

**Achieving the Dream Implementation Proposal
2011**

Name of College: **Texarkana College** Submission Date: 5/15/2011
College Web site: texarkanacollege.edu
College's Achieving the Dream Web site (if applicable):
Mailing Address: 2500 N. Robison, Texarkana, TX 75599

Whom shall we contact regarding questions about this proposal? Lauren Hehmeyer
Name and Title: Dean of Academic Affairs and Developmental Education
Telephone: 903-832-5565 Ex. 3264 E-mail: Lauren.Hehmeyer@texarkana@college.edu
Address: same as above

Achieving the Dream Implementation Proposal 2011

Quantitative Data Analyzed:

In the Fall of 2010, all Texarkana College employees and a representative group of students analyzed cohort data for the academic years 2007-08, 2008-09, and 2009-10 to look for trends or significant indicators in developmental education and gateway courses. Employees and students compared student sub-populations based on the characteristics of race/ethnicity, gender, age group, and Pell Grant status. Participants specifically focused on successful completion rates defined as completing a course with a grade of A, B, or C. One area of analysis that provoked considerable discussion as a barrier to student success and persistence was developmental and gateway mathematics courses. In mathematics participants determined a need to improve these successful completion rates, particularly in the middle level developmental course Math 0032. Successful completion rates for the lowest and highest levels of developmental mathematics hover just below 50% while rates in the middle course of the sequence ranged from the mid-30% to mid-40% for the majority of the sub-populations. Indicators in the gateway math course College Algebra (Math 1314) showed somewhat better statistics with the majority of sub-populations ranging from the mid-50% to mid-60% for successful completion.

Another source of quantitative data analysis at Texarkana College that has been ongoing involves our Quality Enhancement Plan (QEP). In 2006, Texarkana College initiated a student success course as part of the QEP. Academically underprepared students were targeted for participation in the course. Specifically, students placing into all three developmental education programs, reading, mathematics and English, were identified and required to take the student success course. Challenges in advising and proper placement resulted in a portion of that target population failing to enroll in the course, hence becoming an accidental control group for comparison. Over the past five years, TC tracked GPA, persistence, and successful course completion rates for the treated population (those students in all three developmental education programs and enrolled in the success course), the non-treated population (those students in all three developmental education programs but not enrolled in the success course), and all FTIC students. These data served as a basis for examining and comparing persistence and successful course completion rates for FTIC students as well as the most academically underprepared students. The resulting data analysis provoked a discussion regarding the barriers to student success and persistence for all populations. Although general Fall to Fall persistence at Texarkana College is higher than some community colleges, it was

still disheartening for the underprepared and general population of students.

Discussions led to the conclusion that some changes needed to be made in classes that would encourage persistence across the board (based upon the general persistence shown by schools that have implemented active and collaborative learning) and would build upon what has been learned from the current trial of student success classes, which were part of the QEP initiative that targets underprepared students.

For example, the QEP data gave telling statistics about the underprepared population. The five-year average for Fall to Spring persistence rates for each cohort is as follows: FTIC 73%, treated 64%, and non-treated 57%. The five year average for Fall to Fall persistence rates for each cohort shows a drop for all groups (FTIC 48%, treated 35%, and non-treated 38%).

Analysis of successful course completion (defined as receiving a grade of A, B, or C) merits a discussion of a few local factors that may have influenced results. Baseline data from 2006 showed both treated and non-treated cohorts achieving basically the same successful completion rate of approximately 70% in college credit courses while the FTIC cohort was 84%. In 2007 the treated cohort showed improvement moving to a successful completion rate of 79%, with FTIC 83%, and the non-treated cohort dropping to 66%. However, in 2008-2009 TC experienced a dramatic administrative transition, and the QEP lost a degree of institutional focus during this transition. During these years, the treated populations dropped in performance showing similar successful completion rates to their non-treated counterparts (70-72%) while FTIC students remained consistent at 82%. With the administrative transition complete and the QEP given new leadership, the 2010 results show promise. The treated cohort achieved a successful college credit course completion rate of 84%, while FTIC was 80%, and the non-treated cohort dropped to 65%.

The trends for successful completion rates in developmental education (DE) courses were different. While the treated populations in DE courses showed persistence rates approximately 10-20% higher than the FTIC and non-treated cohorts, their successful completion rates were approximately 10% lower. This somewhat inverse relationship in performance between persistence and successful completion in developmental courses can be attributed to what was a state mandate that withdrawal from a DE course would result in the student being dropped from college enrollment. Students in the treated cohorts understood this policy more completely; therefore, they did not withdraw from a course even if they were failing. The non-treated and FTIC populations showed higher withdrawal rates with an implication that the majority of these students only persisted in a course if they were passing. As a result, the treated cohort

data included more students persisting in spite of certain failure leading to lower successful completion rates in the DE coursework.

Analysis of Fall GPA results for each cohort over time shows FTIC students remaining constant around 2.5, while treated students hold an average of 2.1 (with a notable exception in 2010 where the GPA was 2.5) and non-treated students hold an average of 1.7. This is an indication that the success course does provide significant momentum to academically underprepared students to move closer in performance to their academically prepared peers.

