 15" (Conference on College Composition and Communication, 1989).

Using values to drive operations

The developmental programs at institutions participating in this study were typically driven by values. By this, we mean that the programs had a clearly articulated set of student and learning centered values that were not

only understood by all personnel but also used consistently to make decisions. In some cases, the programs had written values statements designed to guide operations. In others, these values were simply understood by all parties and reinforced verbally on a regular basis. One faculty member stated that, "We see that part of our responsibility is to inculcate our institutional values into new faculty members."

As a result, policies and decisions tended to be guided by the values of the program rather than having the values of the program guided by policies. Typically, these values were learning centered and emphasized such things as:

- o committing to student success,
- o honoring students' worth as individual human beings,
- o accepting students where they are and moving them as far as they can go,
- o emphasizing the importance of student attendance and participation in class,
- o utilizing active learning techniques in classrooms,
- o encouraging students to become autonomous,
- o respecting colleagues and students,
- o treating students holistically, and

o   creating a safe environment for learning.

Several of these principles were part of the values driving operations at each of the participating institutions.

Establishing baselines for formative evaluation purposes

Two of the institutions in this study developed baseline data to guide formative evaluation and program improvement activities. They collected data from the most recent three-year period on such things as:

o   Student completion rates in developmental courses,[3]

o   Students completing developmental courses with a C or better, or

o   Semester to semester retention for developmental students.

The averages for all courses and students during the three year period were then calculated and presented in a simple format. This was then shared with all developmental faculty members. As one department chair explained, "We pride ourselves on making data driven decisions and using baseline data is one of the best ways for us to do it."

Faculty might then use this information as a way of evaluating their own performance in teaching developmental students by comparing it to the performance baseline. These baselines also served as a target for improvement from year to year. Each year, faculty would review the data

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[3] Completion rates and "C or better" rates were usually based on the number of students still officially enrolled in the course as of the last day of the semester.

and determine what actions or changes might contribute to improving upon baseline performance.[4]

It also is important to note that none of the formative evaluation activities of participating institutions were undertaken for punitive purposes. To the extent possible, data was anonymous and faculty and administrators agreed that it would only be used to improve program performance.

Building valued activities into the reward system

Grubb, et. al. (1999), point out that although community colleges ostensibly value teaching, they rarely build good teaching into the reward system of the institution. This shortcoming was not discovered at any of the institutions participating in this study. Almost all of them had systematic processes in place for promoting and rewarding quality instruction at some level. One of the administrators interviewed pointed out that, "We don't leave good teaching to chance. We try to put our money where our mouth is by rewarding people for doing things right."

These institutions not only provided frequent professional development opportunities, they also encouraged those who had participated in these activities off campus to mentor others upon their return. At one

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[4] It should be noted that the use of baseline data will always result in eventually reaching a point of diminishing returns where further improvement would be unrealistic given available time and resources. It is unlikely, however, that this point will be reached quickly.

institution, instructors who participated as volunteer assistants in the learning center in order to understand student problems first hand were later rewarded with their choices of courses and schedules. Another institution highlighted the successful teaching practices of individual instructors in a campus newsletter. Another developed a teaching techniques web site for adjunct faculty while another established a "best practices" web site for developmental faculty. In some cases, showing evidence of using best practices or recommended techniques were built into the salary, tenure, and promotion system.

A key characteristic of these activities was that they were systematic. They were undertaken on a regular basis, they were reviewed at the end of each year, and they were part of an overall campus program for the improvement of instruction.

Encouraging students to take college level courses immediately following completion of developmental courses.

One institution placed a great deal of emphasis on encouraging students who completed the highest level of developmental mathematics to take the first college level mathematics course immediately. This was based on the reasonable assumption that mathematics skills atrophy faster than other basic skills because they are less likely to be used in everyday life.

In support of this, instructors of the highest level developmental mathematics course would explain to students that their chances of passing college level mathematics increased if they took it the semester following completion of developmental mathematics. The college had data to validate this point and this information was shared with students on a regular basis. The data was also used by college advisors to encourage students to follow up completion of developmental mathematics with college level mathematics courses. Instructors, advisors, and administrators worked together on a systematic basis to encourage students to do this. As an academic advisor at one college stated, "We want our students to be successful and we have data to show them that if they take these courses right after remediation, they're more likely to be successful."

The available data suggests that such actions contribute to an improved passing rate among developmental students who take the first college level mathematics course. It seems reasonable to assume that encouraging early completion of the first college level course for those who complete developmental courses would also work on other developmental subject areas as well.

Providing aggressive mentoring for new developmental faculty

Most of the faculty and administrators interviewed were in agreement that proper orientation of new developmental faculty was essential to the success of the developmental program. The prevailing opinion was that it was far easier to get new developmental faculty started off in the right direction than to attempt to change their behavior later on. As one senior faculty member noted, "We consider mentoring new faculty to be a basic part of our job. Why let them make the same mistakes we did?"

Consequently, the institutions in this study put a great deal of emphasis on the orientation of new developmental faculty. The most common way in which this orientation was delivered was through structured mentoring programs.

Typically, every new developmental instructor was assigned to a senior faculty member with experience in teaching developmental courses. The senior faculty member met with the new faculty member at the beginning of each academic year to provide initial orientation. The senior faculty member also visited with the new faculty member again on a regular basis throughout the semester to discuss problems and issues and to provide guidance. In addition, the senior faculty member also observed classes and provided feedback for the new instructor. At the institutions in this study, this process was typically supervised by either a department chair or by

another individual appointed specifically for this purpose. It did not happen randomly but as part of a planned, consistent, and systematic mentoring program.

Section 4

Conclusion

In an earlier study of developmental education in Texas colleges and universities, the authors of this report found that outcomes for developmental education varied dramatically from campus to campus (Boylan & Saxon, 1998). Even when results were compared for similar institutions with similar populations, there was an extraordinary range in outcomes. At some institutions, more than 70% of students passed the TASP on their first attempt following participation in developmental education. At other, similar institutions, fewer than 30% of students passed the TASP on their first attempt following participation in developmental education.

Our explanation for this at the time was that the quality of developmental education in Texas colleges and universities was uneven. Some institutions gave it priority and put serious effort into doing it well. Other institutions did not consider it a priority and put little effort into doing it well.

Among the things we consistently encountered at the institutions described in this report was that they considered developmental education to be a priority. This was made clear by the words and actions of presidents, vice president, deans, division chairs, and faculty.

Because it was a priority, developmental education was supported with resources, facilities, and personnel. Because it was a priority, providing quality developmental education was rewarded both formally and informally. Because it was a priority, data was gathered on developmental education outcomes and this data was used for program improvement. Because it was a priority, faculty and administrators talked with each other about how to do it better. Because it was a priority, a culture emphasizing quality developmental education emerged at each of the institutions studied. Ultimately, this culture served as a foundation for the excellence in developmental education attained by the institutions included in this study.

Our conclusion, then, is that quality developmental education results from an institutional culture that values developmental education and considers it a priority. It is possible that, if this culture does not exist, any number of best practices might be implemented without obtaining significant improvement in developmental education. Where the use of best practices is

combined with a culture that values developmental education, however,

excellent developmental education is likely to result.

