CASE STUDY: ONLY CONNECT
CREATING AN OPEN MESSAGING SYSTEM FOR STAFF-STUDENT COMMUNICATION

SUMMARY

The Only Connect project created a new, open communications environment with the aim of strengthening the bonds between individual learners and the university through the provision of better support and learning information. The project developed a message brokering service to deliver information about timetable changes to students via their preferred channels, whether email, SMS, RSS or through widgets and gadgets. The new communications environment, based on the institutional eCommunications and engagement strategy, is part of a wider university change programme, trying to use new technologies and person centred approaches to address some of the challenges of the changing student body and curriculum.

THE CHALLENGE

The University of Bolton has a diverse student body with a high percentage of part time, working and work based students. These students have only limited connections to campus, perhaps visiting only periodically to attend seminars or to use the library.

The majority of University processes assume that all students are on campus regularly; hence campus based communication is the norm: notices on doors and notice boards, messages passed on via tutors, University emails and VLE messages. Communication is usually through a single channel, based entirely on the preference of the individual academic or administrator composing the message. This presents new challenges for Bolton’s Professional University model wishing to communicate effectively with students who are not based on campus or who visit only periodically, and seeking to avoid the unacceptable situation where a work-based student travels across the city only to discover that a lecture has been cancelled.

THE SOLUTION

The Only Connect project team interviewed a range of stakeholders involved in student support and data management, including school admin staff, principle lecturers and student liaison officers, to build use cases of communications with students. An audit was also undertaken of existing information systems and processes that produce student communications. Examples include: the student record system prompt to re-enrol and the library system notifications on book loans. This knowledge was used to inform the design considerations for the project and an exemplar was chosen regarding the process of notifying students of timetable changes.

The Open Messaging system design was based on the principles of service orientation and is made up of a collection of web and database services, including: i) a preference service, to enable students to select their preferred channel for message delivery, ii) a messaging service that provides a communication brokerage, transforming messages issued via one channel to the preferred channel selected by an individual student for a specific information type, and iii) application connectors, that link in core systems, such as the Student records, library or timetable data. Services were designed using open standards that maximise re-use, reconfiguration and sharing.
RESULTS AND BENEFITS

The Open Messaging system has been piloted in one school at the University of Bolton and early results suggest that it has vast potential to improve both administrative process efficiency and enhance the student experience, especially for part-time, working and work based students.

The project has produced a number of reusable, interoperable software components and web services. The Staff Communications Portal enables academic and support staff to send communications to groupings of students. These may be a module cohort or other groups which the school or service builds. Groups are built from student ID numbers and names – contact details are not required as these are pulled from the student record system. The Student Preference Portal allows students to log in and select their preferred communications channels for different message types. The Message Destination Manager receives messages intended for groups of students and checks the user preferences to determine which channels are to be used for delivery. Finally, the Message Broker sends messages to email addresses, mobile phone numbers or RSS feeds based on the information sent to it. This is independent from student preferences which are identified in the message destination manager. It was developed in this way to enable use by other applications which do not require the checking of user preferences.

Additionally, this service oriented approach has allowed other services to be developed that were not originally planned. For example, a simple messaging portal has been added to allow students or groups of students to be contacted by staff, without the need to know contact details or preferences. This is also being developed as an emergency announcement service for critical events.

LESSONS LEARNED

The Only Connect project identified the need for a centralised system for administration and academic staff to send ad-hoc messages to students, and it is anticipated that the Open Messaging system will become the messaging hub for other university systems which have communications outputs that talk to students.

The Only Connect project demonstrated the viability of a shift to a user-centric communications service where users can take control of the method of information delivery. Lessons were learned relating to technical service orientated development, institutional strategy development and regarding the need to ensure that users are not deluged with information, leading them to ‘disconnect from the system’.

Indeed such lessons learned were incorporated into a new university e-Strategy that aims to harness the use of personalised technologies and model, test and evaluate new generation technology-driven solutions which inform the university’s drive towards embracing user technologies.

FURTHER INFORMATION

Further Only Connect project reports, documentation and outputs are available from:
http://onlyconnectbolton.wordpress.com/

JISC IRET programme
http://www.jisc.ac.uk/whatwedo/programmes/emergetech.aspx

JISC IRET supporting studies and synthesis project
http://jisciret.jiscinvolve.org/

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