Analysis of all cohorts over time for their second semester of enrollment each spring leads to some perplexing results. In general, persistence rates remain similar for all cohorts as in the Fall semesters. However, successful completion rates and GPAs show a significant decline for the treated populations while the FTIC and non-treated populations remain comparable to their Fall performance.

Upon analysis of the ratio of coursework dedicated to DE versus college credit, there is an increase in the number of college credit courses taken by all students, treated or not, in the spring semester which may be part of the explanation for the drop in GPAs and successful completion rates. The more rigorous course work in college credit courses may explain the decline for the treated population.

	<u>FTIC</u>	<u>Treated</u>	<u>Non-Treated</u>
Fall Ratio of #of DE Courses <hr/> # of Credit Courses	$\frac{0.2 \text{ DE}}{1 \text{ Credit}}$	$\frac{1.7 \text{ DE}}{1 \text{ Credit}}$	$\frac{0.6 \text{ DE}}{1 \text{ Credit}}$
Spring Ratio of #of DE Courses <hr/> # of Credit Courses	$\frac{0.1 \text{ DE}}{1 \text{ Credit}}$	$\frac{1.4 \text{ DE}}{1 \text{ Credit}}$	$\frac{0.4 \text{ DE}}{1 \text{ Credit}}$

Qualitative Data Analyzed:

After presenting the findings of the cohort data, potential reasons for the various trends or

significant indicators emerged in the data. After several weeks, attendees (again all employees and a representative group of students) reconvened to discuss and identify these potential reasons. Attendees were divided into small discussion groups of 8 or fewer which included a team facilitator/reporter for each group as the groups worked through each set of findings in the data by category such as developmental education, gateway courses, etc. to make recommendations. Each discussion group reported back to the collective group both verbally to generate a collective dialogue and consensus and in writing to document the results. In the area of developmental and gateway mathematics, four major factors emerged: institutional responsibility, preparedness, educational prerequisites, and race/gender.

In addition to this formal attempt to analyze the data qualitatively, attendees wanted to gain a more personal understanding as to what factors reduce student success and persistence within the student population. Texarkana College employs a full-time Retention Coordinator who routinely performs phone and face-to-face interviews with a target population of students that is considered underprepared. This population coincides with both the treated and non-treated populations from our QEP. Using the criteria above for the 2011 Fall semester, over 200 students were indicated as underprepared and were interviewed by phone and/or face-to-face to establish student perception of barriers to success and persistence. Based on those interviews, over 60% responded that math concerns were the major inhibitor to their success. The Retention Coordinator found that a consistent portion of those students interviewed also had major issues in time management, study skills, and critical thinking skills. Further, these qualitative data support the development of three AtD interventions at TC: 1) Developmental and Gateway Mathematics, 2) Student Success Courses, and 3) Active and Collaborative Learning to Improve Student Success and Critical Thinking.

Major Findings of Data Analysis:

In the area of mathematics, developmental and gateway successful completion rates need improvement. For many students, persistence and success in college hinges upon the critical area of mathematics. Upon analysis of employee perceptions, Texarkana College can improve the successful completion rates of students in developmental and gateway mathematics courses by streamlining the process for meeting these mathematical prerequisites for degree seeking students and designing course curricula that facilitate student preparedness. In addition, best practices at other AtD colleges (featured at the 2011 AtD Strategy Institute) show that streamlined mathematics curriculum, such as “collaborative” modular math and integrated intermediate and College Algebra, encourages completion of the developmental mathematics sequence. The webinar “iPads: The Latest and Greatest in Educational Tools?” by Instructional Technology Council and Elluminate 2011 (Presenters: Sue Buchholz, Associate Professor, Wakita Rucker Bradford, Wakita Rucker Bradford, RN, MSN, CPN, Nursing Community Outreach and Educational Technology Coordinator, Georgia Perimeter College) supports the collaborative modular mathematics concept. The research by the Community College of Baltimore County (CCBC) entitled

“Accelerated Learning Project” supports the concept of integrated intermediate and College Algebra. Both of these concepts shorten the sequence of developmental mathematics by not only accelerating, but doing the math differently (Walter S. Johnson Foundation “Acceleration in Context.”

The evidence also shows that improvement is needed in successful course completion rates and long-term persistence for all populations, but more specifically, academically underprepared populations. In addition, the qualitative data specifically indicate a major gap in students’ ability to perform many of the most critical functions in the areas of time management, study skills, and critical thinking. To improve student success, much work needs to be done through the Texarkana College Student Success Initiative and the implementation of active and collaborative learning in courses across the curriculum.

Collaborative learning styles of teaching have shown a clear correlation to persistence and learning according to Chickering and Gamson, and Kuh. Karp and Hughes have recently added to the research, arguing that an active classroom particularly increases engagement *in community colleges*. Arum and Roksa in their acclaimed *Academically Adrift* confirm that collaborative learning increases student learning but caution that faculty must be properly trained in order to make sure that faculty create “specifically structured contexts that focus students’ attention appropriately on learning “(133). Patrick Henry Community College has reported great success with this type of initiative.