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APPENDIX 1
Institutional findings

For each institution a set of "Fast Facts" is provided to orient readers to its type, demographic characteristics, and budget. A brief "Context" statement is also provided describing the institutional context in which developmental education is provided.

The developmental education practices of these institutions are then described under two categories, "Research-Based Best Practices" and "Promising Practices." The Research-Based Best Practices category describes developmental education practices that have been validated by previous research. Although evidence already exists attesting to the efficacy of these practices, the literature of the field identifies a myriad of such practices. Given the broad range of research-based best practices that might be implemented, it is useful to note the particular practices engaged in on campuses that have been successful in their developmental education efforts.

Promising practices are those for which there is little or no current research support but which appear to contribute to the success of the programs studied here. These practices were identified during interviews and met three criteria:

- the faculty and administrators interviewed believed that they contributed to success in developmental education at that particular campus,

- the researchers agreed, based on their experience and observations of other institutions, that these practices might contribute to successful developmental education, and

- it appeared unlikely that using these practices would reduce the effectiveness of developmental education.

Findings for Institutions

LAMAR INSTITUTE OF TECHNOLOGY
Beaumont, Texas

FAST FACTS

Type of Institution	Public Technical/Vocational 2-year
Location	Urban/Southeastern Texas
Credit Enrollment	2540
Full-Time Faculty	85
Developmental Education Faculty	Full-Time n.a. Part-Time n.a
Developmental Education Students	n.a.
Institutional Budget	n.a.
Developmental Education Budget	n.a.
Cost Per Developmental Student	n.a.
Ethnicity of Students	White = 55% Latino = 7% African-American = 32%

Context

Lamar Institute of Technology (LIT) offers vocational and technical education programs that lead to applied science degrees and certificates. It is an urban institution located in Beaumont. The largest minority group at LIT is African-American. The primary goal for students at Lamar Tech is a

terminal technology degree. The leadership does not consider the college as having a "feeder" mission to 4-year colleges.

The developmental education program is centralized and placed under the Department of Supervision. Student support is offered through the Learning Support Lab. Developmental courses are supported by subject based learning laboratories.

Research-based Best Practices

Administrative support for developmental education

The administration at LIT appears strongly committed to offering quality developmental education. It is suggested to be a vital part of the "care of students" mission of the college, and something that is reflected in the expressed values of the faculty and administration. The developmental faculty members feel that they have the professional support and appropriate funding to manage an exceptional program. The developmental program is represented in the Executive Council through the Director of the Department of Supervision. Research supports that developmental education as an institutional priority contributes to student success (Roueche & Roueche, 1993; Roueche & Roueche, 1999).

Centralized developmental education

There is much support in the literature that centralized developmental programs are more effective, likely due to the increased coordination that coincides with this particular structure. (Boylan, Bliss, & Bonham, 1997; Roueche & Snow, 1977; Roueche & Roueche, 1993). The developmental program at LIT is centralized and effectively coordinated through many formal and informal means of communication and protocol. The unit has a planning process applied within the context of the Institutional Master Plan that offers formative guidance for program improvement. This planning process is performed on a systematic basis.

Communication is also facilitated by the centralized structure. Developmental faculty work and reside in close proximity, enhancing the formal and informal flow of communication. In addition to the planning process, the faculty also engages in regular, informal lunch meetings where instructional ideas and teaching strategies are shared and discussed.

Formative evaluation for program improvement[5]

A particular sentiment echoed by faculty and administrators at LIT is that strategic decisions tend to be data driven. This appears endemic to the institution from the top down. It is indicative of this that the college

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[5] The use of formative evaluation for program improvement is a key component of continuous quality improvement. However, continuous quality improvement refers to a systematic and usually institution-wide effort. The term "formative evaluation in developmental education" is used here to refer to activities that may or may not be part of a systematic, institution-wide, continuous quality improvement effort.

president is evaluated on performance measures as reported by the Legislative Budget Board. Subsequently, decisions that affect the operation of developmental education are based on the consideration of particular outcomes from past performance. This is also referred to as "management by exception." Here, performance data are used to identify strengths and opportunities for improvement.

These opportunities are then addressed in the strategic plan. The effectiveness of this process may also imply an effective working relationship between the developmental education program and the institutional research function. The use of evaluation data for program improvement is frequently cited as an activity associated with successful developmental education (Boylan, Bliss, & Bonham, 1997; Maxwell, 1997; Casazza & Silverman, 1996).

Aggressive professional development

The LIT developmental education faculty mentioned that professional developmental activities are encouraged and in many cases funded by the institution. These opportunities are quite diverse, ranging from conferences and planning retreats, to foreign language skills courses aimed at improving communication with minority students. Many of the faculty participated in a retention enhancement initiative delivered at LIT by the Noel-Levitz

company. There is evidence in the research literature suggesting that an emphasis on professional developmental contributes to student success (Casazza & Silverman, 1996; Maxwell, 1996; McCabe, 2000) and a previous study of developmental Education in Texas found this to be true (Boylan & Saxon, 1998).

Mandatory assessment and placement

All students entering a degree program take the COMPASS test, though other accepted testing instruments include the THEA, ASSET or Accuplacer. Assessment exemptions may be allowed based on SAT, ACT, and TAAS scores. Developmental students are required to see an advisor. This is an important process because research has shown the advising by trained academic advisors is related to the success of developmental students (Boylan, Bliss, & Bonham, 1997; Boylan, 2002). The administration expressed confidence that their advising staff are aware of the need for and the benefits provided by developmental education. This promotes a consistently positive demeanor expressed by advisors in conveying information about developmental education to students.

Placement in the appropriate developmental courses is mandatory based on assessment. If developmental students do not successfully complete their developmental courses, they are dropped from any college

curriculum courses they are enrolled in. This feature of mandatory

assessment and placement is associated with developmental student success

(Roueche & Roueche, 1999; Boylan, 2002).

Integrated courses and laboratories

Several of the developmental education instructors and the staff of the

Learning Support Lab expressed that there was a strong link of

communication and coordination between the two entities. One faculty

member referred to the lab as "the cornerstone of developmental education."

It was suggested that there was a coordinated effort to show every

developmental student the lab facilities. Writing and reading instruction had

regular, coordinated lab activities, and mathematics examinations were

scheduled to take place there, as well. The integration of classrooms and

laboratories is cited in the literature as a contributing factor in successful

developmental education (Boylan, Bliss, & Bonham, 1997; Continuous

Quality Improvement Network/American Productivity and Quality Center,

2000).

Promising Practices

Laboratory activities matched to TAS- based curricular objectives

An interesting feature of assessment and placement process is that the

objectives measured by the TASP Test are also matched to appropriate

sections of PLATO. The PLATO system is used as an instructional support program for classes and laboratories. Because the TASP was originally referenced to the Texas postsecondary curriculum, this practice insures that material learned in laboratories is consistent with the college curriculum.

The practice of matching laboratory activities to curricular objectives may help to insure that what students spend time on in laboratories is exactly what they need to master in order to be successful in the college curriculum. This probably strengthens the performance of developmental students in later courses and is, therefore, considered to be a promising practice.

"Customer orientation" toward students

During interviews, the developmental faculty described a student-centric approach that is supported and encouraged by the administration. The students are viewed as "customers" who ultimately have a choice as to where they purchase their education services. Feedback from these "consumers" in the form of evaluations (also referred to as "customer satisfaction surveys") is taken seriously and used for improvement. The retention of these consumers is a high priority.

