NASCIO 2018 State IT Recognition Awards

Title: Enhancements to the Banner Student Information System

Category: Enterprise IT Management Initiatives

State: Georgia

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EXECUTIVE SUMMARY

The University System of Georgia (USG) sought to address two key issues currently challenging our nation and its dominant economic and technological position in the world: the need to expand the number of students pursuing careers in science, technology, engineering and mathematics (STEM) and the rapidly rising costs of higher education.

Graduates with STEM degrees remain in high demand. More than 60 percent of job recruiters were most interested in hiring graduates with STEM degrees in 2017 while only 23 percent of graduates earned STEM degrees ***(Internet Collaborative Information Management Systems, https://www.icims.com).***

Meanwhile, the cost of higher education has increased more than 538 percent since 1985. In comparison, medical costs grew by 286 percent and the consumer price index by 121 percent. That means higher education is 4.5 times more expensive than it was 30 years ago (Bestvalueschools.com). Over the past 35 years, college tuition at public universities has nearly quadrupled to $9,139 in 2014 dollars. If car prices had grown as quickly as tuition over the same period, the average new car would cost more than $80,000 (The New York Times, "The Real Reason College Tuition Costs So Much," April 4, 2015).

In response, the USG implemented two enhancements to its Banner Student Information System (SIS). The first gives greater weight to approved STEM courses when determining a student's eligibility for state-sponsored scholarships, and the second makes no-cost or low-cost eTextbooks more readily available to students through the Banner SIS.

USG officials are already seeing positive results. Student enrollment in the USG's STEM-related programs increased 4 percent from FY 2015 to FY 2017, and the number of STEM-related degrees awarded during the same period increased 14 percent. Meanwhile, the Affordable Learning Georgia initiative has saved students more than $31 million in textbook costs to date, and the initiative is poised to grow in coming years. Only two years ago, the USG was ranked No. 1 in the nation by OpenStax at Rice University, a national publisher, for saving students the most money through free eTextbooks.

The USG's efforts to make higher education more accessible to more students are certainly broader than these two enhancements to its central Banner SIS, but they demonstrate technology's critical role in achieving important goals.

PROJECT NARRATIVE: CONCEPT

In today's technology-driven world, the demand for college graduates with degrees in the fields of science, technology, engineering or mathematics (STEM) is increasing dramatically. Competition among nations in the global marketplace is relentless and can only intensify as nations feverishly work to outpace each other in the pursuit of next-generation super computers, solar technologies and artificial intelligence. STEM education is considered by many business and academic leaders to be the lynchpin to ensuring the United States maintains its position as the world's economic and technology leader.

While the demand for STEM graduates grows, so does the cost of higher education. These costs may prevent many qualified students from entering a college or university or from completing their degrees. Many graduates often owe tens of thousands of dollars in student loans.

To address these issues, the Georgia General Assembly enacted HB 801 in 2016 to encourage more students to pursue STEM education. The legislation revised Georgia's merit-based HOPE and Zell Miller scholarship programs by applying an additional 0.5 weight to STEM-eligible courses, thereby increasing the cumulative grade point average for students enrolled in the courses. To implement the legislation, the University System of Georgia (USG) enhanced its Banner Student Information System (SIS) to correctly identify approved STEM courses, apply the appropriate weights and add the weights to students' grade point calculations, which determine eligibility for HOPE and Zell Miller scholarships.

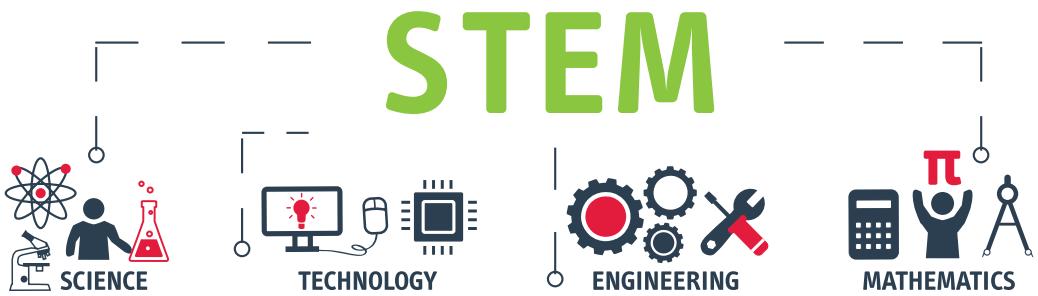
The USG didn't stop there. It also launched the Affordable Learning Georgia initiative, which involved further enhancements to the Banner SIS to provide students with access to no-cost or reduced-cost online textbooks.

