

What We Know About Student Success and How It Can Be Improved

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College Graduates

“...by 2020 America will once again have the highest proportion of college graduates in the world.”

President Barack Obama

Address to Joint Session of Congress

Tuesday, February 24th, 2009

“ Although the increase in the total number of bachelor’s and associate’s degrees and certificates awarded is currently on target, the trend is slowing and flattening. The 27.1 percent increase in degrees awarded since fiscal 2000, which rose to 147,705 degrees in fiscal 2006, will not be enough to reach the 2015 goal of 210,000. To meet this goal, institutions must increase the number of degrees awarded by another 42.2 percent from fiscal 2006.”

Texas in Focus: A Statewide View of Opportunities

Office of the Texas Comptroller of Public Accounts, January 2008

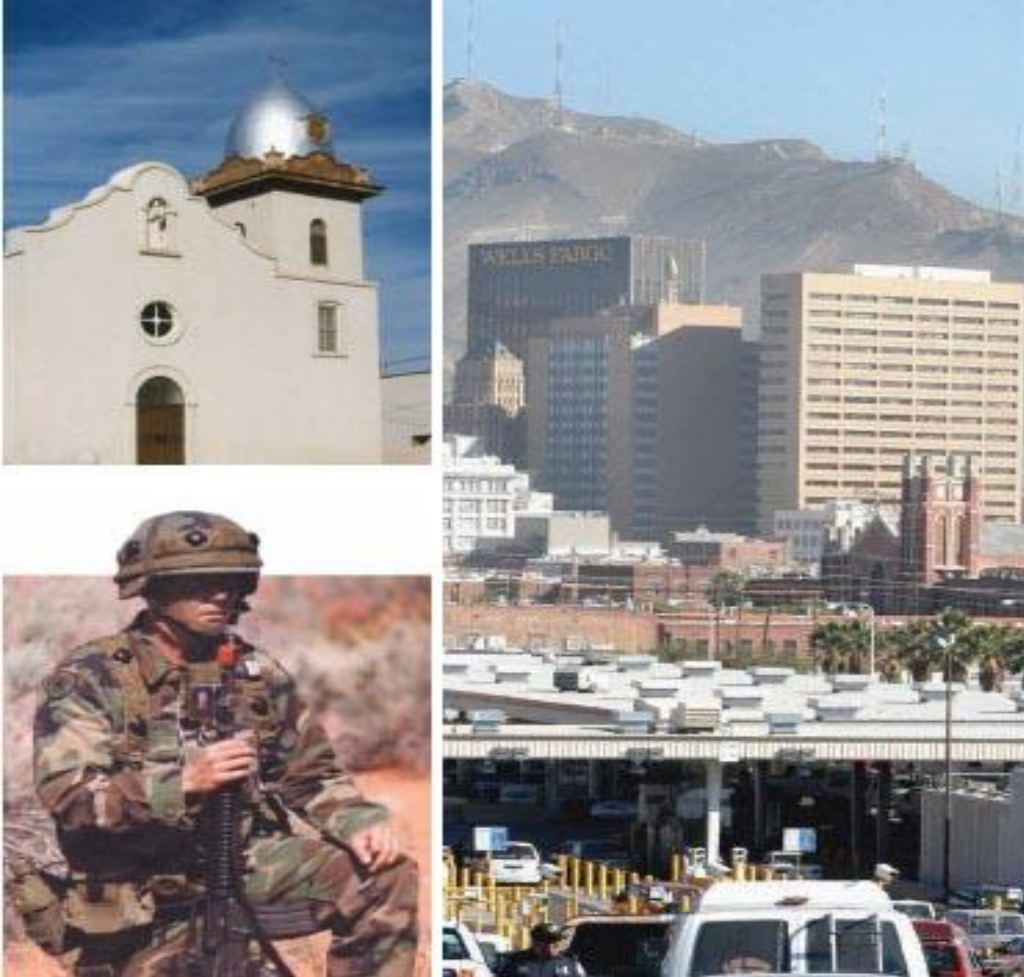
Closing the Gaps

“At present, a large gap exists among racial/ethnic groups in both enrollment and graduation from the state’s colleges and universities. Groups with the lowest enrollment and graduation rates will constitute a larger proportion of the Texas population. If this gap is not closed, Texas will have proportionately fewer college graduates.”