Collaborative interaction with high schools

LIT has in place an Advanced Tech Credit program whereby certain college-credit courses are offered to high school students. Here, "Tech Prep"

recruiters and faculty work with high school administrators and faculty in order to align high school course work with college-level work.

Working with local high schools to insure an alignment between secondary and postsecondary curricula is a promising practice. It has the potential for insuring that high school graduates are better prepared for college. It may also contribute to students having a better understanding of the differences between high school and college academic expectations.

Careful hiring of developmental educators

The LIT Director of Supervision believes that the hiring of quality faculty is important to the success of working with developmental students. A teaching background is required of all applicants. Hiring committees actively seek and recruit those individuals with exemplary credentials and references with respect to their teaching. The candidate must demonstrate an enthusiasm for teaching and learning, and an understanding of the importance of developmental education in the context of the college's mission. LIT also emphasizes the training of adjunct faculty as well. Upon hiring, adjunct faculty members are assigned to a senior faculty mentor who is available to provide training, advice, and consultation.

Administrators at LIT also make sure that only those who actually want to teach developmental courses are assigned to them. As one

administrator said, "We won't put our developmental students in the hands of faculty who don't want to teach them." This was found to be a practice consistent with exemplary programs in the Continuous Quality Improvement Network study of developmental education (2000) which gives further support to the importance of assigning only those who want to teach developmental education to these classes.

Professional treatment of developmental educators

It was clear from interviews with administrators and faculty that developmental educators were considered to be expert professionals. As one administrator put it, "We hire quality people and assume that, with the proper resources, they will do a quality job of teaching developmental students." This sentiment was echoed by faculty who claimed that, "Our administration does not micromanage us – they look at outcomes" and that, "Our leadership is good about seeing that we get the resources we need."

This practice of acknowledging developmental educators as professionals has been noted in other studies but not necessarily, cited as a best practice (CQIN/APQC, 2000; Boylan, Bonham, Keefe, Drewes, & Saxon,). It stands to reason, however, that where developmental educators are considered to be expert professionals and regarded as making an

important contribution to the institutional mission, their efforts are more likely to be successful.

Values driven operations

It is difficult to quantify the values that appeared prevalent at Lamar Tech but they certainly appear to contribute to the programs success. As one interviewee described it, "Caring for each other and students, being receptive and willing to share information, having an accessible administration, and motivated faculty are what makes this program work." The developmental educators interviewed were genuinely committed to student success and sincerely cared for their students and each other. They enjoyed working with and collaborating with each other. These factors probably contributed to the high level of achievement and motivation among developmental educators at Lamar Tech.

Caring, collaboration, and a concern for student success were particularly evident at LIT and Northwest Vista, but to one degree or another they characterized developmental educators at all of the institutions visited. Operating on the basis of these values can, therefore, be suggested as a promising practice for developmental education.

NORTHWEST VISTA COLLEGE
San Antonio, Texas

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FAST FACTS

Type of Institution	Public Comprehensive 2-year
Location	Urban/Southern Texas
Enrollment	7530 head count
Full-Time Faculty	78
Developmental Education Faculty	Full-Time 11 Part-Time 64
Developmental Education Students	6095
Institutional Budget	$16,544,921
Developmental Education Budget	$1,027,710
Cost Per Developmental Student	$169.61
Ethnicity of Students	White = 46% Latino = 45% African-American = 6%

Context

Northwest Vista College is a comprehensive community college offering a wide variety of vocational and technical programs as well as college transfer programs. It is an urban institution located within the city limits of San Antonio. As might be expected given its location, the largest minority group at Northwest Vista College is Latino.

Northwest Vista is one of the newest colleges in Texas having been established in 1995 with construction of its current physical plant initiated in 1997. During the data collection period for the study, 1999-2003, Northwest Vista was, according to its president, "the fastest growing college in the country."

The college was organized around the principles of learning, creativity, community, openness, integrity, caring, joy, synergy, and diversity. These values were reflected in the college's organizational framework and in the philosophy of its operations.

There is no centralized developmental program at Northwest Vista College. Instead, developmental courses are taught through the appropriate academic "cluster." The Academic Foundations Cluster includes the college's reading, mathematics, English, and ESL courses.

Student support is provided by the Developmental Advocacy Center, a learning assistance program offering academic counseling, tutoring, and individualized instruction. Developmental courses are also supported by subject based learning laboratories.

Research-based Best Practices

Administrative support for developmental education

There is no question that developmental education has substantial administrative support at Northwest Vista College. Administrative support is considered by many researchers to be a key factor in the success of developmental education on any given campus (Boylan, 2002; McCabe, 2000; Roueche & Roueche, 1999).

Administrative support is illustrated by the President of Northwest Vista's statement that "We take pride in the fact that we're the only place you can go to obtain quality developmental education. Universities can do the easy work of teaching prepared students."

Faculty consistently indicated that the chief administrators of the college regularly made public statements supporting the importance of developmental education to the institution's mission. Faculty also indicated that chief administrators regularly praise the efforts of developmental educators on the Northwest Vista campus.

According to administrators, the needs of developmental education are given high priority in the resource allocation process. As a result, faculty claim that they are provided with all the resources they need to do an effective job of developmental education. Several administrators echoed the sentiment that, "We have excellent faculty and my job is simply to insure they have the tools needed to put their excellence to work." Further evidence of administrative support is found in the fact that developmental education courses and services are housed in the institution's newest and best facilities. Finally, developmental education is also embedded in the college's strategic plan for the future. All these factors are indications of considerable

administrative support for developmental education at Northwest Vista College.

Mandatory Assessment and Placement

All students entering Northwest Vista College are placed in courses based on their performance in assessment. Mandatory assessment and placement has long been considered a best practice in successful developmental education (Casazza & Silverman, 1996: Morante, 1989; Roueche & Snow, 1977).

The Accuplacer, an ETS product, is the primary assessment instrument, but the college also uses THEA scores for assessment and placement.[6] Assessment testing is done either by appointment or on a "walk in" basis for all entering students. Students placed in developmental writing courses are also given a writing sample to validate placement and students are then reassigned to higher or lower level courses as necessary. According to college officials, 85-90% of incoming students place in one or more developmental courses.

Once students have completed the assessment, they go immediately to group advising sessions. During the data gathering period for this study, 1999-2003, students also received a thirty minute individual advisement

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[6] Although the THEA is not the college's primary assessment instrument, the core skills measured by the THEA are used in developing final examinations.

session from trained academic advisors. According to advisors a critical component of the advising process is that students are encouraged to accept placement decisions as "an investment in their future" rather than as a punishment for poor high school performance.

Students are not permitted to bypass developmental education. The registration system has built in prerequisite codes that prohibit students from entering courses for which developmental education is a requirement.

There is also a strong academic advising program for developmental students provided through the Developmental Advocacy Center ("DAD"). For example, students may not drop developmental courses unless they first consult with DAD advisors. These advisors may move students to different sections of classes to accommodate life or work schedules. They may also assign tutors or recommend other forms of extra assistance.

