



World-class Advanced Manufacturing Talent

Covering 116 square miles along the United States –Mexico border, Rio South Texas is home to the North American Advanced Manufacturing Research & Education Initiative (NAAMEI). NAAMREI is a talent development network of school districts, community and technical colleges, and universities with headquarters at South Texas College.

Regional talent development partnerships represent the foundation on which to build a strong, sustainable, and transformational strategy for economic prosperity in today’s global economy. Rio South Texas is rapidly emerging as the center for higher education with a population expected to exceed the 1.5 million mark next year; combined with Mexican border cities, the region’s population soars to a staggering 2.3 million. Projecting a growth of 15 percent by 2015, Rio South Texas and its advanced manufacturing sector will capitalize on the region’s sustainable path to economic growth and prosperity. With a firm economy as its backbone, the region has over 86,000 students enrolled in institutions of higher learning, ready to fill key occupations; as engineers, supervisors, assemblers, mechanics, machinists, inspectors and more.



VISION
The International Gateway
 Positioning North America as the World Leader in Rapid Response Manufacturing. Establishing the Rio South Texas Region as a major North American logistics and distribution hub with global access through Mexico’s ports.

NAAMREI Americas 3rd Coast

ULTIMATE GOAL

Increase total number of high skill, high wage manufacturing jobs from 17,428 to least 25,000 by 2017 and become a world leader in Advanced and Rapid Response Manufacturing in the Rio South Texas Region .

REGIONAL IMPACT

- The NAAMREI Talent Development Network plays a major role in positioning the region as the North American Hub for Rapid Response and Advanced Manufacturing.
- NAAMREI is one of 39 U.S. Department of Labor WIRED regions in the United States.
- The regional initiative was launched in 2007 through a \$5 million USDOL WIRED Grant secured by Governor Rick Perry.
- The Texas Workforce Commission invested \$3 million in Skills Development Funds to train 2,500 new and incumbent workers. The City of McAllen provided \$1 million in matching funds for the project.
- Dr. Nelsen President of UTPA serves as the Chair of the NAAMREI Leadership Team.
- McAllen Economic Development Corporation, UTPA and leaders in the community worked with Congressman Ruben Hinojosa to secure \$300,000.00 to develop a Master Plan for the development of the “Americas Third Coast Research and Education Park” in McAllen, Texas. The City of McAllen donated 80 acres for the project.
- NAAMREI has leveraged \$30 million to support Research, Innovation and Education development activities in the region.

Research Briefs

KEY FINDINGS

- 94 percent of BAT graduates are employed.
- 100 percent of BAT graduates agree that there is good communication between faculty and students.
- 98 percent of BAT graduates believe that "faculty were willing" to take the time to discuss their academic performance.
- 95 percent of BAT graduates would re-enroll in the same program if they had to do it again

IMPLICATIONS

For Practice:

- Continue to administer the exit survey to evaluate and assess graduate perceptions about the BAT programs.
- Modify the survey questions to include bachelor degree competencies in the core curriculum and in content areas.

For Policy:

- Continue development of regionally needed BAT degrees.
- Use the survey data to confirm the quality and augment support for new programs.

For Research:

- Trend analysis can be applied as the exit survey continues to be administered.
- Use triangulation with other existing qualitative and quantitative data regarding the quality of education received from the BAT programs.

An Analysis of the Bachelor of Applied Technology (BAT) Exit Survey 2009

Recent Graduates' Opinions of the BAT Program

As part of South Texas College's (STC) BAT programs' continuing effort to evaluate and assess the quality of education, the BAT Exit Survey was administered to give recent graduates an opportunity to evaluate their experiences and impressions of the program and to provide information to help understand the development of students as well as their opinions concerning their educational experiences. The results of the survey were consistently positive across all areas of inquiry. When asked "If you could take college over, would you select the same program you are completing?" 95 percent of respondents answered yes meaning an overwhelming majority were satisfied with their programs.