CLOSING THE GAPS: THE TEXAS HIGHER EDUCATION PLAN, The Texas Higher Education Coordinating Board, July 2000.

UTEP's Context

El Paso, Texas



- ❑ El Paso County-3rd poorest large county in the US¹
- ❑ Population: 734,000
- ❑ 81% Hispanic
- ❑ Border community, very dynamic flow of residents and students across the border
- ❑ Limited educational opportunities

¹ 2005 American Community Survey of the US Census

UTEP Demographics

Total Enrollment by Residence		
	N	%
El Paso County	17,443	83.0
New Mexico	230	1.1
Mexico	1702	8.1
Other International	450	2.1

¹Council of Independent Colleges:

<http://www.cic.edu/makingthecase/data/access/income/index.asp>

²Lumina Foundation Focus, Fall 2005, p.5

UTEP Demographics

Enrollment by Race / Ethnicity		
	N	%
White Non-Hispanic	2,183	10.4
Black Non-Hispanic	637	3
Hispanic	15,994	76.1
Asian / Pacific islander	282	1.3
American Indian or Alaskan	40	0.3
International (includes Mexico)	1821	8.6

UTEP Demographics

	At UTEP	Nationally at large public universities	Nationally at small & mid-sized private colleges & universities	Nationally at community colleges
Percent of students with reported family income of \$20,000 or less:	33	10	12	29

Best Way to Measure Student
Success is Degrees Awarded

What More Can be Done?

Lumina Foundation Study at UTEP

10

Research Questions

1. What factors explain success at UTEP?
(graduation from within six years)
2. What factors explain students' risk of departure?
(dropout, stop-out and transfer)

Method

Longitudinal approach using advanced regression techniques
Fall 1999 and Fall 2000 first-time student cohorts

Lumina Funded UTEP Student Success Project 2006 - 2009



1. Growth in degrees awarded
2. Finding UTEP specific predictors of student success
3. Identification of three risk groups with distinct patterns of survival – enabling UTEP to develop effective targeted strategies for each group
4. Building capacity for UTEP to develop more effective interventions and evaluate the efficacy of existing programs
5. Increasing discussion on campus and creating interest in this work nationwide

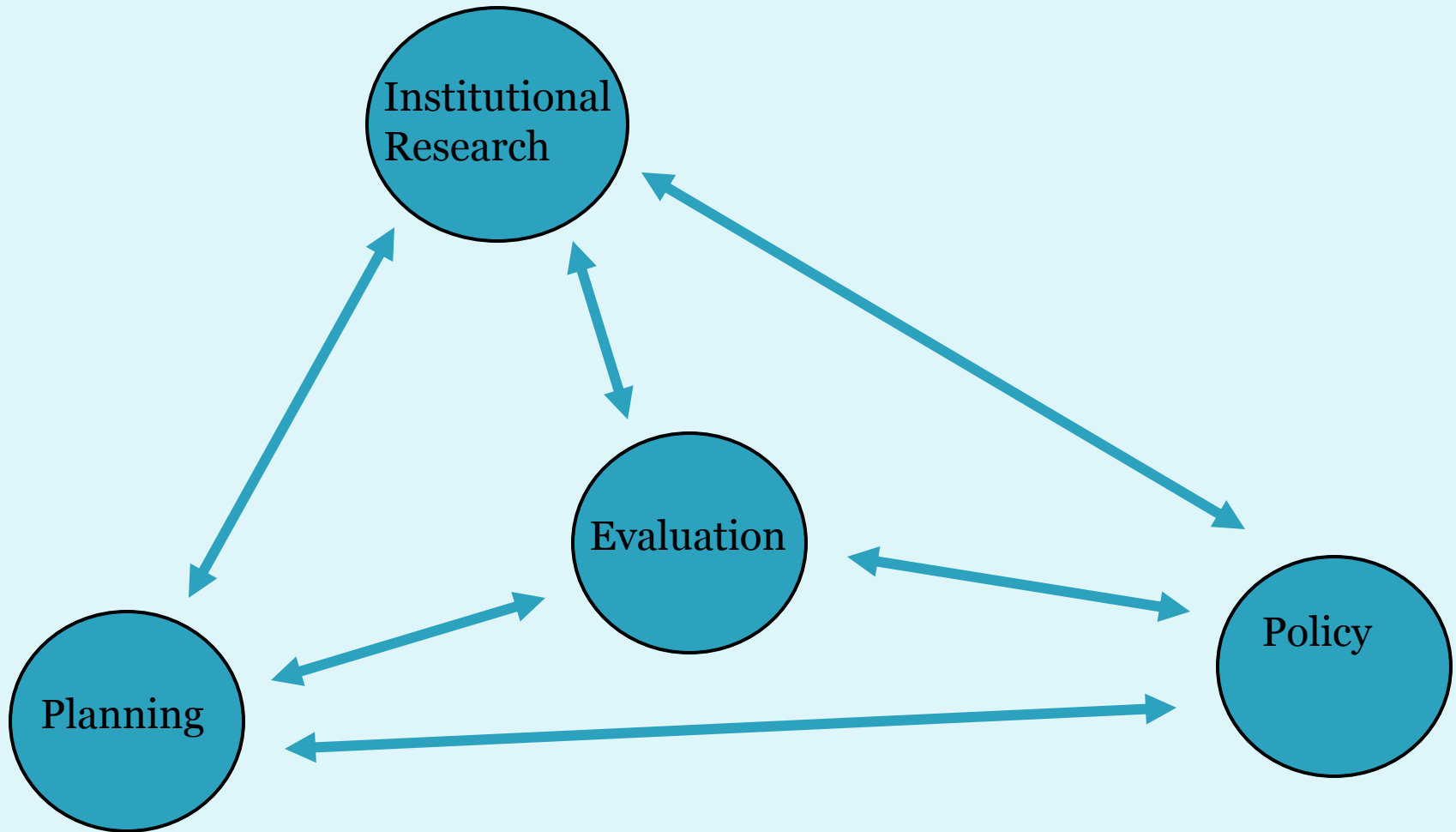
Lumina Funded UTEP Student Success Project 2006 - 2009