Strong coordination and communication in developmental education

Strong coordination and communication among developmental educators is also a well documented characteristic of successful programs (Boylan, 2002; Casazza & Silverman, 1996; McCabe, 2000). A great deal of communication takes place within the Academic Foundations Cluster and among those teaching developmental courses within the cluster. There are meetings of cluster faculty two or three times a semester. The faculty in each

discipline meets at least eight times per semester and those teaching developmental courses meet at least four times a semester. There is also an extraordinary amount of informal communication among faculty in the Academic Foundations Cluster and between cluster faculty and the Developmental Advocacy Center. In fact, many of the reading and English faculty also serve as tutors in the center.

Although there is no official director of developmental education, the Academic Foundations Cluster leader considers coordination of developmental education to be one of her major priorities. This coordination, however, is accomplished through collaboration in identifying and using innovative teaching strategies, reviewing developmental education courses and syllabi, and analyzing data on the performance of developmental students.

Formative evaluation for program improvement

The use of evaluation data for program improvement is recognized as an activity associated with successful developmental education (Boylan, Bliss, & Bonham, 1997; Maxwell, 1997; Casazza & Silverman, 1996). Developmental educators at Northwest Vista have access to excellent data and consistently use it to make decisions about their courses and services.

According to one of the mathematics instructors, "We never stop looking at data to see how we can improve student success."

Macro-level data on long term student performance and retention is collected by the institutional research office of Northwest Vista. Micro-level data on student performance in individual developmental courses is collected by individual program areas. Through a Title V grant, the college is also developing a "Data Warehouse" that will systematically collect essential data on student performance in developmental education.

Grades in follow-up courses, GPA data, and the retention and graduation rates of developmental students are collected and shared with faculty on a regular basis. The mathematics faculty use data from final examinations to insure that there is consistency between the exit standards for one level of mathematics and the entry standards for the next level.

The culture of the college appears to support the use of formative evaluation for program improvement purposes. According to the president of the college, "We try to make data driven decisions about our courses and services on a continual basis. It's something we value as part of the college's character." At Northwest Vista College, the use of evaluation feedback for the improvement of developmental education is part of the college-wide continuous quality improvement process.

Aggressive professional development

Professional development for faculty and staff has consistently been reported as a characteristic of successful developmental programs (Boylan, 2002; Casazza & Silverman, 1996; McCabe, 2000). Faculty and administrators at Northwest Vista take professional development seriously. They regularly attend workshops, institutes, and conferences and participate in graduate courses. Each year, for instance, five or six administrators and faculty attend the National Association for Developmental Education Conference. Faculty at Northwest Vista also place a high value on sharing information learned through professional development with each other and on collaborating to put learned concepts into practice.

Administrators noted that, at Northwest Vista, 20% of the work week is devoted to faculty development. Fridays are set aside for faculty developmental activities and it is expected and encouraged that faculty use this time to get training from on topics such as critical thinking, learning styles, or classroom assessment techniques. Funding for these activities is considered a priority by administrators.

Adjunct faculty training

Most community colleges rely heavily on adjunct faculty to teach developmental courses (Shults, 2000). Northwest Vista is no exception.

However, the college makes extensive efforts to insure that adjuncts are well trained and well oriented to the college's student centric mission. This is consistent with recent research on best practices in the community college generally and developmental education in particular (Boylan, 2002; McCabe, 2003; Wallin, 2005)

Each full-time faculty member in the Academic Foundations Cluster is assigned to work with four or five adjunct instructors in orienting them to the college's student centered philosophy and encouraging them to use active and collaborative learning techniques in the classroom. Adjunct faculty are observed by the cluster leader and given feedback as to how to improve their instruction. Adjuncts are also encouraged to attend subject area and cluster meetings and participate in "brown bag" discussions on teaching and learning, faculty lead workshops, and other faculty development activities. An orientation is provided for adjuncts at the beginning of each semester and an adjunct faculty manual is available as a reference for part-time faculty. New adjunct faculty members are also encouraged to spend 90 minutes a week working in the Developmental Advocacy Center to gain familiarity with Northwest Vista students. Adjunct faculty members are rewarded for participating in professional development activities by being given a choice of teaching times and assignments.

The college makes it a point to see that adjunct faculty are regarded as equal partners in the learning venture and treated accordingly by their full-time colleagues. According to the Dean of Instruction, "We go to great lengths to make the adjuncts feel like part of the college and we include them in all cluster meetings and problem solving meetings."

Collaborative learning in developmental classrooms

There is a considerable body of research indicating that collaborative learning contributes to student success (Grubb, 1999; McKeachie, 2000; Perin, 2001; Weimer, 2002). It also appears to contribute specifically to student success in developmental courses.

There is a substantial emphasis on collaborative learning in developmental courses at Northwest Vista. New faculty and adjuncts are trained in the use of collaborative learning techniques. All faculty members are encouraged to use these techniques in their teaching. In fact, a recent survey of Northwest Vista students, reported that collaborative learning was used in 94% of classes.

The faculty believes that this emphasis on collaborative learning is one of the reasons students are successful in developmental courses. As one instructor put it, "Getting students to collaborate with each other improves the quality of learning that goes on here." Another said, "Students can tell

that we're serious about collaborative learning because we model it in our own practice."

Promising Practices

Baseline data for formative evaluation

As noted earlier in this report, the use of data for formative or continuous quality improvement purposes is well documented in the literature as a best practice in developmental education (Boylan, 2002; Casazza & Silverman, 1996; Maxwell, 1997; McCabe, 2000). Northwest Vista College, however, has a particularly interesting way of doing this. Data on pass rates and persistence rates in developmental mathematics courses is collected at the end of each semester. Baseline data averaging past years' performance is also calculated. This baseline data is then shared with Academic Foundations mathematics faculty.

The data is used to by instructors to identify where their particular classes fall along this baseline. It is also reviewed by the lead instructor in developmental mathematics who provides advice and encouragement to improve the baseline performance where necessary. Although the mathematics instructors look at this data for all courses, they regard developmental mathematics courses as a priority. This appears to be a

promising technique for using data to focus developmental instructors' attention on areas or courses where improvements might be made.

Valued activities integrated into the rewards system

At Northwest Vista College, there is a clear understanding of what activities and values are considered most important in developmental education. According to one administrator, "An emphasis on values overarches everything that we do." As translated in operational terms, these values include such things as participating in professional development, using collaborative learning in classrooms, identifying and applying innovative learning strategies, and collaborating with colleagues. Considerations such as these are then taken into account in the rewards system of the college.

For example, participation in activities recognized as part of the college's primary values is built into the salary, tenure, and promotion system. Adjuncts participating in training activities are given their choice of courses and schedules. Faculty members who are engaged in innovative projects receive professional development support. All of these things function to encourage and reward the use of best practices in developmental education among faculty.

Formal and informal structures supporting quality instruction

Norton Grubb (1999) points out that, even though community colleges claim to value good teaching, few colleges actually have structures in place to encourage and support good teaching. Northwest Vista College, however, has a variety of mechanisms in place to promote quality teaching in general and for developmental students in particular.

Regular faculty meetings in the Academic Foundations Cluster are devoted to the discussion of teaching and learning issues. Faculty members are encouraged to share successful techniques for teaching developmental students and to engage in collaborative projects to field test innovative practices. At least once each year, departmental meetings are held to share and discuss course syllabi. A systematic process is in place for reviewing and changing syllabi based on data and experience.