Background

Since its inception in fall of 2005, the BAT programs' rate of enrollment and graduation have grown exponentially (365 percent and 50 percent respectively) making it evident that there is a need for more bachelor programs at STC. In order to ensure that the current BAT programs are of the highest quality, this study was designed collaboratively by Research and Analytical Services (RAS) and the BAT Division to measure the extent to which BAT graduates perceive what they have learned. There are four areas of inquiry: employment or status after graduation, satisfaction with instruction, satisfaction with student-faculty interaction, and satisfaction with mentoring. Out of 75 in the graduating class at the time, 68 completed the online exit survey during the months of April and May of 2009. Four surveys were excluded because they were incomplete yielding a response rate of 85% (64 out of 75).

Purpose of Study

The survey was designed to serve

two purposes: to give recent graduates an opportunity to evaluate and express their experiences and impressions of the BAT programs; and to provide information to help STC understand the development of students as well as their opinions concerning their educational experiences while enrolled in the BAT programs.

Methodology

The survey design was conducive to the research methodology leading the respondent from general to very specific questions. Analyses were also conducted in that order. First, percent of frequencies for polar (yes/no) questions were observed. Then, the Likert-type scale questions were analyzed by looking at the frequencies of levels of agreement and scale means by giving each of these levels a number value (Strongly Agree=4, Agree=3, Disagree=2, and Strongly Disagree=1). Finally, these scale questions were grouped by area of inquiry and level of agreement and scale mean were analyzed.

Research Questions

The research questions included, but not limited to, the following:

- Are BAT graduates employed, and or what are their impressions of the BAT programs relative to employment?
- Are they satisfied with the instruction they received while in the program?
- Are they satisfied with the level of interaction with program faculty?
- Are the BAT faculty supportive in offering guidance to their students?

Key Findings

Because of the overall positive responses, linear relationships, or correlations, between any of the questions on the survey were disregarded as unreliable due to the positive skew, or right-skewed distribution.

Employment or Status After Graduation

Results from the survey indicate that 94 percent of the recent BAT graduates that responded were currently employed. Furthermore, 94 percent agreed that course work from STC helped them to

An Analysis of the Bachelor of Applied Technology (BAT) Exit Survey 2009 (cont.)

improve their current job while 92 percent believed the education they received from their program met their expectations, and 95 percent concurred that they would re-enroll in

the same program if they had to do it again (see Table 1). Accordingly, this high satisfaction level gives clear evidence that these students' educational and related occupational expectations were achieved. Based on their BAT degree, 78 percent were confident that they expected to change jobs.

While 62 percent responded that they plan to enroll in a graduate level program, 60 percent of them specified the name of the graduate school they planned to attend in the follow-up comment question. (Baylor

University, Lamar University, Sam Houston State University, Texas A & M University, and The University of Texas are just a few mentioned.) Therefore, it is apparent that having attained a four year degree is an incentive to acquire a graduate level degree.

Instruction

For all three of the instruction area questions together, the majority (96 percent) of BAT graduates responded (with responses of

Employment or Status After Graduation	Yes	No
Are you currently employed?	93.5%	6.5%
Did having course work from STC help you get your current job?	54.8%	45.2%
Did the course work from STC help you to improve your current job?	93.5%	6.5%
Do you expect to change jobs based on your BAT degree from STC?	75.8%	24.2%
Do you currently have a job offer:	24.2%	75.8%
Do you expect to receive a promotion based on your BAT degree from STC?	59.7%	40.3%
Did the education you received in the Bachelor Programs meet your expectations?	91.8%	8.2%
If you could take college over, would you select the same program you are completing?	95.1%	4.9%
Are you planning to enroll in a graduate program?	62.3%	37.7%

“Strongly Agree” and “Agree”) that they received a well delivered and quality education (see Table 2).

Student-Faculty Interaction

This area of inquiry earned the highest

percentage of agreement (97 percent). All of the graduates (100 percent) agreed that “There was good communication between faculty and students regarding suggestions.” The majority also agreed that there were opportunities outside the classroom to meet with faculty members about their needs and concerns.