Additionally, commended for

- excellent work conducting high quality research and making the findings accessible for program improvements
- making evidence-based practice a key component of our culture
- using data to develop more effective interventions
- evaluating student success strategies
- disseminating outcomes across campus and beyond

Challenge of Applying Research and Data Points to Student Success



How did we do that?



Start with the Research Questions

1. What factors explain success at UTEP?
(graduation within six years)
2. What factors explain students' risk of departure?
(dropout, stop-out, and transfer)

Next Question:

What data do we need to gather to answer those questions?

Major Findings about Student Success



- **Demographics** are not a significant predictor of success: gender, ethnicity, income, or educational level of parents
- **Standardized Tests** are not a good measure of our students' college readiness:
 - ACT/SAT scores are not significant predictors of student success.
 - Using standardized test scores as a proxy for college preparation can limit access and opportunity.

Major Findings about Student Success



- **Level of Preparation** is related to student success:
 - Student engagement as measured by
 - ✦ high school rank or
 - ✦ high school GPAis a significant predictor of success.
 - Math preparation is a significant predictor of success.

Major Findings about Student Success



- **Student Commitment** has an impact on student success.
 - Working more than 20 hours decreases the probability of success.
 - Belief that it is important to prepare for class increases the probability of success.
- **Performance in College** has a significant impact on success.
 - First-term performance is a strong predictor of success.
 - GPA, over time, is the strongest predictor of success.
- **Financial Support** increases the probability of success.
 - Grants, loans, and work-study

Major Findings about Student Success



- **Low Semester GPA** increases the risk of departure.

Over time, the effect of semester GPA *decreases*. For example, a lower GPA in a student's sixth semester of enrollment will be much less likely to lead to a departure, compared with a low GPA in the student's first semester.

- **Failing a course** will increase the risk of departure.
- **Part-time enrollment** increases the risk of departure.
- **Financial aid** (loans, grants, work study) will reduce the risk of departure.
- **Students who stop-out** once are more likely to depart again.

Major Findings about Student Success



- The risk of departure is **higher in earlier semesters**.
- The risk of departure is **higher in spring semesters** than fall semesters.
- The risk of departure is **higher for students who re-enroll** at UTEP after departing.
 - For returnees, the risk of departure is higher in the semesters immediately after returning.
 - The risk of departure for returnees increases with the length of the stop-out period. That is, the longer a student remained stopped-out, the higher the risk for another departure.

