



Texas A&M University — Kingsville

CAMPUS REPORT

May 2005

I. INTRODUCTION

This document presents a progress report of the Texas A&M University – Kingsville (TAMUK), with a focus on the cumulative impact of TxCETP and plans for sustaining accomplishments. The report is organized by TxCETP goals, which cover these areas:

1. Course reform
2. Recruitment of students to STEM teaching
3. Preservice teacher and novice teacher support
4. Systemic reform connections



Because of the inherent overlap between Goal 2: Recruitment, and Goal 3: Preservice teacher and novice teacher support, the reader may find individual campus differences in which goal the strategies and activities are placed to accomplish these goals.

The following data sources have been used to show evidence of the extent to which these goals have been achieved:

- NSF reporting system
- State Board of Educator Certifications
- Student and faculty course surveys
- Campus Team Leader reports/interviews
- Campus Strategic Plan
- NSF Scholar application narratives

To provide a context for interpreting the TxCETP progress data, the next section includes some background information on TAMUK - a brief campus description, faculty and K-12 teacher involvement in TxCETP, and student participation in the teacher education program.

II. BACKGROUND INFORMATION

1. CAMPUS DESCRIPTION

TAMUK is located in south Texas at Kingsville. It has a multicultural campus that is 67 percent Hispanic. The university has nationally recognized programs in engineering, agriculture, wildlife and the sciences and is known for developing the nation's first doctoral degree in bilingual education. Research here is diverse; the Citrus Center, the Center for Semi-Arid Forest Resources, the Welhausen Water Resources Center, the Caesar Kleberg Wildlife Research Institute, and the Natural Toxins Research Center.

The mission of Texas A&M University-Kingsville is to develop well-rounded leaders and critical thinkers who can solve problems in an increasingly complex, dynamic and global society. TAMUK offers an extensive array of baccalaureate and master's degrees, and selected doctoral and professional

degrees in an academically challenging, learner-centered and caring environment where all employees contribute to student success. Founded in 1925 as South Texas State Teachers College, the university broadened its mission and became a member of the Texas A&M University System in 1989.

Based on the most recent IPEDS data from school year 2003-04, the overall enrollment has increased almost 15% from Fall 1998 (N=5,940) to Fall 2003 (N=6,856). 81% of the Fall 2003 student body was undergraduates. The ethnic make up was approximately 66% Hispanic, 26.6% White, and the remaining, Black, Asian, Native American and non-resident alien. The university awarded 788 Baccalaureate degrees between July 1, 2003 and June 30, 2004, 155 in Business Management, Marketing and Related Support, 125 in Multi/Interdisciplinary Studies, 90 in Engineering, 57 in Agriculture Operations and Related Sciences, and 49 in Social Sciences.

2. PARTICIPATION IN TxCETP BY CALENDAR YEAR

The following tables show the number of faculty and K-12 educators involved in TxCETP implementation and benefiting from these reform efforts by TAMUK since the year 2000:

Table 1a: Campus Participation by Calendar Year										
	Implementation					Beneficiaries				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
College of Education	1	0	1	1	0	0	3	0	0	0
Science	4	5	7	6	3	0	6	0	0	0
Mathematics	2	2	1	1	1	0	3	1	1	0
Other	0	1	0	0	0	0	2	0	0	0
Total	7	8	9	8	4	0	14	1	1	0

Source: NSF Data Reports

Table 1b: Community College Participation											
	Implementation					Beneficiaries					
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004	
College of Education	0	0	0	0		0	0	0	0		
Science	0	0	0	0		0	0	0	0		
Mathematics	0	0	0	0		0	0	0	0		
Total	0	0	0	0		0	0	0	0		

Source: Campus Activities Reports

Table 2: K-12 Participation by Calendar Year										
	Implementation					Beneficiaries				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Elementary Teachers	0	0	4	4	0	0	0	0	0	0
Mathematics Teachers	0	1	0	0	0	0	4	0	0	0
Science Teachers	0	1	2	2	0	0	10	0	0	0
Mathematics/ Science Teachers	0	0	1	1	0	0	0	0	0	0
Administrators	1	2	0	0	0	0	0	0	0	0
Other/Unknown	0	0	1	1	0	0	0	0	0	0
Total	1	4	8	8	0	0	14	0	0	0

Source: NSF Data Reports

3. STUDENT PARTICIPATION IN TEACHER PREPARATION PROGRAM – ENROLLMENT, GRADUATION, AND CERTIFICATION

The next four tables provide the following information:

- Juniors and seniors enrolled in teacher preparation program by major and ethnicity
- Bachelor degrees from the teacher preparation program by major
- Post-Baccalaureate certification students from the teacher preparation program by major
- Initial ExCET/TEsES Test Takers by Area and Academic Year

The key for the column headers is as follows: E = Elementary Education, M=Mathematics, S=Science.