As noted earlier, Fridays are devoted to faculty development activities. Faculty members are encouraged to develop and deliver workshops for each other and are rewarded in various ways for doing so. There are a variety of formal and informal opportunities for faculty to discuss and demonstrate how their teaching reflects the values of the college. All of these activities are part of a systematic effort to promote quality instruction at Northwest Vista. These activities are purposeful, consistent,

and ongoing. As such, they represent a good model of promising practice for developmental education.

Careful hiring of developmental educators

Administrators and faculty alike were consistent in emphasizing that hiring the right faculty is critical to the success of the college. The hiring process is considered essential for insuring that new faculty members represent the right "fit" with the college. This is particularly true for developmental education. According to the President of Northwest Vista, "The one thing we can't teach someone is how to fit into our culture. They have to be able to do that from the start."

The credentials of all those applying for developmental education positions are carefully reviewed by teams of faculty and administrators. All developmental education faculty members are encouraged to participate in the interviews of new faculty. Applicants for faculty positions are required to teach a demonstration lesson with particular attention to how this lesson could work for developmental students.

It was also interesting to note that many new faculty members are hired directly out of graduate school. According to one campus administrator, "We value youth and innovation." This very careful attention given to the hiring of new faculty appears to contribute to the success of

developmental education at Northwest Vista. As such, it represents a

promising practice.

SOUTH PLAINS COLLEGE
Levelland, Texas

FAST FACTS

Type of Institution	Public Comprehensive 2-year
Location	Rural/West Texas
Credit Enrollment	9,585
Full-Time Faculty	297
Developmental Education Faculty	Full-Time 48 Part-Time 10
Developmental Education Students	2,909
Institutional Budget	$6,866,853
Developmental Education Budget	$2,083403
Cost Per Developmental Student	$716
Ethnicity of Students	White = 61% Latino = 32% African-American = 7%

Context

South Plains College is a rural comprehensive community college

located in Levelland. The college offers a full range of career and college

transfer programs and has a long history of providing developmental

education. Before the TASP was initiated in the late 1980s, South Plains was

already assessing its students and placing them in developmental courses

based on this assessment.

South Plains has a decentralized developmental program, in that courses are taught in their respective academic departments. These courses include developmental reading, English, and mathematics. They are supported by learning laboratories and the Teaching and Learning Center. The Teaching and Learning Center provides advising, tutoring, study skills assessment, and individualized instruction. The Center also offers learning strategies courses, a critical thinking course, and a student success course. The college also has a federally funded student support services program and a program for students with disabilities.

Research based best practices

Limited use of adjuncts

An earlier study of developmental education in Texas found that those institutions using the fewest numbers of adjuncts to teach developmental courses had the highest post-developmental education TASP pass rates (Boylan & Saxon, 1998). Similar findings were noted in the CQIN/APQC study (2000) and in research by McCabe (2000).

South Plains College faculty and administrators believe that full-time faculty should teach developmental courses. They further believe that the use of full-time faculty to teach developmental courses helps reinforce their

importance to the college community and to the students. As a result, 90% of the college's developmental courses are taught by full-time faculty.

Another advantage of using full-time faculty to teach developmental courses is that, because the faculty understands what is required in upper level courses, they know how to prepare students better in developmental courses. One department chair stated that, "We have great people in the classroom. We rotate courses so that all faculty members teach some developmental education." This also helps to insure that the exit standards for developmental courses are consistent with the entry standard for college level courses.

Learning strategies instruction

The college offers several learning strategies courses taught through the Teaching and Learning Center. Students are advised to take these courses if their assessment test scores suggest they might profit from it. These courses follow the model used by Dr. Claire Ellen Weinstein at the University of Texas – Austin (Weinstein, 1985; 1988). Unlike study strategies courses, strategic learning courses use a holistic approach to learning, emphasizing such concepts as metacognition, skill, will, and environment. This model has proven to be one of the most effective methods

available to enhance the performance of underprepared students in colleges and universities (Weinstein, Dierking, Husman, Roska, & Powdrill, 1998).

Strong coordination and communication in developmental education

There is a high degree of communication among developmental educators at South Plains College. Faculty meet every year in subject centered groups to insure that, as department chair put it, "the curriculum is constantly lining up." Faculty members review course syllabi, student evaluations, and course outcomes to insure that there is a seamless transition between various levels of developmental education, as well as between developmental education and the college curriculum.

At the beginning of each academic year, the Teaching and Learning Center brings developmental faculty together for the "Developmental Educators' Update." In this meeting, faculty members are provided with information on national trends and issues, conferences, workshops, and teaching and learning methods.

All instructors in the Teaching and Learning Center meet monthly to discuss issues, problems, and solutions. At the beginning of each year the college sponsors two days of faculty meetings to address teaching and learning issues. In addition, a great deal of informal communication takes

place among developmental faculty including such things as luncheon discussions and email discussions.

Tutor Training

Research consistently indicates that tutor training is essential to a successful tutoring program (Boylan, 2002; Boylan, Bliss, & Bonham, 1997; Casazza & Silverman, 1996; Maxwell, 1997). The Teaching and Learning Center has a strong tutoring program that serves developmental students in a variety of subject areas. Tutoring is also offered by individual departments.

Developmental courses are supported by a strong tutor training program that is recognized as a statewide model for tutor training. This training program has been certified at the highest level by the College Reading & Learning Association (CRLA). CRLA provides the oldest and most prestigious tutor certification program in the country.

Aggressive professional development

Having well trained faculty members teaching developmental students is essential to a successful developmental program (Boylan, 2002; McCabe, 2000). There is a substantial emphasis on professional development at South Plains College. Professional development is supported by the administration through grants to attend professional conferences and workshops.

Professional development is also supported through the college's Title V grant.

Faculty members are surveyed each year to determine their professional development needs. Based on results from this survey, a variety of professional development activities such as local workshops and conference attendance are planned. The Teaching and Learning Center also provides updates and information for developmental educators, and departments have their own newsletters or on-line discussion groups. The college has also provided a great deal of technical support for faculty, including developmental educators. This support is designed to help faculty improve the use of technology in their classrooms.

Early academic advising for developmental students

Early and ongoing academic advising for developmental students is a well known best practice in developmental education (Casazza & Silverman, 1996; McCabe, 2000; Roueche & Roueche, 1999). The Teaching and Learning Center at South Plains provides advising for all students who do not pass one or more sections of the placement test. The Center also provides specific training to help advisors work with underprepared students. A rubric for assigning students to courses based on test scores and

other criteria has been designed by advisors and is used regularly to guide students in selecting courses.

Developmental students are required to see a trained advisor to develop what the college refers to as an "Individual Plan for Success." Guidelines for this plan were developed in consultation with developmental educators. The plan outlines courses and other activities that students will engage in each semester until the students have attained "TSI success."

Promising Practices

Professional treatment of developmental educators

College administrators place a rather substantial amount of power in the hands of individual faculty, particularly developmental educators. As one administrator put it, "We hire very strong faculty through a very strong selection process. We can't turn around and not allow them to make professional decisions."

Another said that developmental "faculty are the ultimate authority on a student's grade. A grade of B or better says that student is absolutely prepared for college level work. Our faculty members understand and feel that professional accountability and we trust them to exercise it."

Administrators claimed that they made a point to listen to faculty and be guided by what they heard. And, in fact, the faculty interviewed pointed

out many instances where the college administration had made major decisions based on faculty input.