In addition to research that supports the use of active and collaborative learning to ensure student success, Texarkana College has a unique and local reason to launch this initiative. The largest local school district, Texarkana Independent School District (TISD) has trained a majority of its teachers to follow the “engineering project management” model. This model is currently used in the lower grades, and it is being moved upward. In a few short years, the students entering TC’s doors will be familiar with more active learning styles. TC must be ready for them. Helpfully, a small group of TC faculty has considerable expertise in active and collaborative learning strategies; drawing on their expertise and the expertise of outside trainers, this base of trained individuals can be expanded to include more faculty.

The emergence of these three priorities exhibits a commitment to serve all populations through efforts to streamline the mathematics program through the implementation of active and collaborative learning across the classroom culture and through the improvement and expansion of student success courses.

Stakeholders Engaged in Priority-Setting:

Texarkana College has included employees at all levels both full-time and part-time, staff, faculty, administrators, and student representatives in the analysis of data and development of recommendations. In addition, the President has regularly informed the Board of Trustees of progress on proposed initiatives.

Other Information Regarding the Decision Making Process:

As the proposed math intervention emerged as a potential focal point for the TC AtD initiative,

all full-time mathematics faculty met to consider the data presented in greater depth to develop a proposal for implementing more effective strategies within the developmental and gateway mathematics courses to improve successful completion rates of students within the math program. The Core and Data Teams met regularly, exchanging information and conversing about ways for the college to use that information to create a better success rate for students.

Through the analysis of existing data from the QEP, coupled with the research of best practices of other community colleges, it was decided that the current student success course could be modified and improved to increase successful completion rates and persistence of students. Similarly, those same indicators should be improved by impacting the classroom culture of TC as a whole through the implementation of professional development for active and collaborative strategies for the classroom.

Resulting Priority:

Several priorities emerged involving reducing barriers to student success and persistence through 1) increasing developmental and gateway mathematics completion, 2) improving and expanding student success courses, including the redesign of a mentoring program, and 3) implementing collaborative and active learning to improve critical thinking.

Intervention Name:

Intervention #1 A) Modular Developmental Math B) Integrated Intermediate and College Algebra C) Math Boot Camp
Intervention #2 (A) College Success Strategies (B) Mentoring Redesign
Intervention #3. Collaborative and Active Learning in the Classroom

Direct or Indirect Student Intervention:

Direct / Indirect

Intervention #1 Direct

Intervention #2. Direct (1) Students will directly be impacted by their enrollment and participation in the student success course. Prior to full scale-up, this intervention will be measured by using the treated group of enrolled students. The success of these students will be analyzed after course completion and will be compared to those students not enrolled in the course. If analysis indicates that this is a successful intervention, then scale-up will result in all students being enrolled; thus, measurement will be done through comparison with earlier established baseline data.

(2) Students enrolled in the student success course will have an assigned advisor to work directly with them to provide resources and interventions as needed during the first semester enrolled at Texarkana College. Perceptions of these students will be compared to the general student population.

Intervention #3. Direct This intervention will be measured by analyzing the performance (completion with A,B,C) and retention (persistence Fall to Fall) data of students in the collaborative learning classes.

Indirect: Faculty perceptions will also be measured.

Start Date:

Intervention #1

A) Spring 2012 B) Spring 2012 C) Fall 2012

Intervention #2. (1) The student success course continues to be taught at Texarkana College, and in the Fall of 2011, a systemic data comparison will be conducted for each semester to address the achievement gaps of students enrolled in the course compared to their FTIC counterparts. Hiring of a full-time faculty member to deliver the methodology of student success courses is imperative for students to receive the full benefits of a student success course. Training for all faculty members on the implementation of college success strategies across the curriculum will be conducted in the Summer 2012 and be on-going throughout the coming years. (2) The hiring of a full-time advisor to manage students enrolled in the student success course will begin after examining the effects the class has on students in the Fall of 2011 and the Spring of 2012, determining which strategies need to be implemented by the advisor. The advisor will begin work with these students in the Fall of 2013.

Intervention #3. Fall 2011. One awareness activity took place in Fall 2010. Ten full-time faculty toured and observed a local school system that uses collaborative learning techniques.

Type of Intervention (choose all applicable):

Intervention #1 Advising, Developmental Education, Equity, Faculty Professional Development, Gatekeeper Courses, Improved Use of Data, Institutional Effectiveness, Institutional Research, K-14 Strategies (through coordination with local public schools to identify students in need of Math Boot Camp), Program Evaluation Process, Supplemental Instruction (not formal national program but rather an additional supporting form of instruction external to class time), Tutoring

Intervention #2. Advising, Developmental Education, Equity, Faculty Professional Development, First-Year Experience, Gatekeeper Courses, Improved Use of Data, Information Systems, Institutional Effectiveness, Institutional Research, Internal Policy Review & Update, Learning Communities, Other (Direct), Other (Indirect), Program Evaluation Process, Student success course, Student Support Services, Supplemental Instruction, Tutoring

Intervention #3 Developmental Education, Equity, Faculty Professional Development, First Year Experience, Gatekeeper Courses, Institutional Effectiveness, Institutional Research, Program Evaluation Process

***Specific Course Content Area (choose all applicable):**

Math / English / Reading

Intervention #1 Math

Intervention #2. Math / English / Reading

Students who are enrolled in three developmental areas must enroll in the student success course. Scale up will include all students needing two developmental courses after the third year and in the fourth year all students who are enrolled in one developmental course. Eventually all FTIC students at TC will participate in this course.

