

CASE STUDY G: Early Alert at the University of New England

"... we are striving to be a university that sets the standard for social inclusiveness and access for all to higher education"

(University of New England, 2011, p. 20)

The University of New England, New South Wales, Australia has around 18,000 students, of whom about 12,000 are undergraduate and 6,000 postgraduate. The proportions of part-time (55%) and external or mixed mode (77%) undergraduates are very high compared to other Australian institutions. Many students spend a large proportion of their time off campus. Also, the proportion of mature undergraduates (59% over 25 years of age) and the proportion of students from the indigenous population (2%) are high compared with the sector. 20% of students are of low socio-economic status. (Nelson and Creagh, 2013, p. 90)

Key takeaway points

- » The idea of student wellness is central to this system. It is an enhancement model, not a deficit model
- » Learning analytics is part of a wider ecosystem of engagement with students via social media to foster a sense of community amongst students who may be studying part time or at a distance as well as on campus
- » This was a staged implementation, developed partly in-house and partly with an IT solutions provider, beginning with a relatively low cost system based upon students indicating their emotional state via a set of 'smilies' on the student homepage
- » Students can opt out of the analytics and interventions if they wish

Rationale

The main driver for the development of this system was the need to identify students who were struggling, so they could be offered timely support. Prior to this, despite the high quality personal support and learning support provided by the University, many students were not aware of these services until it was too late. Staff did not have timely or systematic evidence to decide when to offer support. Identification of students who were at risk tended to occur after they had failed to submit an assignment or attend a class. It was also difficult to observe the many students who were off-campus. Support was offered or accepted inconsistently rather than part of a baseline provision.

The aim was to develop a "dynamic, systematic and automated process that would capture the learning wellbeing status of all students intra-event." (Leece & Hale, 2009)

The initial project

Early Alert is the third phase of implementation of a student support system. The first phase was the e-Motion project, trialled in 2008, which gathered self-reported information about happiness from students via emoticons and a free text box on each student's home page on the online student portal. The second phase, the Automated Wellness Engine (AWE), trialled in 2010, incorporated the emoticons data into a wider system which analysed thirty-four triggers to identify students in need of support. Early Alert incorporates all these features alongside extensive use of social media including Facebook, Twitter and Flickr. The aims are to encourage peer-to-peer student networking, disseminate information and connect support staff with the students on a daily basis. Early Alert has the ethos of gathering and sharing emotional intelligence through a variety of channels, to encourage a sense of belonging to a community. The dashboard for student support staff is just one aspect of this programme.

Dashboards and interventions

e-Motion: Every student has a set of emoticons and a text box on their online student portal page. They can opt in to record how they are feeling each day (happy, neutral, unhappy, very unhappy), linked to their current module. All students recording a negative emotion are contacted within 24 hours by the Student Support Team. 17%-20% of students recording 'unhappy' or 'very unhappy' are case managed by the team. Of those, 33% require multiple contacts.

The Vibe: Students' comments in the text box alongside the emoticons are aggregated into a word cloud, which is updated every ten minutes, so the entire student cohort can see what their peers are saying. This word cloud acts as a barometer for student wellbeing and normalises student experience, because the larger the word, the greater the number of students experiencing the same thing. The text entries on each student's portal page also give the support team a daily update on the issues and concerns of the students.

Automated Wellness Engine (AWE): In the second and third phases of the implementation, the AWE analyses live data from seven corporate systems every night. Each morning, the student support staff dashboard is updated to identify which students need support. An automated email is used in the first instance, followed by phone calls and other support as necessary.

Data sources and indicators of engagement

The Automated Wellness Engine (AWE) analyses data from 34 triggers identified as indicating 'at risk' behaviour. These triggers are based upon behaviours, not demographics.

Data sources include e-Motion student input, class attendance, previous study history, prior results, assignment submissions, access patterns for student online portal and other university websites. Previous

AWE scores are also included. Both daily time series and trend analysis are used to assess a score for intervention. The highest weighted triggers are the students recording 'unhappy' or 'very unhappy' in emotion, not accessing the student online portal for more than 40 days or not completing a unit in a prior semester. Middle ranking triggers include: failed a unit in a prior semester, previously identified as high risk, involved in 6 or more course units in a teaching period, more than two assignments late in this teaching period, and enrolled in a high attrition course (Leece and Hale, 2009).

Students who do not want contact do not opt in. Most students who do opt into the e-motion feedback respond positively to offers of support.

Findings and outcomes

During initial trials of the AWE, attrition was cut from 18% to 12% (Davis, 2015). Qualitative feedback from students showed that Early Alert was successful in increasing the students' sense of belonging to a community, and sharing their experiences of study increasing their motivation. The Automated Wellness Engine project and Early Alert have received several awards from Australian national bodies in recognition of the innovative approach and its transferability to other organisational settings.

Leece and Campbell (2011) report that feedback from students has been overwhelmingly positive and is reflected in comments, such as this one from a student who was contacted as a result of emoticon feedback:

"Thank you for your concern and feedback. I now understand that if I am struggling that there will be someone looking out for me during the coming semesters."

(External Student, 2009)

They also report that other aspects of the system are successful in motivating students with automated feedback to the cohort, rather than direct staff intervention:

"I love watching the vibe on myUNE (the little ball of words). ... The biggest word today is 'finished' the second biggest are exam, essay, tired, behind, stresses ... seems I'm not the only one swept up in catching up with all the forgotten assignments."

(Student, 2010)

The value of learning analytics within a wider social media strategy is an important feature of Early Alert. A sense of community and the presence of support staff as routine (not just for times of crisis) is built through multiple channels:

"Just wanted to drop by and say thanks for the blog! It's an absolute lifesaver. I was feeling very overwhelmed until I read through the page yesterday, and clicked on a few of the links. Now I am super confident and wonder what I was worried about in the first

place. I especially liked your video of the different people at UNE, giving first timers advice."

(New External Student 2011)

References

- Davis, D. (2015) Altis Consulting: HE Information Management Specialists. Presentation to the UK Learning Analytics Network, Edinburgh, UK, April 2015.
<http://analytics.jiscinvolve.org/wp/2015/05/13/notes-from-the-learning-analytics-network-event-in-edinburgh/>
- Leece, R., Campbell, E. (2011) Engaging students through social media. *DE Quarterly*, No 8.
<http://archive.dehub.edu.au/wp-content/uploads/2011/05/DEQuarterly-Winter-2011-Edition-No-8.pdf>
- Leece, R., Hale, R. (2009) *Student engagement and retention through e-Motional intelligence*.
http://www.educationalpolicy.org/events/Rog/PDF/Leece_E-Motion.pdf
- Nelson, K.J., Creagh, T. (2013) *A good practice guide: Safe-guarding student learning engagement*. Queensland University of Technology (QUT), Brisbane, Australia. <https://safeguardingstudentlearning.net>
- University of New England (2011) *University of New England Annual Report*. University of New England.
<http://www.une.edu.au/about-une/annual-reports>