The faculty members interviewed indicated that they, indeed, felt empowered by their administrators. They indicated that they knew they had the power to make whatever decisions were necessary to promote student learning. Faculty did not feel that any of their efforts were micromanaged by their administrators.

Small class size for developmental courses

Faculty and administrators at South Plains both agreed that maintaining relatively small class sizes for developmental courses was important. Administrators particularly recognized that developmental writing classes require that faculty spend a great deal of time grading and correcting written assignments. Although administrators acknowledged that capping enrollments in developmental courses was expensive, particularly when these courses are taught by full-time faculty, they felt that maintaining small classes was required by the institution's commitment to developmental education. Generally, class sizes were kept to the following numbers of students for each subject:

- English – 20,
- Reading – 20-25, and

- Math – 25.

Although class sizes for mathematics might occasionally reach thirty students, this is an exception.

New faculty mentoring programs

The college has a formal mentoring program for newly hired faculty. In the English and mathematics departments, new faculty members are assigned to a more experienced faculty member for mentoring. These mentors meet regularly with the new faculty, provide advice and counsel, and are available to discuss problems encountered.

In addition, all new faculty hires are required to attend an orientation program that emphasizes the college's learner-centered developmental education philosophy. As one faculty member said, "At South Plains we improve every student's life. We want our new faculty to understand this completely." A great deal of emphasis is placed on this philosophy and there is considerable formal and informal peer pressure for new faculty members to follow it.

TEMPLE COLLEGE
Temple, Texas

FAST FACTS

Type of Institution	Public Comprehensive 2-year
Location	Rural/Central Texas
Credit Enrollment	4,068

Full-Time Faculty	85
Developmental Education Faculty	Full-Time n.a. Part-Time n.a.
Developmental Education Students	748
Institutional Budget	$20,149,035
Developmental Education Budget	n.a.
Cost Per Developmental Student	n.a.
Ethnicity of Students	White = 70.4% Latino = 14% African-American = 14%

Context

Temple College is a 2-year public community college which offers an Associate of Arts and Associate of Applied Science degrees, as well as community education and public service courses. It is a suburban institution located in Temple. It is relatively small in size, and Hispanic and African-American students constitute the largest minority student groups. The developmental education courses and services are integrated into their respective academic departments.

Research-based best practices

Administrative Support for Developmental Education

First and foremost, Temple College exemplifies strong administrative support for developmental education. The president states that developmental education is one of the college's major priorities. This is also reflected in print via a "values statement" in the college catalog. The developmental faculty also expresses confidence in the professional and

funding support they receive from administration. Research supports the contention that making developmental education an institutional priority contributes to student success (Roueche & Roueche, 1993; Roueche & Roueche, 1999).

Strong coordination and communication in the developmental program

Although Temple has a decentralized developmental program, there are features in place that contribute to a coordinated effort and increased effectiveness. The following is a list of some of these features.

- There are regular formal meetings of the developmental and traditional curriculum faculty.

- The Vice-President of Instruction presides over the Support Services function which lends itself to increased collaboration between course instruction and student services.

- Faculty and administrators have a strong sense of the value of developmental education to the entire curriculum.

- There is substantial formal and informal communication between developmental faculty and student support services personnel.

The president stated his belief that the integration of developmental education into the academic departments is an advantage. In this case, it appears that this practice is much more than mere relegation of developmental education to academic departments, but an effort to have increased communication and collaboration among the developmental and regular curriculum faculty. There appears to be a high level of integration

between developmental education and regular curriculum courses at Temple. The developmental faculty expressed the sentiment that their efforts were valued and respected by the academic disciplines in which they are a part. This practice is consistent with findings from the CQIN/APQC (2000) study whereby effective decentralized programs were characterized by high levels of integration and communication.

The developmental faculty meets regularly with college curriculum faculty in order to address the issue of linking developmental course content to college curriculum course requirements. The proximity of these entities lends itself to more informal discussion of these matters among the faculty. The research strongly supports that a seamless transition between developmental and college-level courses contributes to student success (Roueche & Roueche, 1993, 1999; Boylan & Saxon, 1998; CQIN/APQC, 2000).

Mandatory Assessment and Placement

All students entering a degree program take the THEA. However, exemptions are allowed based on SAT, ACT, and TAAS scores. Developmental students are prevented from participating in electronic registration and are required to see an advisor. This is an important feature because research has shown that advising by trained academic advisors is

related to the success of developmental students (Boylan, Bliss, & Bonham, 1997). Temple College faculty and administrators are committed to insuring that developmental students receive personal advising from advisors who are consistent in directing students to take the developmental courses into which they are placed. Although advisors may make exceptions to students' developmental education placement, these exceptions are few and are carefully implemented. There is a great deal of consistency in the messages provided by advisors regarding the importance of developmental education.

Placement in the appropriate developmental courses is, therefore, mandatory based on assessment. If developmental students do not successfully complete their developmental courses, they are dropped from any college curriculum courses they are enrolled in. This feature of mandatory assessment and placement has consistently been associated with developmental student success (Roueche & Roueche, 1999; Boylan, 2002).

Mastery-based instruction

Developmental mathematics courses at Temple College are taught as lab-based courses. The lab will accommodate 30 students at a time, with three full-time faculty members present to serve as tutors. Students may progress in developmental mathematics at their own paces, however, the software has encryption features embedded that will alert faculty members if

and when required remediation in particular content areas is necessary. Required remediation is a component of mastery learning and generally associated with improved student pass rates in developmental courses (CQIN, 2000; Boylan, 2002).

Students are required to attend the lab sessions on a weekly basis, but they have flexibility in determining their own schedules. The mathematics faculty feels that students are more engaged in active learning in the laboratory environment than so in traditional classroom instruction.

Careful hiring of developmental educators

Temple college administrators feel that the hiring of quality faculty, both full-time and adjunct is vital in upholding an institutional developmental philosophy. As the college's Vice President for Educational Services states, "Everything we do later will be made harder or easier by the decisions we make now."

In the selection process, candidates are required to deliver a teaching demonstration to the hiring committee. The committee looks for teaching techniques and strategies that would serve underprepared students effectively. The candidate must also demonstrate an enthusiasm for teaching and learning, the knowledge and attitudes to appropriately address the needs

of traditionally underserved student populations, and a student oriented philosophy consistent with the values of the college.

As do many programs, Temple must rely on adjunct instructors to teach developmental education. Adjunct faculty members are placed in a situation that fosters a mentoring relationship between themselves and veteran faculty. Each adjunct faculty member is assigned to a senior faculty mentor who is available to provide advice and consultation.

Promising practices

Small Class Size

Temple College falls at or below the national averages (Boylan, Bonham, Jackson, & Saxon, 1995; Shults, 2000) for student class sizes in their developmental reading and writing courses, as well as developmental English. Typical class sizes for these courses are 15-20 students. This allows instructors to offer greater attention and increased individualized assistance to developmental students. Most instructors of these courses considered small class size to be a contributing factor in the success of their students.

Regular use of administrators as instructors

The administration of Temple College demonstrates their commitment to teaching by serving as instructors on a regular basis. Faculty members feel that the administrators remain empathetic to and aware of the issues that

teachers face because they are spending time in the classroom. The faculty suggests that this gives them an implicit sense of support for their efforts. Although no research-based information is available to support the idea that having administrators teach classes is associated with student success, when administrators do teach, it makes a statement about the importance of the instructional mission of the college.