Intervention #3 Math/English/Reading The first group of trainees will include developmental teachers.

***Target Student Group (choose all applicable):**

- First-time students for **Intervention #2**

- *Academically underprepared students for Intervention #1 and #2, based upon Texas Success Initiative scores*

***Estimate Number of Students Enrolled or Otherwise Benefiting:**

Intervention #1 All developmental math students and students in College Algebra, approximately 1100 each fall and 850 each spring, will ultimately benefit from improvements in the mathematics program. Initially a smaller subset of these populations (100-200) will be directly impacted through pilot courses with that subset of students directly impacted through these interventions progressively increasing in size as the interventions are scaled up.

Intervention #2. (1) Currently students enrolled in three developmental courses (Fall 2010 approximately 300) are required to enroll in the student success course. For scale up in the student success course in year three, those student enrolled in two developmental courses will be required to enroll in the student success course; year four students enrolled in one developmental course will be required to enroll in the student success course. Eventually all FTIC students will be mandated to enroll in the course during the first semester of attendance. (2) As the number of students enrolling in the student success course increases, a scale up in the number of advisors performing identified strategies to increase student success, retention, completion and graduation will be addressed.

Intervention #3. Estimated numbers of classes containing collaborative learning techniques the first year is 100; we hope to scale up each successive year.

***Do students have to satisfy certain criteria to take part in the intervention?**

Yes / No

Intervention #1 A) Students testing into Math 0031 Pre-Algebra or Math 0032 Introduction to Algebra will be eligible to enroll on a voluntary basis in designated pilot sections of Modular Math B) Students testing into Math 0033 Intermediate Algebra or Math 1314 College Algebra will be eligible to enroll on a voluntary basis in designated pilot sections of Integrated Intermediate and College Algebra C) Students testing into Math 0031 will be eligible to enroll on a voluntary basis in designated pilot sections of Math Boot Camp.

Intervention #2. (1) Yes, students have to be enrolled in three developmental classes in the beginning, scaling up to students enrolled in two developmental courses, then one developmental, and eventually all FTIC students will be required to enroll. (2) Upon implementation of the advisor component, all students will receive intervention from an advisor during the first semester.

Intervention #3. No.

***Will special efforts be made to recruit students to take part in the intervention?**

Yes / No

Intervention #1 Students testing into Developmental Math or College Algebra will receive a brochure about the interventions available, and all advisors (who will have been trained in the AtD initiatives) will actively promote student participation in the appropriate pilot sections relative to student placement.

Intervention #2. (1) Yes, students will be identified as they enroll as FTIC students and are enrolled in three developmental courses. They will be advised to register for the student success course. (2) Upon implementation of the advisor component, students will be assigned an advisor upon enrolling in the student success course.

Intervention #3. No, but a special effort will be made to recruit developmental faculty to be among the first group of active and collaborative learning trainees.

Description:

Intervention #1

- A) Modular Math for Math 0031 and 0032 is designed to improve successful completion rates in the two entry level developmental math courses, speed time to completion, and reduce the number of times students retake these courses which impacts available financial aid resources. Modular Math for Math 0031 and 0032 is a mastery based curriculum that is self-paced with instructor support. Content will be delivered through active and collaborative learning in homogenous student groups (grouped by common content needs; grouping is flexible and ongoing) during regular scheduled face-to-face class periods and through technology-based content delivery of mini-lessons on each topic area. Assigned faculty and lab assistants will facilitate group and individual student progress throughout the semester. Students who are able to progress more quickly may complete both courses within a single semester thereby moving them toward a college credit bearing course more efficiently. Students who need more time to develop comprehensive mathematical skills may continue each semester with only the topics they have not yet mastered, reducing the repetitious wait time when retaking a course to get to the content they really need. Students are held accountable to the standardized final exam every semester of enrollment to ensure comprehensive mastery and retention of skills necessary for success in the next subsequent coursework.
- B) Integrated Intermediate and College Algebra for Math 0033 and Math 1314 is designed to facilitate progress to and through the gateway mathematics course, College Algebra. The integrated course will blend content from the two courses together based on the College Algebra curriculum. All College Algebra topics will be covered, but they will be introduced at an intermediate level or with the intermediate prerequisites needed for success on the specific College Algebra topic and then build to the level of rigor appropriate for College Algebra on that topic. Students will enroll in both courses simultaneously meeting during the same class period four days each week. Students enrolled in this course will complete the standardized final exam for both Math 0033 and Math 1314.
- C) Math Boot Camp is designed to provide a refresher of basic mathematics topics to facilitate placement into a higher level of math thereby reducing the number of courses a student must take in mathematics to reach a credit bearing course. Math Boot Camp will require no textbook and no testing within the intensive review. Upon completion, students will be eligible to retake the placement exam to attempt a higher level placement in the math sequence. Some students may test out of developmental levels after taking the Boot Camp. Math Boot Camp will be offered in mini-sessions throughout the year to meet the needs of incoming student groups.

