

DCCCD Retention Best Practice Submission Form

Across the district there are many successful practices that contribute to the retention of students. As the district begins to develop a greater emphasis on its retention strategy, all locations are asked to identify and submit information about successful retention programs and activities. Please complete the following information on selected practices.

College/Location: **Eastfield College**

The Retention Best Practice is primarily supported by what college/location area:

Instruction _____ Student Success _____ Administrative X

Combination of areas: (Please list)

Contact Person: (Include contact information)

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Retention Best Practice Title: *Pathways: Broadening Access and Success of Underrepresented Groups in STEM Fields*

Retention Best Practice Area of Focus:

Math _____ STEM X Honors College _____ Other _____

Retention Best Practice Executive Summary: approximately 50 words (Please use additional pages for a detailed description)

The project is designed to increase access, student success, and undergraduate research opportunities while increasing the number of graduates, including women and underrepresented minorities, with degrees in STEM fields or transfer to STEM programs in four-year institutions. This project supports the study of science and generates enthusiasm about research through opportunities for: students to conduct laboratory and field research with professional scientists; student activities, faculty development and collaborative partnerships.

Please describe the evaluation measures utilized to support this initiative as a best practice.

The evaluation is multi-faceted and utilizes institutional data, participant surveys and analysis of performance factors. Retention is compared for the college at large, STEM students and a cohort of grant scholarship recipients.

Provide a summary of the results, including data (such as trend lines over time) to show how it impacted retention and is a best practice.

(below)

PROJECT PATHWAYS RETENTION REPORT

Tables II-A and II-B

The year to year retention rate for the pre-intervention year 2004-05 for Eastfield College students was 4.4% over the previous year. The retention rate for the intervention year 2006-07 decreased -1.2% for 2005-06 and was 0.6% for 2007-2008. Whereas the retention rate for the pre-award year 2004-05 for STEM students was 13.7%. Post award retention rates were 11.7% for 2006-07 and 27.1% for 2007-2008.

Comparison of Student Retention Rates Year to Year	PRE-AWARD		GRANT AWARD	POST-AWARD	
	Pre-Intervention Years		SET UP PERIOD	Intervention Years	
	03-04	04-05	05-06	06-07	07-08
EFC Fall to Fall Retention	3727	3892	3743	3697	3718
% CHANGE		4.4%	-3.8%	-1.2%	0.6%
STEM Fall to Fall Retention	489	556	538	601	764
% CHANGE		13.7%	-3.2%	11.7%	27.1%

Table II-A Comparison of Retention Rates (Eastfield College Institutional Research) September 2008

Table II-B compares the pre-award base years' average to the post implementation retention rates measuring fall to fall data. The 2007-08 college retention rate showed a decrease of -3% for the 2006-07 and a decrease of -2.4% for 2007-08. However, the STEM retention rate in the first year of intervention had a significant gain of 14.9%. Notable results were found (**46.1%**) in the 2007-08 fall to fall retention rate for STEM students.

STEP Scholars had a phenomenal retention rate, 91% and 93% for 2006/2007 and 2007/2008. Based on this data the STEM Scholar Program has had a major impact on the retention of STEM students who received the additional financial and support services. The added resources provided to these participants by NSF and Eastfield College have clearly contributed to a higher success rate amongst this cohort of students.

Comparison of Student Retention to Base Years Averages	PRE-AWARD Averages	POST-AWARD	
	Pre-Intervention Years	Intervention Years	
	03-05	06-07	07-08
EFC Fall to Fall Retention	3810	3697	3718
% CHANGE		-3%	-2.4%
STEM Fall to Fall Retention	523	601	764
% CHANGE		14.9%	46.1%
STEP Scholar Fall to Fall Retention		10 of 11	13 of 14
% CHANGE		91%	*93%

Table II-B Comparison of Intervention Years with Pre-Intervention Years Retention (Eastfield College Institutional Research) September 2008

What would be needed to replicate the practice at other DCCCD colleges?

1. Innovative, highly committed faculty and administrators willing to donate a lot of uncompensated time to the project;
2. Appropriate facilities and equipment
3. Extensive collaborative partnerships
4. Personnel with extensive grant administration experience
5. Review of best practices and compatibility with the institution

Cost to implement this practice (financial and human):

Cost would vary greatly depending upon existing facilities, equipment, institutional support and other funding. Annual cost of personnel and other resources approximately \$360-380,000 (does not include college support for computers, offices, and IT costs.) This is a very time intensive operation requiring 5-6 full time employees and a lot of extra hours for the administrator.

Please submit this form to Dr. Sharon L. Blackman, DCCCD Educational Affairs by October 24, 2008