Immediate enrollment in college mathematics following completion of developmental mathematics

At Temple College there is a concerted effort made to insure that students continue taking mathematics courses before they forget what they learned in previous mathematics courses. Upon completion of developmental mathematics, students are encouraged by faculty and advisors to enter college-level math courses in the ensuing semester.

Although there is no empirical evidence to support this, anecdotal evidence suggests that this contributes to improved student performance in later mathematics courses. Furthermore, the notion that student performance is improved by taking college mathematics courses immediately following developmental math courses is certainly not counter-intuitive. This is a potentially important finding because it would be a cost effective way of improving student performance in mathematics, the area in which

developmental students are typically the weakest (National Center for Education Statistics, 2003; Boylan, 2002).

Focused use of technology

With regard to this use of technology, the mathematics labs contain computers dedicated specifically to the task at hand; that is, teaching developmental mathematics. The computers will not allow access to any other programs than the mathematics software utilized for developmental mathematics. Students therefore are not distracted by temptation to access the Internet, play games, or check email while in the mathematics lab. This appears to reinforce the notion of why students are in the lab and may contribute to a more focused learning experience.

TEXARKANA COLLEGE
Texarkana, Texas

FAST FACTS

Type of Institution	Public, 2-year
Location	Northeastern Texas
Credit Enrollment	4,217
Full-Time Faculty	108
Developmental Education Faculty	Full-Time 2 Part-Time 8
Developmental Education Students	1040 (duplicated)
Institutional Budget	$14,231,549
Developmental Education Budget	n.a.
Cost Per Developmental Student	n.a.
Ethnicity of Students	White = 81% Latino = 2% African-American = 16%

Context

Texarkana College offers a variety of vocational, technical, and transfer programs. The campus is located in Texarkana, an urban area of Northeast Texas and serves students from a variety of backgrounds. Ethnic minorities constitute approximately 19% of the student population. A scholarship program (Rising Star) that has recently been implemented has significantly increased the college's enrollment, as well as participation in developmental courses and services. Adult and continuing education and cooperative education are emphasized as vital parts of Texarkana's program offerings. Developmental education courses and activities are organized in a decentralized fashion and cited as being "vital to the success of the institution." Developmental education is included in the mission statement of the college as well. Learning assistance is offered through Student Support Services and a TRIO grant funded lab.

Research-based Best Practices

Administrative support for developmental education

A strong commitment to developmental education is apparent at Texarkana College. At every administrative level, the personnel feel and express that their professional success is contingent upon student success.

The president suggests that everyone at the college is "in one or another involved in developmental education." He emphasizes that Texarkana College is the "go to" college for students to develop and succeed. There is also careful attention paid to remove any stigma associated with developmental education. Every effort is made to uplift and assist students who need to develop their college skills. Administrators and faculty do not want students to feel that they are not "college material" just because their skills are weak in a particular subject area. Research supports that developmental education as an institutional priority contributes to student success (Roueche & Roueche, 1993; Roueche & Roueche, 1999).

Decentralized (but coordinated) developmental education

Texarkana College offers developmental education courses through their respective academic departments. The faculty and administration feel that this particular structure aids in the alignment of developmental and college-level curriculum courses, and it may serve to reduce the stigmatization of developmental students and activities. Another benefit suggested by the faculty is that students may be able to take both developmental and college-level courses from the same instructor. This facilitates the alignment of content, the development of adequate developmental course standards, and builds rapport between the instructor

and student. The president suggests that the institution is "pretty thin administratively," and that this contributes to more effective communication. Boylan, Bliss, and Bonham (1997) suggest that programs with a high level of coordination among its developmental courses and services are more successful. The organizational structure and the commitment to a developmental philosophy at Texarkana College lend itself to effective coordination of its developmental program.

Mandatory Assessment and Placement

According to the Texas Success Initiative (TSI), all students entering a degree program take the THEA, or the Accuplacer. Assessment exemptions may be allowed based on SAT, ACT, TAKS, and TAAS scores. Students exempt from TSI are assessed in order to make placement recommendations as well. Students assessed as developmental are required to see an advisor. The research literature suggests that advising by trained academic advisors is related to the success of developmental students (Boylan, Bliss, & Bonham, 1997; Boylan, 2002). Advisors are required to attend an orientation session which, among other issues, addresses the need for and the benefits provided by developmental education. This training promotes a consistently positive demeanor expressed by advisors in conveying information about developmental education to students.

Placement in the appropriate developmental courses is mandatory based on assessment. If students do not successfully complete their developmental courses, they are dropped from college curriculum courses. This feature of mandatory assessment and placement is associated with developmental student success (Roueche & Roueche, 1999; Boylan, 2002). Students admitted under exemptions to TSI are assessed using one of the aforementioned examinations. Should it be deemed necessary, those students needing developmental courses are encouraged in a positive manner to enroll in them.

Tutor Training

Texarkana College implements research proven measures to develop the effectiveness of their tutoring program. All peer tutors are trained in effective tutoring techniques. Peer leaders are given the opportunity to attend the annual National Tutoring Association conference. Boylan, Bliss, and Bonham (1997) find the training of tutors working with developmental education students contributes to student success.

Integrated courses and laboratories

Many of the developmental education instructors and the staff of the Learning Lab suggested that there was a strong connection between courses and lab activities. Developmental mathematics courses had regular,

coordinated lab activities. Computer and video resources in the laboratory were "keyed" to the classroom instructional materials. The integration of developmental courses and laboratory activities has been cited in the literature as a contributing factor to successful developmental education (Boylan, Bliss, & Bonham, 1997; Continuous Quality Improvement Network/American Productivity and Quality Center, 2000).

Entering student orientation programs for academic credit

Entering students are required to take an orientation course designed to acclimate them to campus life, college issues and expectations. A variety of resources are used in this course that help students understand the difference between high school and college and familiarize them with college level expectations. The course also emphasizes study strategies and personal planning. Completion of the course offers one hour of academic credit.

Student orientation courses have consistently been recognized as contributing to student success (Casazza & Silverman, 1996; Higbee & Dwinnell, 1998; McCabe, 2000). They are particularly helpful to first generation college students who are frequently the majority of developmental students.

Promising Practices

Developmental mathematics emphasis

Since a majority of developmental students participate in developmental math, administrators and faculty feel that math is the foundation of college success. This provides the impetus for careful attention to the way courses are structured and taught, and how resources are allocated to the department. The following list sums up many of the techniques and practices developed by the mathematics department to promote student success in developmental mathematics:

Techniques & Practices that Promote Success in Texarkana College Developmental Mathematics Program

• Strict classroom attendance policy

• Required 1 hour per week tutorial lab attendance

• Required participation

• All of above or be dropped - if dropped then dropped from all enrolled courses

• Departmental common text and curriculum for all full- and part-time faculty

• Departmentalized final exam ensures same curriculum goals and definition of success for all faculty/students

• Provide access to practice test packets and practice final exam

• Quality teachers - regular availability, approachable, caring, provide encouragement, diversity and flexibility in teaching styles which accommodates many different learning styles

• Math Lab for tutorial experiences - one-on-one with personal tutors (qualified, caring and willing to help, make students work to learn, variety of help styles), computer resources keyed to text, video resources keyed to text, accessible hours for students to seek help

• Design of curriculum - use same text for 2 semesters, keep course load lighter per semester, and at a manageable pace

• Faculty teach both remedial and college-level courses so they understand what is needed in a remedial course to succeed in a college math course

• Keep remedial area integrated within regular Math department - students feel less stigmatization, have common instructors with college-level students, and can follow same instructor from remedial courses to college credit courses to build rapport

• The department has realistic goals for getting these students through remediation without lowering standards

Source: Mathematics department, Texarkana College.