Intervention #2. (1) The student success course will be implemented in the Fall of 2011, with training for faculty and staff campus-wide occurring in the summer of 2012 and on a continuous basis. The purpose of training multiple faculty and staff members is to infuse the principle of

student success strategies and principles to all who have contact with students. This strategy could then be infused into additional curriculum of courses as well as the general student population as different departments interact with students. Students enrolled in the student success course will benefit directly from this strategy. Additionally, hiring a full-time faculty member trained to deliver content and strategies to broadly engage all FTIC students in the student success course will provide students access to a faculty member who will be dedicated to the methodology of the class and the students in the class.

(2) Upon implementation of the advising component in the Fall of 2013, each FTIC student would receive intervention in the form of contact with an advisor who will be dedicated to providing them a number of services and serving as a “resource broker” for the student during their first semester. This personal contact will allow us to focus in on underserved populations and provide the extra support needed to close performance gaps. Students will be expected to meet specific contact requirements in order to successfully move on to the second semester without the intervention of the advisor. Students will also have GPA requirements they must successfully meet to move to the second semester as well. The contact component will be done through multiple interventions including intrusive advising, classroom visits, group advising sessions, career advising sessions, financial aid planning, degree planning session, class scheduling session, Facebook, Twitter, email, or by phone.

Intervention #3. The plan will begin with faculty engagement and training. After receiving training, Faculty Engagement Rates will be measured. Student outcomes such as completion rate, grade rates, persistence, engagement rates, and student learning outcomes will be measured (CL classes vs. non-CL classes). Focus groups or case studies may also be used in the last year with successful completers.

Way(s) the intervention will help close achievement gaps:

For the purpose of this question, an achievement gap is a disparity in outcomes among student subgroups. Subgroups may be defined by a variety of characteristics, including race/ethnicity, gender, enrollment status, Pell grant eligibility, or other characteristics pertinent to your student population.

Intervention #1 All three mathematics interventions are designed to improve successful completion rates in the developmental math program. Students placing into the developmental math series are less likely than their counterparts to successfully complete a college credit mathematics course or even to persist in college enrollment due to the length of time it may take to complete the developmental math coursework. The data show achievement gaps tied to the following subgroups: ethnicity (black), Pell, gender (male), age (18-19). However, this intervention targets the academically underprepared student population (based upon their placement into the developmental math sequence) in its entirety. As a result, the needs of these subgroups will be represented when they fall within the targeted population.

Intervention #2. (1) The student success course will provide valuable resources to students during the critical first semester of college enrollment. The strategies of the class have shown to provide students with the necessary structure and engagement to enhance student success. Persistence rates in developmental courses are currently less than 50%. The desire is to increase persistence rates for all students with the implementation of the student success course and implementation of the advisor component in the Fall of 2013. Although our original

QEP data was not disaggregated by subgroups based upon gender, ethnicity, etc., future analysis of cohorts enrolled in the student success course will include this analysis to determine the effectiveness of its intervention in closing performance gaps.

Intervention #3. One of the areas of inquiry will be which subgroups are effected and to what extent. However, collaborative learning data from research shows that CL does tend to be “the rising tide that lifts all boats.”

Measurable Yearly Goals:

Include the current rate or number and goals for each of the first four years of the intervention. For example, “increase the three-year developmental math sequence completion rate from the current rate of 10% to 15% the first year, 20% the second year, 22% the third year and 24% the fourth year.”

Intervention #1. Increase the successful completion rate of students enrolled in Math 0031 from 46% to 48% by the second year, to 50% the third year, and 52% the fourth year; in Math 0032 from 39% to 41% by the second year, to 43% by the third year, and 45% the fourth year; in Math 0033 from 47% to 49% by the second year, to 51% by the third year, and 53% the fourth year; and in Math 1314 from 57% to 59% by the second year, 61% by the third year, and 63% the fourth year.

Intervention #2. Increase the persistence rate of FTIC students enrolled in three developmental courses and the student success course by 5% (from a base of 49.6%) during the Fall 2012-Fall 2013 and increase the retention rates of students enrolled in the Student success course by 5% in the third year with the implementation of the advising component.

Intervention #3. Baselines will be established through CCSSE and SENSE. Results will be compared to similar programs, such as Patrick Henry. More research will need to be done in Fall 2011 to establish a sensible target percentage of improvement and retention. Comparisons to other schools that have made these attempts (such as Patrick Henry) would be a logical place to start. The goals of Texarkana College should probably be set higher, as their Dean, Carolyn Byrd, pointed out the Patrick Henry has larger numbers of part-time faculty than Texarkana College. In addition, a local school district had a similar training program in which they collected limited data that they are willing to share.