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Implications



- **Determine appropriate class load**, based on preparation, work, and personal commitments
- **Prescribe placement** into courses that increase the likelihood of success
- **Monitor progress** (course grades, degree requirements)
- **Ensure continued enrollment** (facilitate on-campus work, scholarship, financial aid)

Three Distinct Risk Groups



Factors that determine a student's risk group:

- high school class rank / GPA
 - college level math placement
 - intended number of hours per week spent working
 - time of matriculation
-
- Low risk group
 - Medium risk group
 - High risk group

Linking Institutional Evaluation, Research, and Planning to Program Development and Student Success at UTEP



What to do with the data?



- **Put the data in context with other current initiatives**
- **Develop programming to achieve objectives determined by the data**

Closing the Gaps

- Participation
 - Add 500,00 more students
- Success
 - Increase by 50% the number of degrees
- Excellence
 - Increase the number of nationally recognized programs
- Research
 - Increase the level of federal research funding by 50% to \$1.3 billion

Emerging Tier One – HB 51

- House Bill 51 requires *research and emerging research universities* to develop long-term strategic plans to achieve or enhance their recognition as research universities.

**Closing the
Gaps**

**Emerging Tier
One – HB 51**

Performance and Growth Objectives

Performance Objectives

- Annual expenditure of at least \$100 million in externally funded research
- Annual graduation of approximately 200 doctoral degrees

Growth Objectives

- Increase the number of tenured and tenure-track faculty from 508 to 720 by 2020
- Increase the number of PhD programs by 40 to 2020
- Increase student enrollment from 21,000 to 29,500 by 2020
- Increase the provision of research, instructional, and associated support space by 3.2 M gross square feet by 2020

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The Importance of Retention in Meeting Enrollment Targets

	2009	2010				
		<table border="1"> <tr> <td>Expected Growth</td> <td>Target</td> </tr> <tr> <td>21,496 2.3%</td> <td>22,332 6.3%</td> </tr> </table>	Expected Growth	Target	21,496 2.3%	22,332 6.3%
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21,496 2.3%	22,332 6.3%					
Total Enrollment <i>Growth</i>	21,011					
Undergraduate Enrollment (A+B+C+D)		17,754				
<i>New Students</i>						
First-Time Students (A)		2,411				
Transfer Students (B)		1,594				
Returning Undergraduates (C)		13,514				
Postbacs (D)		236				
Graduate Enrollment (E+F)	3,570	3,742				

The Importance of Retention in Meeting Enrollment Targets

	2009	2010		
		Expected Growth	Target	Additional Enrollment to Meet Target
Total Enrollment <i>Growth</i>	21,011 2.7%	21,496 2.3%	22,332 6.3%	836
Undergraduate Enrollment (A+B+C+D)		17,754		755
<i>New Students</i>				
First-Time Students (A)		2,411		125
Transfer Students (B)		1,594		50
Returning Undergraduates (C)		13,514		580
Postbacs (D)		236		0
Graduate Enrollment (E+F)	3,570	3,742		81

Texas Higher Education Coordinating Board Grant Opportunity



- **Low Semester GPA** increases the risk of departure.
- **Failing a course** will increase the risk of departure.
- **Performance in College** has a significant impact on success. First-term performance is a strong predictor of success.