Careful hiring of developmental educators

The Dean of Instruction states that "The most important step we take is in hiring (developmental faculty)." It is emphasized that that every faculty member is part of the developmental program. Either they are working directly with developmental students, or at the least, they work to design developmental courses and align the developmental curriculum with the college-level curriculum. All applicants must have a teaching background and a commitment to student success. Developmental education is specifically addressed and discussed in job interviews.

New faculty hires, as well as part-time faculty are assigned to a veteran faculty member for training, mentoring, and evaluation purposes. Only the faculty members who *want* to teach developmental courses are assigned to them. This was found to be a practice consistent with exemplary programs in the Continuous Quality Improvement Network study of developmental education (CQIN/APQC, 2000).

Values driven operations

Many statements were apparent during the interviews which suggested embedded values of commitment, caring, and community. These values may be difficult to quantify, however they are likely to contribute to the motivation to succeed and the maintenance of high morale. Administrators and faculty consistently stated that they are strongly committed to student success. They expressed concern and care for their students and for each other. They enjoyed working with and collaborating with one other. Once again, these values appeared prevalent in all institutions that participated in this study. The association of these values with successful programs may suggest that they represent a promising practice for developmental education administration.

Customer orientation in assessment

The director of assessment at Texarkana College maintains what may be considered as a "students-as-customers orientation" in her approach to managing operations. There is formal training provided to staff that emphasizes customer service skills, as well as functional provisions of the department. The reasoning behind a service orientation is that all prospective students must initially visit the Assessment Office. The director emphasizes that "The first impression makes all the difference in the world." Formal lines of communication are established through staff meetings which are held every 2-3 weeks. If student "consumers" are treated well by the staff in this office, they may be more receptive to the outcomes imposed by assessment activities.

Professional treatment of developmental educators

It is apparent through interviews that developmental educators at Texarkana College are respected and considered to be experts and professionals in their work. They are given autonomy with regard to decision making and budget control. Their efforts and experience are valued by the administration. Their mission is clearly delineated and supported. This is a characteristic that turned up at all institutions in the study, and has been mentioned in other qualitative studies as well (CQIN/APQC, 2000; Boylan, Bonham, Keefe, Drewes, & Saxon, 2004). It seems intuitive that

where developmental educators are valued in this fashion, their efforts are

more likely to be successful.

APPENDIX 1
President's Letter

January 12, 2005

_____
_____
_____
_____

Dear President _____:

Congratulations! Following first stage analysis of data from the Texas Higher Education Coordinating Board, XXX Community College, has been identified as having one of the most effective developmental education programs in the State of Texas.

As you may know, the Texas Association of Community Colleges has commissioned the National Center for Developmental Education to conduct a study of high performing developmental education programs in Texas community colleges. The initial part of this study involved an analysis of post developmental education TASP pass rates from 1999 to 2003. Using this measure, your institution was one of the top ten performers among Texas community colleges.

The second stage of this project involves site visits to five colleges with high performing developmental programs. These institutions have been selected to represent various types of institutions and regions within the State of Texas. XXX Community College is one of the institutions selected for a site visit.

The purpose of site visits is to identify what your college is doing to promote success in developmental education. Based on our findings, we will prepare a presentation to the Texas Association of Community Colleges at this summer's conference. We will also be publishing a report highlighting our findings in the fall of 2005.

To this end, we would like to visit your campus and meet with you as well as with faculty and administrators involved in developmental education at XXX Community College. We hope to conduct these visits between March and April of 2005. One of our research assistants will be contacting your office shortly to make arrangements for this visit.

Should you have any questions about this project, our site visits, or our report, please feel free to call me at 828-262-6100. I look forward to meeting with you and your colleagues in the near future.

Sincerely,

Hunter R. Boylan, Ph.D.
Professor and Director

APPENDIX 2

List of Interviewees

Interviews were arranged with the following people at each institution:

President of the College

Director of Institutional Research

Director of Testing

Director of Developmental Education

Developmental Education Faculty (lead full-time faculty)

APPENDIX 3
QUESTIONS FOR TEXAS SITE VISITS

NAME OF INSTITUTION_____

NAME/TITLE OF THOSE INTERVIEWED_____

 DATE OF VISIT_____

ORGANIZATION AND ADMINISTRATION

1. Please describe the structure of your developmental education program, including how it receives funding, its placement within the organization's administrative structure, and any collaborative approaches/relationships with internal and external organizations.

    - centralized developmental education program?
    - highly coordinated developmental education program?

2. What are the greatest strengths of your DE program?

3. Describe how you integrate the various functions of your institution's DE program.

4. How is the developmental education program included in the institution's overall strategic planning process?

    5. What amount of money is budgeted for the DE program? What % of

    - institution's overall budget?
    - What is the cost/student?

6. Are there any key lessons that you have learned from your developmental education program?

    - Are there any lessons that may be of benefit to others?

7. What role does adjunct faculty play in your program? What type of orientation/professional development opportunities are they offered?

8. What innovations have you implemented that you consider "best practice?"

9. What are the five most critical steps your institution took to establish developmental education as a successful program? What steps is it taking to ensure its continued success?

10. What aspects of your developmental education curriculum contribute most to your program's success?

PROGRAM COMPONENTS

1. Is a systematic plan in place for the evaluation of developmental education courses and services?
   Do you collect data on faculty satisfaction with your DE program? Is it collected from dedicated DE faculty only, or from faculty members who also teach college-level courses? What methods are you using to collect this data? What have the results been? Please explain.

2. Is professional development available for developmental educators? What activities in this area have been the most successful and why?
   How are these opportunities typically provided (e.g., workshop format, in-service, ongoing informal sharing of resources, etc.)?

3. Is there a written philosophy statement that guides the provision of developmental education courses and services? What is it?
   Could you describe the values and beliefs that you believe are associated with your program?

4. Describe the curriculum development process for your DE program and how this process is supported by the institution (e.g., through faculty release time, curricular design assistance, technology support, etc.).

5. How is student performance monitored in your DE program for intervention purposes?

INSTRUCTIONAL PRACTICES

1. How does your institution assess learner skills and abilities? How are students placed in developmental education courses?

2. Why that particular instrument (the THEA in all cases according to our records)?

3. What do you do to ensure consistency between exit standards of developmental classes and curriculum entry classes?

4. What pedagogical approaches or methodologies have you found work best with developmental education students? Please explain.
   - learning communities
   - different instructional methods
   - instructors regularly use active learning techniques

5. Describe all of the support services (academic and personal intervention) provided to students in your DE program? Which have contributed the most to the success of your institution's developmental education students?

6. What role does technology play in the overall structure of your developmental education program?

7. What % of DE students take classes on-line?