***Achieving the Dream Student Progress and Success Measures That Will Be Directly Affected by This Intervention (choose all applicable):**

- ***Percent of students who successfully complete developmental courses and progress to credit-bearing courses***
- ***Percent of students who enroll and successfully complete gatekeeper courses***
- ***Percent of students who complete the courses they take, with a grade of C or higher***
- ***Percent of students who re-enroll from one semester to the next***
- ***Persistence Fall to Fall***

Evaluation Plan Description:

Intervention #1 The Mathematics Department and Institutional Research office will collect persistence and successful course completion rates for all developmental math courses, College Algebra, and the sequence collectively, disaggregated by standard characteristics, and compare it with baseline data with ongoing treated versus non-treated sections of each course. Also, success rates for Student Learning Outcomes established for each course will be compared in

treated versus non-treated sections. In addition, course enrollment rates throughout the implementation process will be tracked for comparison of treated versus non-treated sections. Surveys will be administered each semester in each course to both students and faculty to evaluate the level of satisfaction and engagement in the treated versus non-treated sections. Each semester these data will be shared with the Data and Core Teams for analysis and discussion regarding progress and any necessary modifications to the plan. Results and progress will be reported to stakeholders through our new Achieving the Dream newsletter.

Intervention #2. The evaluation will be done by measuring the success rates of students enrolling in developmental courses and the student success course to determine if there is a marked increase in retention and persistence compared to baseline years and to students who did not receive the intervention.

Intervention #3. The questions on CCSSE and SENSE that pertain to collaborative learning and active learning will be used as a baseline. Faculty will also be surveyed as to perceived usefulness of both the training and their perception of the success of their classroom experiences (Faculty Engagement Rates). Student outcomes such as completion rate, grade rates, persistence, engagement rates, and student learning outcomes will be measured (CL classes vs. non-CL classes).

***Evaluation Results Comparison (choose all applicable) for all three interventions:**

- *Baseline data*
- *Other Comparison group (treated versus non-treated sections)*

Plan to Scale Up:

Intervention #1 The 2011-2012 academic year will be utilized by mathematics faculty to develop curriculum materials for use in the pilot sections of the intervention courses. Initially two pilot sections of each intervention (some beginning Spring 2012 and others Fall 2012) will be offered to students on a voluntary enrollment basis. If the pilot section results show increased developmental math success rates after the first year of implementation, then additional sections of successful intervention courses will be implemented the next academic year based upon enrollment demands. Each year an analysis of success rates and enrollment trends within the math sections will be used to determine a balance between the number of intervention sections and traditional sections.

Intervention #2. (1) FTIC students who are enrolled in three developmental courses will also enroll in the student success course. The scale up beginning in year three will require that students who are enrolled in two developmental courses must also enroll in the student success course. Year four students enrolled in one developmental course will enroll in the student success course. In year five all FTIC students will be required to enroll in the student success course.

Intervention #3. The initial group of trained faculty will consist of about twenty, which will affect about 100 classes. Additional faculty will be trained the second year, making the total forty. In turn, those full-time Faculty will help develop a plan to train their colleagues, adjuncts, and new faculty on the techniques. It is anticipated that scale up may consist not only of numbers, but of *types and methods* of collaborative learning and active learning techniques.

Sustainability/Institutionalization Plan:

Intervention #1 The plan outlined above will be followed, making mid-course corrections as

needed based on the analysis of results each year. The first year of implementation will be the smallest with only two pilot sections of each intervention. The subsequent years will progressively show growth in the number of intervention sections needed to meet the anticipated demands and success of the intervention strategies. Unless enrollment growth in the developmental math series increases unexpectedly, allocation of faculty resources to these intervention sections will be distributed throughout the existing faculty base. Faculty responsibilities for the development of curriculum materials will be shared among the existing faculty base. In the first year, it will be necessary to purchase equipment and software for curriculum development. This initiative is front-loaded in the expense to the institution based upon course development needs. Each subsequent year should require minimal additional financial investment since the increased implementation of intervention sections will reduce the number of traditional sections for each course thereby leaving the faculty work load essentially unchanged. However, one anticipated expense that will occur with an increase in the number of intervention sections is the purchase of additional equipment to increase the number of classroom sets of our selected technology platform.

Intervention #2. The scalability and sustainability of this initiative is broad in that we will need to hire a full-time faculty member to broadly engage students enrolling in the student success course as well as a full-time advisor to provide support and intervention in year three of the program. Additionally, training for the student success course methodology and materials will need to be conducted before full implementation begins.

Intervention #3. This initiative is sustainable because it does not demand a high financial outlay. The primary capital is faculty commitment. TC can consult with schools such as Patrick Henry to find out sustainability problems they have encountered, as Patrick Henry is farther along on this CL journey. One difficulty the Dean at Patrick Henry mentioned was that they have a high percentage of adjuncts. TC does not have nearly as high a percentage; therefore, we anticipate even better results and less problems scaling up.

Communications Plan:

Intervention #1 The Office of Institutional Advancement and Public Relations will coordinate with leaders from the Core Team to prepare a press release to local media to inform the community about the data analyzed, the priorities identified, and the interventions that will be implemented to close achievement gaps and increase student success and persistence. In addition, brochures will be developed to explain and promote each intervention course for use by recruitment, advising, and mathematics personnel. Articles in the new Achieving the Dream newsletter will inform all TC employees about the initiative and the student newspaper will print articles regarding the initiative and its impact on students as the initiative progresses.

Intervention #2.

- AtD newsletter to all campus members monthly
- Monthly collaborative strategy meetings among key stake holders to determine if needs are being fulfilled.
- Website information with current trends and information
- Information in student portal to inform them of the benefits of the class
- **Intervention #3.**
- Full-time trained collaborative learning faculty will create a committee (working with

the existing Professional Development Committee) to create a system to monitor and mentor collaborative learning. Faculty input into training, planning, and measurement is essential to the success of this intervention.