Likert Scale Questions by Area of Inquiry	% Strongly Agree/Agree	4 Point Scale Mean
Instruction		
Courses listed in the degree plans are offered frequently enough for timely completion of degree requirements.	95.0%	3.37
The courses I took were well taught.	98.4%	3.38
Faculty members were well qualified to teach their courses.	95.0%	3.40
Aggregate	96.1%	3.38
Student-Faculty Interaction		
There was good communication between faculty and students regarding student needs.	96.6%	3.6
There was good communication between faculty and students regarding concerns.	95.0%	3.55
There was good communication between faculty and students regarding suggestions.	100.0%	3.63
There were many opportunities outside the classroom for interaction between students and faculty.	96.7%	3.57
Aggregate	97.1%	3.59
Mentoring		
Faculty were helpful and supportive in my search for professional employment.	86.7%	3.23
Faculty were willing to meet with me to discuss my academic performance.	98.3%	3.55
Aggregate	92.5%	3.39

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Mentoring

As mentioned earlier, a large proportion of BAT graduates are employed. Comparatively, it is worthy of noting that a near equal proportion (87 percent) indi-

Implications for Further Research

Now that there is baseline data, the BAT Division should continue administering the exit survey to evaluate and assess their graduates on a periodic basis so trend analysis can be applied. Additionally, the survey questions should be modified to closer address whether graduates have acquired basic intellectual competencies in both program specific and in the core curriculum: Reading, writing, speaking, listening, critical thinking, and computer literacy.

South Texas College (STC) offers two Bachelor of Applied Technology degrees in direct response to local workforce needs. The Bachelor of Technology Management and Computer Information Technologies have increased access to predominately Hispanic students and have contributed to the goals of *Closing the Gaps* by raising higher education participation rates and by increasing the number of students earning bachelor degrees.

1. Student Demographics

Following are student demographics, including full- or part-time status, gender, and ethnicity of students admitted into both BAT programs and enrolled in upper-level courses.

Status		Gender		Diversity			
Full Time	57%	Female	48%	Hispanic	94%	Black	.02%
Part Time	43%	Male	52%	White	5%	Other	.08%

2. Enrollment—Projected and Actual

Actual annual unduplicated student enrollment in upper division courses has exceeded all enrollment projections. The Technology Management program experienced a **530% enrollment increase** and the Computer & Information Technologies program experienced a **102% enrollment increase** over a five year period. Actual enrollment exceeded projections by **324%**.

Projected Enrollment by Fiscal Year	2005-06	2006-07	2007-08	2008-09	2009-10
Technology Management	21	53	41	37	37
Computer & Information Technologies	--	--	25	25	50
Total	21	53	66	62	87
Actual Non-duplicated Enrollment by Fiscal Year	2005-06	2006-07	2007-08	2008-09	2009-10
Technology Management	40	112	186	245	252
Computer & Information Technologies*			58*	97	117
Total	40	112	244	342	369

*Program began Spring 2008

3. Retention (Fall to Fall)

Fall to fall retention for the Technology Management program has ranged from **85% to 93%** for all cohorts from Fall 2005 to Fall 2008 and **85%** for the Computer & Information Technologies Fall 2008 cohort. Retention rates have remained strong with the substantial enrollment increases.

Fall to Fall Retention Rates by Cohort	Fall 2005	Fall 2006	Fall 2007	Fall 2008
Technology Management	93%	85%	88%	86%
Computer & Information Technologies	N/A	N/A	N/A	85%

4. Graduation

The two baccalaureate programs at STC have prepared **215 graduates**. These graduates have contributed significantly to the goals of *Closing the Gaps*. These degrees, for many students, build on successful completion of Associate Degrees and create a seamless academic ladder.

Graduates	2006-07	2007-08	2008-09	2009-10	TOTAL
Technology Management (Fall 2005 start)*	14	39	63	52	168
Computer & Information Technologies (Spring 2008 start)**	--	--	23	24	47
Total	14	39	86	76***	215

*71% completed in 2 years, 90% completed in 3 years, and 93% completed in 4 years **87% completed in 2 years ***Pending 17 additional August candidates

5. Placement

Following are the number of graduates and the placement rates (percentage of the graduates employed) and the advancement rates (percentage of graduates who, after graduation, received a promotion, raise, and/or new job offer).