Ethnicity	Fall 2000				Fall 2001				Fall 2002				Fall 2003				Fall 2004			
	E	M	S	Total	E	M	S	Total	E	M	S	Total	E	M	S	Total	E	M	S	Total
African American/Black	7	0	0	3%	6	0	0	3%	7	0	0	3%	6	0	0	2%	7	0	0	2%
Anglo/White	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	---	102	0	0	29%
Hispanic	92	3	1	37%	80	2	4	36%	91	3	2	37%	123	2	2	40%	228	6	5	68%
Native American /Pacific Islander	151	3	2	60%	134	3	8	61%	150	3	0	60%	173	6	2	57%	3	0	0	1%
Asian	1	0	0	---	0	0	0	---	1	0	0	---	2	0	0	1%	0	0	0	0%
Other/Not Reported	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	---	1	0	0	0%
Total	251	6	3	260	220	5	12	237	249	6	2	257	304	8	4	316	341	6	5	352

Source: NSF Data Reports

Ethnicity	2000				2001				2002				2003				2004			
	E	M	S	Total	E	M	S	Total	E	M	S	Total	E	M	S	Total	E	M	S	Total
African American/Black	2	0	0	2%	3	0	0	2%	2	0	0	1%	1	0	0	1%	3	0	0	3%
Native American /Pacific Islander	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	0%
Asian	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	0%
Anglo/White	36	0	0	30%	43	1	0	33%	42	0	0	31%	39	0	1	42%	34	0	1	40%
Hispanic	83	0	0	68%	85	0	1	65%	92	1	0	68%	53	1	0	57%	45	5	0	57%
Other/Not Reported	0	1	0	1%	0	0	0	---	0	0	0	---	0	0	0	---	0	0	0	0%
Total	121	1	0	122	131	1	1	133	136	1	0	137	93	1	1	95	82	5	1	88

Source: NSF Data Reports

Table 5: Post-Baccalaureate Students Certified by Major and Calendar Year					
Major	2000	2001	2002	2003	2004
Elementary Education	11	11	27		
Mathematics	0	1	0		
Science	2	3	2		
Mathematics/Science	0	0	0		
Total	13	15	29		

Source: Campus Activities Reports

Table 6: Number of Initial ExCET/TEGES Test Takers by Area and Academic Year					
Area	(9/99-8/00)	(9/00-8/01)	(9/01-8/02)	(9/02-8/03)	(9/03-8/04)
Early Childhood Education	17	9	24	47	-
Elementary Comprehensive	51	44	82	94	-
Professional Development (Elementary)	84	67	113	118	-
Generalist EC-4	-	-	-	5	183
Generalist 4-8	-	-	-	-	5
Pedagogy and Professional Responsibilities EC-4	-	-	-	12	153
Pedagogy and Professional Responsibilities 4-8	-	-	-	1	14
Pedagogy and Professional Responsibilities 8-12	-	-	-	9	62
Pedagogy and Professional Responsibilities EC-12	-	-	-	7	134
Mathematics 4-8	-	-	-	-	4
Mathematics 8-12	-	-	-	-	8
Mathematics/Science 4-8	-	-	-	-	7
Science 4-8	-	-	-	-	4
Science 8-12	-	-	-	-	2
Mathematics (Secondary)	1	1	9	7	-
Biology (Secondary)	4	4	6	7	-
Chemistry (Secondary)	1	-	1	4	-
Composite Science (Secondary)	-	-	-	-	-
Earth Science (Secondary)	-	-	1	1	-
Life/Earth Science (Secondary)	-	-	-	-	-
Life Science 8-12	-	-	-	-	7
Physical Science (Secondary)	-	-	-	-	-
Physics (Secondary)	-	-	-	1	-

Source: SBEC Reports

III. CUMULATIVE IMPACT OF TXCETP ON YOUR CAMPUS

GOAL 1: COURSE REFORM

This section of the report describes the cumulative impact made to date in the area of Course Reform to systemically improve STEM teacher preparation. Specifically how TxCETP has impacted the campus in the TxCETP wide objectives:

- Expand course reform from Biology to Chemistry, Physics, Earth Sciences, and courses taken by elementary, math/science preservice teachers and potentially to all students enrolled in these courses.
- Integrate Texas Essential Knowledge and Skills (TEKS) and the state standards for teacher certification into mathematics and science courses.
- Introduce course reform to faculty through the use of various TxCETP-sponsored projects (e.g., Multi-Initiative Dissemination Chemistry Workshops, Inquiry for Professors, TxCETP Forum)

In addition, other impacts on this campus as a result of involvement in the TxCETP initiative are reported.

CUMULATIVE IMPACT OF TXCETP ON COURSE REFORM

Information not provided.