- This intervention has already had faculty buy-in through an awareness meeting in the Fall 2010 with visit to Texarkana Independent School District to see their “engineer project management”(collaborative learning) system of engaging students.
- Communications should be extended to involve the local school districts (TISD in particular).
- Newsletter to keep faculty up to date on AtD.
- Collaborative learning might have a special page to report on active and collaborative learning ideas.

Internal and/or External Resources Needed:

Intervention #1

- Approximately \$20,000 for the first year and then potentially \$15,000 each year that increased number of intervention sections require an increase in classroom sets of equipment
- Faculty professional development on the use of software and equipment targeted for curriculum development and classroom use
- Budget allocation for the printing of promotional brochures
- Possibly travel to other AtD schools in Texas to collaborate on implementation of similar interventions

Intervention #2.

- Computer equipment for new personnel
- Computer software
- Furniture to support new personnel
- Financial resources for salaries
- Training and conferences to support methodology
- Noel Levitz Training (for assessment)

NACADA Training

Intervention #3. Financial support for consultation with other schools that use this method. That might involve some travel. Professional training will incur costs. Support from Administration to give time and recognize the importance of serving on the anticipated CL Committee is key.

Institutional Policy Changes Needed:

Intervention #1 Official policy changes needed: none. Unofficially: more aggressive cooperation of advising staff in understanding and promoting intervention course sections to target populations.

Intervention #2. (1) Policy changes which require mandatory enrollment in the student success course and system interventions which would block students who have not met the requirements.

Intervention #3. None

Anticipated Challenges:

Intervention #1 One anticipated challenge is effectively promoting these intervention strategies within our institution and advising students appropriately regarding the choices available, the anticipated impact of those choices, and their role in achieving student success through these interventions. Another challenge is that our budget has been cut for the coming year; hence, allocations for equipment and software purchases may be limited.

Intervention #2. Getting institutional and student buy-in. Providing information to all faculty, staff, and administrators which details the importance of the initiative and how it will impact the students and the institution and how they play a major part in the implementation.

Intervention #3. There will be some opposition from faculty who do not see how this technique can help them or their students. Collaborative learning participation by faculty will have to be measured, monitored, mentored, and encouraged. Finding the time to involve and train adjuncts will be difficult. In addition, measuring the effects of collaborative learning and separating them from other initiative's effects could be difficult. We might have to develop new measures as we go forward.

Additional Institution-Wide Decisions in Which the Resulting Evaluation Will Be Helpful:

Intervention #1 The analysis of the results of these interventions will be helpful as we consider ongoing modifications to the QEP which specifically targets academically underprepared students.

Intervention #2. It might be difficult to determine at what point in time certain implementations should occur...i.e. at what number of students enrolled in two or one developmental courses as well as the student success course do we hire an additional Full-time faculty member and advisor? This will be decided based upon analysis of the results if scale up of the intervention is justified.

Intervention #3. The design of professional development and the allocation of professional developmental dollars might be affected. In addition, faculty may find that they have more or different classroom equipment needs when they use collaborative learning techniques than without them. It is difficult, if not impossible, to foresee what those equipment needs might be.

Principles for Increasing Student Success through Institutional Improvement

Briefly describe how the college will make progress on the following principles. Consult the Field Guide for Improving Student Success, pages 15-18, for specific indicators that may guide your response.

1 Committed Leadership

Texarkana College's new leadership (2008) has shown a strong commitment to changing the college culture and moving it from a culture of "Enroll students" to one of "Help students succeed and complete." Our leadership team continually emphasizes this in its decision making process, choosing over and over again to implement policies that lead to success even if it leads to the loss of a few dollars. For example, administration is eliminating late registration because allowing students to register late has been shown discourage success.

A recent all-day professional development meeting encouraged by the administration ("Bridges

Out of Poverty”) was a success—faculty and staff alike attended, and the feedback was extremely positive. The administration purchased a copy of the *Bridges Out of Poverty* for all TC employees to show administrative commitment to improving performance for all students across racial/ethnic and income groups.

2 Use of Evidence to Improve Policies, Programs, and Services

Texarkana College’s new leadership (2008) has shown a strong commitment to data collection, hiring a full-time institutional research employee, a data assistant, and a part-time worker. The information technology capacity of the campus has been greatly expanded. The college is implementing the Banner computer and data control system in spring of 2011 and has plans to purchase new hardware to facilitate survey processes and analysis around the same date.

3 Broad Engagement

External stakeholders were called together in 2009 to re-write the Strategic Plan for the college with an emphasis on student success.

The college initiated its AtD activity with a college-wide data summit, which engaged every member of the college community in data evaluation, with opportunities to have input into strategy selection. Both CCSSE (administered for the first time in Spring 2011) and SENSE (planned for the first time in Fall 2011) will be used in order to provide data for student services staff to assess their part in aiding student success. All faculty and staff will examine the data and use it to improve student success.

