INSTITUTIONAL RESEARCH

Advancing IR capacity beyond compliance reporting at Tallahassee Community College, Tallahassee, Fla.

From “Strengthening Institutional Research and Information Technology Capacity through Achieving the Dream” by Rhonda Glover in the series Principles and Practices of Student Success

Tallahassee Community College’s (TCC) institutional research office spent so much time producing state and federal compliance reports that it had little time to conduct studies that could help the college improve the effectiveness of its programs and services. The college’s data-savvy president realized that a technological intervention to revamp the institution’s data systems was in order.

A new data warehouse and a strategic knowledge management system are changing the way the college uses and shares data. With five portals, 245 portal sites, a data mart, a data warehouse, and several data cubes in the system, TCC has greatly expanded access to student outcomes data for college personnel. The institution created a Web portal that allows members of the board of trustees to review student data during their meetings. Data cubes for early alerts, registration, academic history, and applications are operational, and a graduation data cube is under development. Each cube is a collection of specific data subsets relevant to its particular topic that gives users the option to analyze measures from multiple dimensions or perspectives; e.g., 2008 graduates by date of entry, race, and former high school. Data cubes generally provide summary level output as well as the opportunity to link to detailed records. Ultimately, these components will be connected to allow the college to track students’ academic experiences from application to completion and evaluate the impact of efforts to improve student outcomes. Although compliance reporting requirements have not been eliminated, IR staff members have advanced well beyond producing compliance reports and spend much more time conducting analyses to support performance improvement efforts and making data more readily available to end users.

Expanding capacity in both informational technology and institutional research at Cuyahoga Community College (Tri-C), Cleveland, Ohio

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Leaders at Cuyahoga Community College realized that they needed easier access to reliable data on their students. Although the institution was capable of retrieving data from its student information system, the reports took too long to generate, required a programmer, and sometimes produced inconsistent results. In Cuyahoga’s multi-campus environment, college leaders urgently needed consistency and a solution that would give them a “single view of the truth.” The college launched a cross-functional work group called the “intelligence council” to determine the information needs of key user groups. The college used this information to develop a business intelligence system with a data warehouse, called “One Institutional Intelligence” (OII). This gave the college the data it was seeking to support planning, decision-making, and its Achieving the Dream improvement work. For example, the institution now has
the capability to identify, within individual courses, the points at which students drop out. The college uses these data to improve student success and retention by strategically targeting the timing of its interventions.

A new data warehouse and accompanying reporting tools also added capacity in the college’s institutional research department. The department created extensive longitudinal student cohorts and developed an exemplary evaluation plan to track each intervention strategy. The department has now added the capacity to more quickly generate data reports and analyses. IR staff also developed an inventory of 30 reports that users can customize by selecting their own parameters (terms, campus, course, etc.). One example is a report designed for instructional managers to track course and pre-requisite completions.

These data help managers schedule courses and numbers of sections to meet student scheduling needs in upcoming semesters. Additionally, the expanded data retrieval tools allow IR staff to spend less time creating individual queries and more time helping others understand the data and how to use the new reporting environment.

Benefits of the new intelligence system are many. One college administrator said that the college developed this knowledge management system on the premise that consistent data will yield better information and knowledge in the long run. Cuyahoga also discovered that it is able to generate knowledge about what does and does not work for students at a much faster pace now that the warehouse is operational. Several complex queries that once took an hour to process are now performed in four seconds. Most significantly, the college took action to close its data gaps and is now operating with consistent, timely, and easy-to-retrieve data to advance its efforts to help more students succeed.