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Intra-Georgia Registration Sharing System (INGRESS)

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Project Initiation and completion date

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Project completion date: November 1, 2010

Organization and primary point of contact

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Business problem Description

The University System of Georgia (USG) needed a scalable solution that would allow students to enroll in online courses across multiple institutions while leveraging existing ERP resources. Additionally, the solution needed to comply with USG information security policies in order to ensure the privacy of confidential student information.

Business solution description

INGRESS is the multi-institution registration tool for the USG. The primary goal is to deliver a scalable solution that accommodates decentralized registrations among multiple institutions while supporting a centralized seat-management process. INGRESS is unique in that it is the only application of its kind that integrates both Banner systems and a learning management system (LMS) to enable multi-institution registration. In addition, INGRESS leverages existing functionality within the institutions' Banner systems and takes advantage of current campus business processes to the greatest extent possible. By facilitating the sharing of seats in courses among multiple institutions, INGRESS enables USG institutions to build capacity and enhance the delivery of services to students.

INGRESS is an innovative tool with four main features:

- Enables students to register, drop, withdraw and pay within their home institution Banner systems for classes offered at other USG institutions.
- Facilitates centralized management of course seats in shared course sections
- Provides secure collection and distribution of attendance verification and final grade data
- Automatically creates enrollments in Blackboard Vista for students registered in shared course sections and for faculty teaching these sections

INGRESS is hosted by USG Information Technology Services, and the application is written in PHP development language. The user interface is accessible as a Powerlink within the Blackboard Vista 8 LMS. The INGRESS database connects with the host institution's Banner database through a secure connection. Campus Registrar's Office staff and faculty access the INGRESS Faculty and Administrative console by logging into the LMS. The Faculty console includes a consolidated class roster designed as a web form for data entry of grades and attendance. The Campus Administrator console provides Registrar staff with access to a series of enrollment reports. Using a special modification for Banner, course section and student registrations are extracted from Banner on a timed schedule and transferred to INGRESS for processing.

The key to the multi-institution functionality of INGRESS is the centralized course seat management mechanism. As students register in Banner for collaborative online courses, INGRESS dynamically balances the available course seats across multiple institutions and allocates additional seats to each participating school based on a predefined formula. INGRESS automatically creates the online course section in the LMS and enrolls students and faculty in these sections based on registrations. As students register, drop and withdraw from the collaborative course sections, INGRESS processes these transactions to update seat availability across multiple collaborating institutions. In addition to registration services, INGRESS securely collects and distributes attendance verification, midterm and final grade data to each student's home institution Banner system.

Benefit to government

The USG licensed a commercial product in 2007 to provide multi-institution registration functionality. However, this system proved to be cost-prohibitive and ultimately difficult for students, faculty and back-office personnel.

INGRESS has resulted in an estimated annual cost savings of $1.3 million to the state of Georgia. More than 5,000 course enrollments were processed by INGRESS for fall 2011. Survey results from INGRESS campus support staff indicate a greater satisfaction with multi-institution registration since migrating to INGRESS. The workload associated with supporting students and faculty in INGRESS-processed courses has decreased in comparison to the commercial multi-institution registration product.

2

In addition, faculty teaching online collaborative courses that include students from multiple institutions now have a user-friendly mechanism to securely send attendance and verification to each student's home campus for financial aid processing and final grades at the end of the term.

INGRESS is scalable in order to manage large numbers of course registrations, and it is compliant with Family Educational Rights and Privacy Act (FERPA) regulations.

The total number of USG institutions using INGRESS has increased from 8 to 15 as of spring 2012. These 15 institutions are collaborating to share online courses to meet enrollment needs. Three additional institutions have submitted requests to implement INGRESS in fall 2012.

The number of online collaborative programs using INGRESS for registration processing now stands at a total of 14, including nursing, teacher education, business and information technology.

Benefits to customers

Through INGRESS, USG institutions offer more than 190 course sections shared among 15 institutions. More than 5,000 course enrollments were processed by INGRESS for fall 2011. Students benefit from the collective expertise of faculty from multiple campuses, allowing them the opportunity to enroll in classes that may not be available on their home campus. INGRESS gives them a way to bypass the administrative overhead associated with typical transient enrollment in order to aggregate all course credit within their home Banner system.

In addition to maximizing USG resources and facilitating collaboration among institutions, the possible benefits of INGRESS for promoting college completion should not be overlooked. The ability for students to aggregate credit hours within their home Banner systems for courses taught by other institutions is a major benefit for students receiving financial aid. Moreover, sharing course sections increases the number of available seats in both high-demand and low-enrollment courses. These strategies may serve collectively to improve retention and completion rates.

Best practices employed (e.g., governance, relationship management, communication and marketing, etc.). That is, what business practices contributed to the success of this project, helped maintain commitment, funding and adoption.

One of the most important best practices that has contributed to the success of INGRESS has been the multi-disciplinary team collaboration among the various service areas within ITS. To promote this communication, we created a multi-disciplinary INGRESS Service Team, which is comprised of representatives from the GeorgiaBEST student information team, GeorgiaVIEW Learning Management Systems group, Integration and Deployment Services, and Collaborative Program Services. The team meets on a regular basis to review issues, engage in collective problem-solving and planning. In addition to our internal collaborations, ITS conducts a monthly INGRESS Web conference attended by the functional staff at the participating campuses. The purpose of these meetings is to facilitate the exchange of best practices across the institutions and to provide a forum to update users on new releases to the INGRESS software product.

Describe why and how this collaborative effort is transferrable to other jurisdictions.

The INGRESS application is written in an open-source PHP language that may be adapted for most student information systems and learning management systems. Therefore, higher education online consortiums should be able to utilize the INGRESS logic to develop a custom solution to support multi-institution registration.