The concern for student success has driven the Texarkana College Achieving the Dream planning. For example, full-time mathematics faculty participated in the planning of the mathematics interventions and in the analysis of the resulting data comparisons between our baseline data and the treated versus non-treated data. All adjunct mathematics Faculty will be informed of the initiative and ongoing results as it goes forward. All stakeholders will be regularly engaged in the ongoing success of the mathematics intervention through our communications plan and through the use of periodic surveys. Administration has supported this detailed planning, even offering a class reduction to the faculty member most actively engaged in the planning.

4 Systemic Institutional Improvement

As mentioned above, external stakeholders were called together with stakeholders from the college in 2009 to re-write the Strategic Plan with an emphasis on student success. The college has a plan to regularly assess its programs and has a standing committee on Institutional Effectiveness that is responsible for guiding and monitoring efforts to improve Student Learning outcomes. The college has recently encouraged travel to organizations that focus on closing achievement gaps; for example, the college sent eight faculty members in the last two years to the National Association of Developmental Education Conference (NADE).

Is there any additional information you would like Achieving the Dream to know about the college or about the implementation proposal?

Through its many administrative and technical changes in the past two years, Texarkana College has re-invented itself to be a college that is focused on student success. Participation in Achieving the Dream is part of that re-invention, a way to keep “our eyes on the prize.” That prize is not enrollment, but the success of each and every one of our students.

Proposal Work Plan

Work Plan	Year One	Year Two	Year Three	Year Four	Lead Staff
Intervention #1: Mathematics					
Identify necessary codes/reporting requirements for the State of Texas to use when reporting enrollment/contact hours in mathematics intervention course sections	X				Dr. Raphael Turner, Tom Elder
Develop, print and disseminate brochure(s) on mathematics interventions	X				Suzy Irwin, Lisa Thompson
Train advising staff regarding mathematics interventions – recommended student populations, course descriptions, potential impacts, student expectations, etc.	X				Dr. Raphael Turner, Dr. Ron Bright, Delbert Dowdy
Finalize research of equipment and software needed for curriculum development and delivery	X				Jamie Ashby, Kathy Smith
Purchase equipment and software needed for curriculum development and delivery		X			Jamie Ashby, Kathy Smith
Provide mathematics faculty professional development in the use of acquired equipment and software		X			Delbert Dowdy, Kathy Smith
Begin development of technology based instructional modules		X			Delbert Dowdy
Offer pilot sections of Modular Math and Integrated Intermediate and College Algebra		X	X	X	Lauren Hehmeyer, Delbert Dowdy

Offer pilot sections of Math Boot Camp		X	X	X	Lauren Hehmeyer, Delbert Dowdy
Design and oversee evaluation of pilot courses; Analyze and use results to inform decision making	X	X	X	X	Scott Randall, Jamie Ashby, Robert Jones
Based upon ongoing data results and analysis progressively scale up the number of mathematics intervention course sections offered		X	X	X	Lauren Hehmeyer, Delbert Dowdy

Intervention #2 (A) College Success Strategies and (B) Mentoring Redesign	Year 1	Year 2	Year 3	Year 4	LEAD STAFF
#2 Implement Student success course for FTIC students enrolled in three developmental courses		X			Dean Hehmeyer Dean Turner
#2 Provide training or strategies to be used by faculty and others at Texarkana College	X	X	X	X	Dean Hehmeyer
#2 Hire full-time faculty member to deliver methodology and materials to enrolled students			X		Dean Hehmeyer
#2 Scale up to FTIC students enrolled in two developmental courses			X		Dean Hehmeyer Dean Turner
#2 Scale up to FTIC students enrolled in one developmental course				X	Dean Hehmeyer Dean Turner

#2 (2) Hire Full-Time Academic Advisor to work with FTIC students enrolled in Student success course			X		Dean Turner
#2 Scale up to all FTIC students enrolled				Beyond year five	Dean Hehmeyer Dean Turner
#2 Yearly Data Comparison	X	X	X	X	Scott Randall
Research viability of hiring full-time advisor and benefits of collaborating with AtD	X	X	X	X	Dean Turner Scott Randall
Intervention #3. Collaborative and Active Learning	Year 1	Year 2	Year 3	Year 4	Lead Staff
• Form Collaborative Learning Committee	X				Mannie Hall Lauren Hehmeyer
• Awareness & Communication	X	X	X	X	Mannie Hall Lauren Hehmeyer CL Committee
• Research and contract with trainers	X				Mannie Hall Lauren Hehmeyer CL Committee
• First Professional Training	X				Mannie Hall Lauren Hehmeyer CL Committee
• Measurement &Monitoring		X	X	X	Mannie Hall Lauren Hehmeyer IR Director

<ul style="list-style-type: none"> • Second Professional Training 		X			Mannie Hall Lauren Hehmeyer CL Committee
<ul style="list-style-type: none"> • Develop sustainability through further organized training 		X	X	X	Mannie Hall Lauren Hehmeyer IR Director CL Committee
<ul style="list-style-type: none"> • Creation of plan to involve adjuncts 			X		Mannie Hall Scotty Hayes Lauren Hehmeyer IR Director CL Committee
<ul style="list-style-type: none"> • Involve adjuncts 				X	Mannie Hall Scotty Hayes Lauren Hehmeyer IR Director CL Committee