Course #	Course Title	Enrollment				
		2000	2001	2002	2003	2004
BIOL 1111	Introduction Botany Laboratory	-	-	122	189	158
BIOL 2375	Life Science	-	-	51	35	-
CHEM 1311	General Chemistry	-	99	-	-	-
CHEM 1376	Elementary Chemistry	-	40	68	27	45
GEOL 1303	Physical Geology		-	22	30	25
MATH 1335	Selected Topics in Contemporary Math. I	15	-	60	76	49
MATH 1336	Selected Topics in Contemporary Math. II	15	-	18	32	47
Total		30	139	341	389	324

Source: NSF Data Reports

Table 8: Student and Faculty Course Survey Results by TxCETP Vision Indicators						
Vision Indicator	Percent of All Item Responses that were Always/Usually					
	Fall 2003		Spring 2004		Fall 2004	
	Student (n=0)	Instructor (n=0)	Student (n=113)	Instructor (n=7)	Student (n=86)	Instructor (n=6)
Course Design	--	--	78%	93%	78%	100%
Prior Knowledge	--	--	85%	91%	85%	90%
Instructional Strategies	--	--	80%	86%	79%	83%
Assessments	--	--	84%	91%	81%	100%
Problem Solving	--	--	72%	71%	74%	67%
Multiple Representations	--	--	77%	86%	81%	89%
Learning Environment	--	--	82%	67%	75%	100%
Books, Materials & Technology	--	--	55%	57%	47%	33%

Source: Fall, 2003 Course Surveys; Spring, 2004 Course Surveys; Fall, 2004 Course Surveys

GOAL 2: RECRUITMENT OF PRESERVICE TEACHERS

This section of the report describes the cumulative impact made to date in the area of Recruitment of more undergraduate students to STEM teaching. Specifically how this campus has been impacted by the TxCETP wide objectives:

- Use introductory courses and summer experiences to target freshmen and sophomore mathematics and science undergraduates for preservice teacher recruitment and retention.
- Use alternative certification and post-baccalaureate pathways for junior and senior mathematics and science majors who become interested in teaching careers.
- Recruit high school students from local districts, from the Texas and South Texas Rural Systemic Initiatives (TRSI and STRSI) districts, and from Regents' Initiative (TX A&M System Schools only) partner school districts to teaching careers.
- Recruit community college students with declared interest in STEM teaching careers, and facilitate their transfer to TxCETP campuses.

CUMULATIVE IMPACT OF TXCETP ON RECRUITMENT

Information not provided.

GOAL 3: SUPPORT FOR PRESERVICE AND NOVICE TEACHERS

This section of the report describes the cumulative impact made to date in the area of Support for Preservice and Novice Teachers to increase retention and quality. Specifically how TxCETP has impacted this campus in the TxCETP wide objectives:

- Disseminate reformed courses for preservice mathematics and science students. Include emphasis to tie to Informal Science partners (e.g., Fort Worth Museum, Texas Parks and Wildlife, Texas State Aquarium)
- Use student chapters of NCTM, NSTA, scholarships (TxCETP and Noyce Scholars), and travel awards to conferences to support preservice mathematics and science teachers.
- Assist with placement, induction and sustained professional development to novice mathematics and science teachers.

CUMULATIVE IMPACT OF TXCETP ON SUPPORT FOR PRESERVICE AND NOVICE TEACHERS

Information not provided.

Majors	2002				2003				2004			
	L1	L2	Noyce	Total	L1	L2	Noyce	Total	L1	L2	Noyce	Total
Elementary	0	0	0	0	0	0	0	0	0	0	0	0
Mathematics	3	0	1	4	7	3	2	12	1	0	2	3
Science	2	0	0	2	2	0	0	2	0	0	0	0
Mathematics/Science	1	0	0	1	0	0	0	0	0	0	0	0
Total	6	0	1	7	9	3	2	14	1	0	2	3

Source: TxCETP Scholarship Database

GOAL 4: MAKING SYSTEMIC REFORM CONNECTIONS

This section of the report describes the cumulative impact made to date in the area of Strengthening Systemic Reform Connections to maximize alignment and impact. Specifically how this campus has been impacted by the TxCETP wide objectives:

- Collaborate with STRIS/TRSI by involving mathematics and science specialists, and Teacher Partners in mentoring, lesson modeling, observations, workshops, etc. with TxCETP preservice and novice teachers.
- Collaborate with Texas Education Agency (TEA), State Board for Educator Certification (SBEC), and others to construct the new Texas Examinations of Educator Standards (TEXES) to reflect standards-based instruction.
- Collaborate with Regents' Initiative (A&M Systems Schools) to coordinate activities with mathematics and science Academy members, campus recruiters, and data collection resources.

CUMULATIVE IMPACT OF TxCETP ON MAKING SYSTEMIC REFORM CONNECTIONS

Information not provided.

IV. STRATEGIES TO INSTITUTIONALIZE ACCOMPLISHMENTS

This section of the report describes plans for sustaining TxCETP accomplishments on this campus for each of the four goals: Course Reform, Recruitment of Students to STEM Teaching, Preservice Teacher and Novice Teacher Support and Systemic Reform Connections. In addition, plans to sustain other accomplishments on this campus as a result of involvement in the TxCETP initiative are reported.

PLANS FOR SUSTAINING COURSE REFORM

Information not provided.

PLANS FOR SUSTAINING RECRUITMENT OF STUDENTS INTO STEM TEACHING

Information not provided.

PLANS FOR SUSTAINING PRESERVICE AND NOVICE TEACHER SUPPORT

Information not provided.

PLANS FOR SUSTAINING SYSTEMIC REFORM CONNECTIONS

Information not provided.

PLANS FOR SUSTAINING OTHER TxCETP-RELATED ACCOMPLISHMENTS

Information not provided.