The Drop Rate Improvement Program at Odessa College

By Natalie A. Kistner, Ph.D., ZogoTech with Carrie E. Henderson, Ph.D., Achieving the Dream

Challenge

Like many two-year colleges throughout the country, Odessa College's (OC) student outcome data revealed that a large percentage of students were withdrawing from courses, struggling to succeed in the courses they did complete, and ultimately, failing to earn a degree. Odessa's president, Dr. Gregory Williams, recognized that existing approaches were not working, and challenged his team to look inward and identify factors limiting students' course success.

Key to the decision to examine student achievement more carefully were OC's involvement in Achieving the Dream, which encouraged the use of data for decision-making, and OC's partnership with ZogoTech, which provided the software solution to make widespread use of data possible.

In 2010, Associate Dean for Arts and Sciences (now Vice President for Institutional Effectiveness) Dr. Donald Wood began using ZogoTech's data warehouse and analytics tools to drill into the institution's student outcome data, look at patterns over time, and identify performance gaps across different student groups. What he discovered was that course drop rates* differed significantly across instructors, regardless of the subject, course, time of day, level of rigor, or students' level of preparedness. The questions then became: why do course withdrawal rates differ by instructor, and what can we do to close the gaps?

* Course drop rates are the percent of students enrolled as of the census date who withdraw from the course as of the last day to drop.

Background

Since 1946, Odessa College has been serving the residents of Odessa and the Permian Basin of rural West Texas through online and on-ground courses in more than 45 associate degrees and 70 certificates. The college also offers dual credit, workforce training, and continuing education programs. Of the approximately 5,000 students who enroll at OC annually, the majority are under 24, female, Hispanic, and attending part-time. Further, roughly 30 percent are Pell grant recipients.

Odessa College joined the Achieving the Dream network in 2009. Achieving the Dream leads and supports a network of community colleges dedicated to student access and success. In the last decade, Achieving the Dream has built a network of more than 200 community colleges committed to helping more students, especially low-income students and students of color, complete certificates, earn associate degrees, or transfer to four-year institutions. Achieving the Dream guides and supports the colleges through coaching, peer-learning opportunities, and adoption of effective practices and policies leading to improved outcomes for all students.

Since 2003, more than 50 two-year colleges have used ZogoTech's data solution software to undertake analyses that had been difficult – if not impossible – to do previously, including longitudinal student cohort tracking and evaluating intervention effectiveness. The core of this solution is a data warehouse that integrates data from internal and external

sources and transforms those data to create the most relevant metrics community colleges need for monitoring student success, including persistence, course success, and graduation. ZogoTech provides access to the transformed data through custom tools that allow users throughout the institution to leverage data for decision-making.

Solution

To understand the differences in instructors' drop rates, Wood conducted a series of classroom observations and faculty interviews. He determined that drop rates were not a function of an instructor's teaching methods, but rather the instructor's relationship with students. The instructors with lower drop rates had what Wood describes as "a common thread of connectivity to their students" that distinguished them from their higher drop rate counterparts.

These findings led OC to implement the Drop Rate Improvement Program, which was designed to improve the instructor-student connection and close the gap between instructors with high drop rates and those with low drop rates. The program involves informing instructors of the best practices Wood identified through his analysis, and encouraging them to apply those practices in

their own classrooms, including:

- Interacting with students by name during the first week of a new term.
- Monitoring student behavior and progress and intervening when an issue arises.
- Meeting with students one-on-one and communicating routinely about their course performance.
- Becoming a "master of paradox" (i.e., maintaining a structured course while allowing for some flexibility).

Faculty support and committed leadership were key to the successful implementation of the Drop Rate Improvement Program. Also essential were the clear evidence of the role the faculty-student connection plays in course completion and the recognition that students must stay in class if they are to persist and eventually graduate.

Results

Following implementation of the Drop Rate Improvement Program in the fall of 2011, inclass retention rates increased from an average of 83 percent to 95 percent. Therefore, only 5 percent of the students who enrolled in a course at Odessa College each following semester failed to complete the course. These results held true regardless of gender, age, race/ethnicity, or Pell status.

Table 1: Sample of Instructor Drop Rates, by Instructor Type

		Historic (Three-Year Average)	Drop Rate Improvement Program (Fall 2011)
Experienced Instructors	Instructor 1	28.1%	6.7%
	Instructor 2	23.7%	9.7%
	Instructor 3	22.7%	15.1%
	Instructor 4	20.8%	9.2%
	Instructor 5	20.7%	8.1%
	Instructor 6	19.0%	7.6%
	Instructor 7	18.6%	13.4%
	Instructor 8	18.4%	5.5%
	Instructor 9	18.3%	15.1%
New Instructors	Instructor N-1	22.0%*	7.3%
	Instructor N-2	19.8%*	10.3%

^{*} first semester teaching

The program's effects are even more dramatic when comparing drop rates for individual instructors over time. In the first semester of the program, drop rates for "high-drop" instructors, which ranged from an average of 18 percent to 28 percent, declined to between 6 percent and 15 percent. In some cases, instructors' drop rates declined by as much as 20 percentage points.

The commitment to making data-informed decisions that led to the development of the Drop Rate Improvement Program formed the basis for other interventions at Odessa

College. Together, these various initiatives have positively affected student success outcomes institution-wide. Over the last six years, course success rates (students earning a grade of C or better) improved by 10 percentage points, while the number of yearly graduates has increased by 55 percent.

These results led Dr. Brad C. Phillips, Odessa College's Achieving the Dream data coach and president/CEO of the Institute for Evidence-Based Change, to state, "Odessa College's outcome data are the most impressive I have ever seen."



Community Colleges Count