Students < 30 SCH

End of Spring Semester 2009

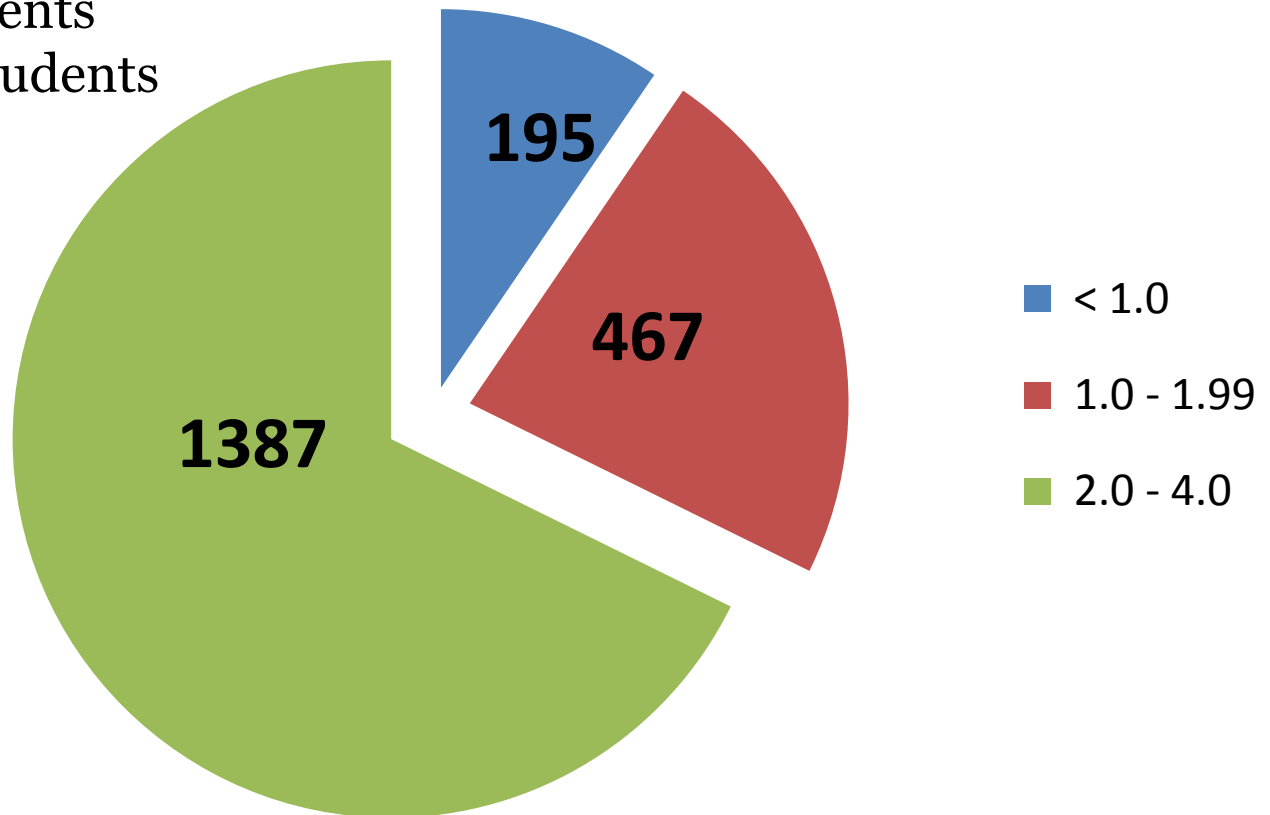


Total: 2049

FTFT Freshmen

Transfer students

Continuing students



Students < 30 SCH

End of Spring Semester 2009



- 662 out of 2049 students ended their first year on Academic Probation or Suspension
- 32.3% of the population with < 30 student credit hours
- Approximately 20% retention to the next fall – that's 528 who are not.

ASSIST



- **Accelerated Student Support through Integrated Success Teams**
- This intervention focused on providing intensive support and instruction to participating students while simultaneously exploring the barriers faced by these students to perform well in their first year of college.



- The five main strategies incorporated in the 2009 program were
 - reinforcing reading and math content
 - integrating critical thinking and reflection in instructional activities
 - involving peer mentors to provide support to program participants during and after the summer program
 - providing consistent positive thinking and motivation to participants through diverse program activities,
 - obtaining feedback on program process from the participants and utilizing this feedback to modify program activities during the program

Results



- Almost 65% of the ASSIST 2009 program participants re-enrolled in fall 2009 at UTEP compared to the traditional fall enrollment rate of about 21% for this group of students.
- Forty-six percent of the ASSIST 2009 participants are were enrolled at UTEP for spring 2010.

Participant Feedback



- 57% of the ASSIST 2009 (n=16) reported initiating positive behavior change by the 4th week of the program.
- 100% of program participants reported an increase in knowledge and skills pertaining to utilization of campus resources.
- 64% (n=18) participants reported an increase in knowledge and skills related to reading and writing as a result of the program and,
- 89% (n=25) reported that they gained information related to study skills and strategies as a result of ASSIST 2009.

Self Reported Barriers to Success



- Inadequate preparation for transition from high school to college in terms of workload and interaction styles high school versus college instructors
- Difficulty in forming new social networks
- Inadequate study skills including time management and priority setting
- Issues related to family including lack of childcare
- Transportation issues including delays at the U.S.-Mexico border
- Financial need
- Medical/health problems

Steps / Summary



Research Questions

Data Points

Implications

Programming

Feedback

Results

Revise Research Questions

Get New Data Points

Revise Programming



Bachelor's Degrees Awarded 2003-2008