Technology Management				
Program by Fiscal Year	2006-07	2007-08	2008-09	2009-10
Graduates	14	39	63	52
Placement Rate	92%	100%	96%	88%
Advancement Rate	N/A	N/A	65%	47%

Computer & Information Technologies		
Program by Fiscal Year	2008-09	2009-10
Graduates	23	24
Placement Rate	100%	88%
Advancement Rate	38%	53%

Continued on back

6. Student to Faculty Ratio & Faculty with Doctoral Degrees

Student to faculty ratio for the upper division classes for the last five years has averaged 16 to 1. The following table includes the percentage of upper-division courses taught by faculty with doctoral degrees. In addition, 95% of Technology Management and 78% of Computer & Information Technologies upper-division courses are taught by STC full-time faculty.

Courses Taught by Faculty with Doctoral Degrees per Fiscal Year	2005-06	2006-07	2007-08	2008-09	2009-10
Technology Management	50%	49%	49%	30%	51%
Computer & Information Technologies	N/A	N/A	39%	30%	29%

7. Faculty Costs (Salaries & Benefits)

All faculty at STC, including those teaching in the BAT Program, are paid according to a Board approved salary schedule, which takes into consideration experience and education. The teaching load is 15 lecture hour equivalents and focuses on teaching excellence.

8. Formula Funding

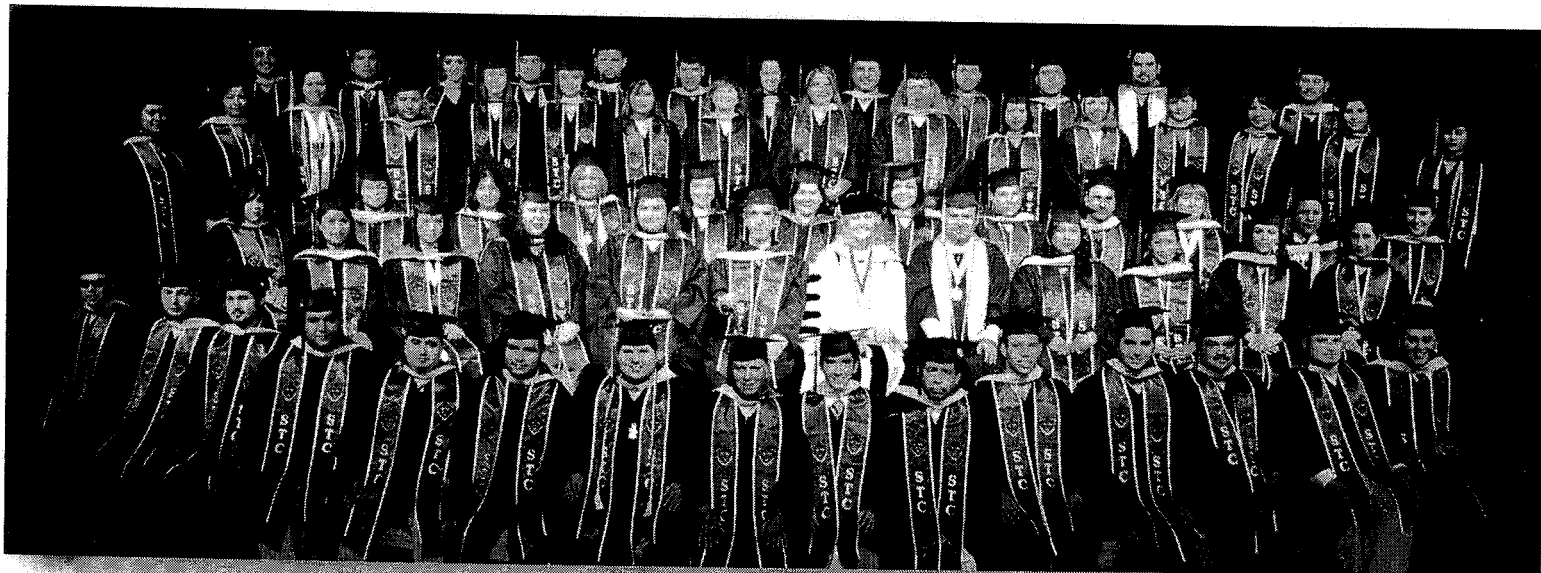
The following table represents total state appropriations for both programs based on upper division student credit hours during the enrollment base period. The total credit hour appropriations for both programs were \$502,530 or the equivalent of \$2,337 in appropriations per BAT graduate. Sustainability requires continued formula funding for instructional costs.