PROJECT NARRATIVE: SIGNIFICANCE

The USG is part of the community in each of Georgia's 159 counties. It comprises 26 higher education institutions, including four research universities, four comprehensive universities, nine state universities and nine state colleges. The USG also includes the Georgia Public Library System and the Georgia Archives.

Through its 26 institutions, the USG serves more than 320,000 students and employs more than 47,000 people. Its economic impact totals $15.5 billion annually.

The USG's Information Technology Services (ITS) implemented HB 801 by enhancing the Banner SIS so it correctly identifies approved STEM courses, applies the appropriate weights and adds the weights to students' grade point calculations for HOPE and Zell Miller scholarships.



ITS undertook an additional enhancement to support Affordable Learning Georgia, an initiative providing students with access to no-cost or reduced-cost textbooks online through the Banner SIS. Courses for which these textbooks are available are identified by an attribute code, and the information is easily visible to students when they use Banner Self-Service to search the course catalog or schedule classes. The availability of the textbooks is also advertised to students during registration. ITS developed a business process to describe the necessary steps in the Banner SIS, thereby making these designations visible to students and easy to find in the class registration system.

The success of Affordable Learning Georgia results from USG faculty and administrators working together to:

- Make use of USG grants to provide free textbooks, formally called Open Education Resources (OER) and often referred to as “eTextbooks.”
- Redesign courses to take advantage of free and low-cost materials in place of costly textbooks.
- Use OER in all USG’s eCore online courses and continue to expand the use of free eTextbooks in the classroom.

The enhancements directly support the priorities of the USG’s chancellor, which include:

- Ensuring more Georgians enter the workforce with a college degree.
- Making college more affordable and accessible for Georgians.
- Finding opportunities to operate more efficiently and control costs.

They support Governor Nathan Deal’s goals to increase the percentage of Georgians who hold a postsecondary credential and to strengthen the state’s HOPE scholarship program, one of the most generous in the nation. The program helps keep Georgia’s best and brightest in the state; students who graduate in Georgia are more likely to begin their careers in Georgia, which strengthens the state’s workforce and promotes economic growth.

The enhancements further support Governor Deal’s High Demand Career Initiative, which engages private-sector leaders in discussions about their workforce needs, including courses, majors, degrees, certificates and skill sets.

PROJECT NARRATIVE: IMPACT

Student enrollment in the USG's STEM-related programs increased 4 percent from FY 2015 to FY 2017, and the number of STEM-related degrees awarded during the same period increased 14 percent.

University System of Georgia
STEM-related Degrees and Awards Conferred

DEGREE LEVEL	FY 2015	FY 2016	FY 2017
Under 1 Year Certificate	280	333	456
1 Year Certificate	162	139	100
Associates	13	25	31
Career Associates	1,499	1,396	1,292
Bachelors	12,308	13,133	13,950
Advanced Certificate	100	135	208
Masters	3,857	4,458	4,836
Education Specialist	221	225	266
Doctorate	990	1,023	1,073
First Professional	537	546	522
TOTAL AWARDS	**19,967**	**21,413**	**22,734**

Meanwhile, Affordable Learning Georgia has saved students more than $31 million in textbook costs to date, and the initiative is poised to grow in coming years.

Only two years ago, the USG was ranked No. 1 in the nation by OpenStax at Rice University, a national publisher, for saving students the most money through free eTextbooks.

Textbooks and course materials average $1,250 per student per year or about $5,000 over four years. Replacing even one or two textbooks each semester with OER can result in an immediate monetary impact for students.