Credit Hour Funding per Fiscal Year	2005-06	2006-07	2007-08	2008-09	2009-10
Technology Management	--	--	\$101,768	\$101,768	\$175,385*
Computer & Information Technologies	--	--	--	--	\$123,609*

*Includes a 5% reduction

9. Special Appropriations

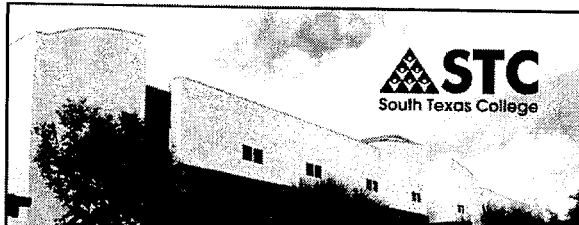
Funds were appropriated for the start-up costs for up to five applied baccalaureate degree programs. Funds were used to acquire library resources, software, technology, instructional materials and equip computer labs. Funds are in reserve for the development of three additional applied baccalaureate degree programs upon approval by the Coordinating Board.



Education drives prosperity.

South Texas College serves as the catalyst for regional economic prosperity and social mobility.

The economic future of South Texas depends on the successful preparation of local human capital for high wage-high skill employment opportunities.

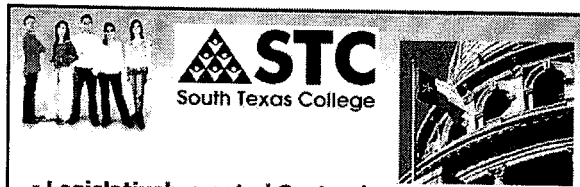


STC
South Texas College

**Overview of South Texas College
for the Texas Senate Higher
Education Committee, Interim
Hearing, Thursday, June 24, 2010**

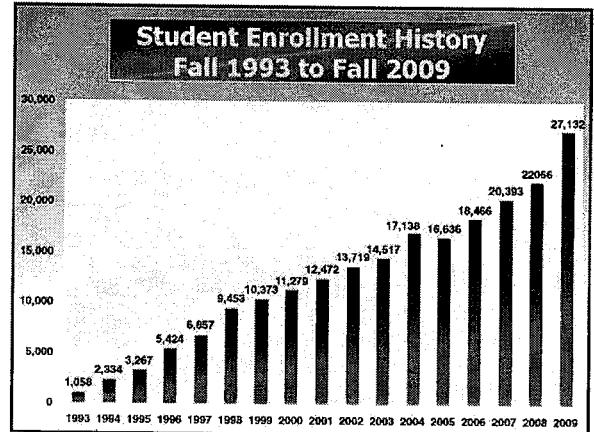
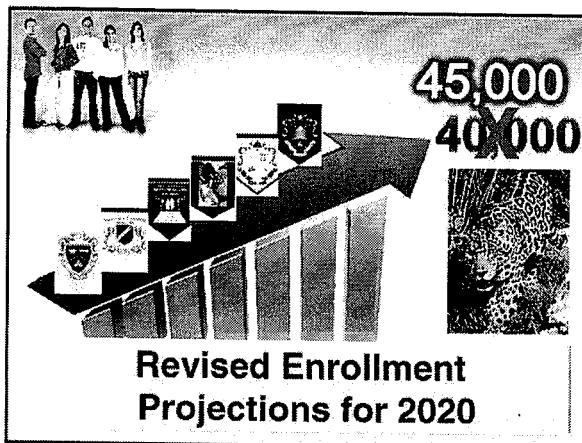


South Texas College
*Changing Lives
Changing Communities*
Campaign




STC
South Texas College

- Legislatively created September 1993 to serve over 678,000 people without access to a community college
- Formulated as an economic development strategy
- Community voted to approve a taxing district for operation of the College and \$118.7 million in construction bonds

45,000
40,000

**Revised Enrollment
Projections for 2020**



STC is a National Leader

#3: Associate Degrees to Hispanics

#6: Associate Degrees for Multi/Interdisciplinary Studies

#19: Associate Degrees for Criminal Justice

#41: Associate Degrees Awarded

TOP 100
ASSOCIATE DEGREE PRODUCERS
2009 EDITION

Source:
Community College Week
Analysis of U.S.
Department of Education Data

Winner of the 2008 MetLife Foundation Community College Excellence Award

JOB'S FOR THE FUTURE
CREATING STRATEGIES for Educational and Economic Opportunity

2010 Leah Meyer Austin Institutional Student Success Leadership Award

Achieving the Dream
LEADER COLLEGE

2009 Leader College Designation

Over 100 Degree and Certificate Options

9 Associate Degrees On-Line

Bachelor of Applied Technology

One of three community colleges in Texas accredited to offer the degree

- Technology Management
- Computer & Information Technologies

Five Campuses

STARR COUNTY HIDALGO COUNTY

Mexico

Pecan Campus Technology Campus

Starr County Campus Nursing & Allied Health Campus Mid Valley Campus

eSTC Virtual Campus

- Complete degree programs
- Full student support services on-line
- Capacity to serve 10,000 students




Commitment to Creating a College-Going Culture

- Partnerships with 52 High Schools
- Dual Enrollment
- Six Early College High Schools
- Engineering and Medical Science Academies
- Drop-out Recovery
- College Bound

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Continued...

- First Year Connections
- Adopt an Elementary School
- The College Experience
- Summer Leadership Academy
- 9th Grade Initiative



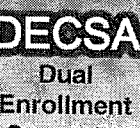




Dual Enrollment
 STC has served 34,843 dual enrollment students since Fall 1999
 ... Tuition Free



- Over 8,580 high school students each semester
- 52 high school sites



High School Students Earn Associates Degree









Dual Enrollment Computer Science Academy (Fall 2010)


Six Early College High Schools

- Progreso – Year 3
- McAllen – Year 2
- Mercedes – Year 2
- PSJA T-STEM – Year 2
- Valley View – Year 1
- PSJA North - New
- Students on track to earn 60 college credits or associate degree by high school graduation

Transfers to UTPA

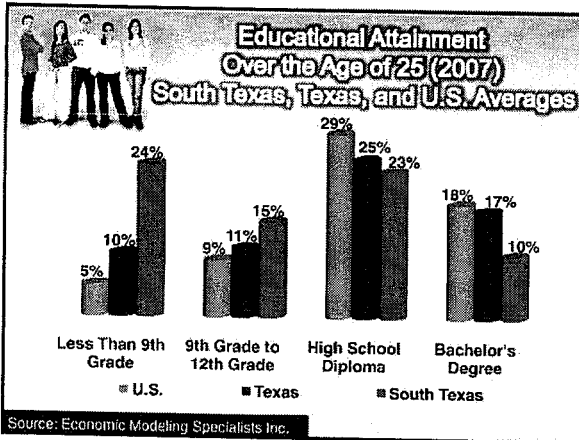
As of Fall 2009, 11,120 students who previously attended STC are now at UTPA and have a cumulative G.P.A. of 2.76.



Employer Satisfaction

Preparing graduates for good paying jobs with an **A⁺** employer satisfaction rating





Jobs Drive Prosperity

Our economic future depends on today's and tomorrow's skilled workforce.

Workforce development is the most significant infrastructure need for South Texas

North American Advanced Manufacturing Research and Education Initiative

Making World-Class Advanced Manufacturing a Reality

Designed by Microsoft Creative

STC Makes a Significant Contribution to the Economic and Talent Development of South Texas

Over 19,000 Graduates since 1994

Community Colleges are the Solution

- Serve as the educational workhorse of higher education and job training
- Fuel the economic engine for workforce development
- 70% of all new college students in Texas are enrolled in community colleges

