

Monitoring engagement and progress: towards a systematic strategy of communicating a message of care

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The University of Otago is committed to enhancing student retention and academic success over the next few years through the development a systematic programme of interventions. It seeks to do this through research-informed approaches and evidence-based evaluation. To this end, a first pilot was undertaken to test the utility of some of the possible indicators of first-year students' non-engagement in the first semester and their possible impact on the first semester academic performance. The findings of this pilot suggest that there are indeed some indicators that predict Grade Point Average at the end of the first semester. Further pilot interventions are planned for this year. The overarching principle in our approach is to avoid the discourse of blaming students, but to communicate a message that "At Otago we care". This presents both challenges and opportunities.

Background

Interventions to enhance retention over the last few decades have taken many different forms (see e.g. Kift, Nelson, & Clarke, 2010; Nelson & Kift, 2009; Nelson, Kift, Humphreys, & Harper, 2009). These interventions typically are a combination of early identification of students at risk and transition-focused approaches.

Early identification of students at risk

One well-researched intervention is data-based early identification of first-year students who may be at risk of failure or under-performance, due to known risk factors, before they begin their studies (Dancer & Fiebig, 2004; Mallik, 2011; Mallik & Lodewijks, 2010; Nelson, Clarke, Kift, & Creagh, 2011). These may include pre-entry characteristics, such as high school academic attainment or particular tertiary entry pathways (Clark, van der Meer, & van Kooten, 2008; Mallik & Lodewijks, 2010).

A second intervention strategy uses a lack of engagement is once students have started their studies. This can be assessed by lack of Learning Management Systems access, poor class attendance and poor engagement with assessment (Campbell & Oblinger, 2007; Newman-Ford, Lloyd, & Thomas, 2009). Important factors of this type of intervention are timely and accurate identification of these disengaged students. This could be done by teaching staff monitoring the LMS system data, maintaining tutorial attendance records and monitoring students' performance on first assessments.

Transition-focused approaches

Transition-focused programmes or approaches take different formats, from extra-curricular, co-curricular to embedded approaches in programmes or specific papers. Extra-curricular programmes include academic orientation activities that are provided for students outside of their chosen study programme(s). These are typically aimed at induction into the world of a university student, which can be social, academic or both. The range and diversity of these activities are many (Kift et al., 2010; Nelson et al., 2011). For example, at our university, all

first-year students are invited to Academic Orientation presentations and students who come into university through the 'special admissions' pathway (without formal high school qualifications and are over 20 years of age) are invited to attend a New Skills course in orientation week.

A well-established and well-researched co-curricular approach is the Peer Assisted Study Sessions programme (PASS). This particular programme is focused on assisting first-year students in making the academic transition and students becoming familiar with successful study habits in higher education. Research into the effectiveness of PASS suggests that in many cases participation in this programme has a positive effect on both academic success and retention of first-year students (Blanc, DeBuhr, & Martin, 1983; Bowles & Jones, 2004; Dawson, van der Meer, Skalicky, & Cowley, 2014; Martin, 1983; Martin & Arendale, 1993).

A central message of “We care”

An overarching philosophy of these interventions is that we do not assume the lack of student engagement is their fault. That their poor engagement is due to 'laziness', a 'lack of motivation' and that 'they didn't prepare themselves for university while at school'. We explicitly distance ourselves from a discourse of 'blaming' students and assist in developing help-seeking behaviours, 'it's OK to ask'. Students' transition into the first year of a new educational environment can be overwhelming for students and produce a complex range of feelings, experiences, behaviours and responses (Kift, 2008; Kift & Field, 2009; Kift et al., 2010; Krause, 2005; Nelson et al., 2011; Nelson & Kift, 2009; Sotardi et al., 2016; van der Meer, Jansen, & Toorenbeek, 2010).

Whilst engaging in an intentional and systematic approach to supporting students in this transition, we also want to be explicit in communicating our rationale for doing so. Key messages may sound something like the following:

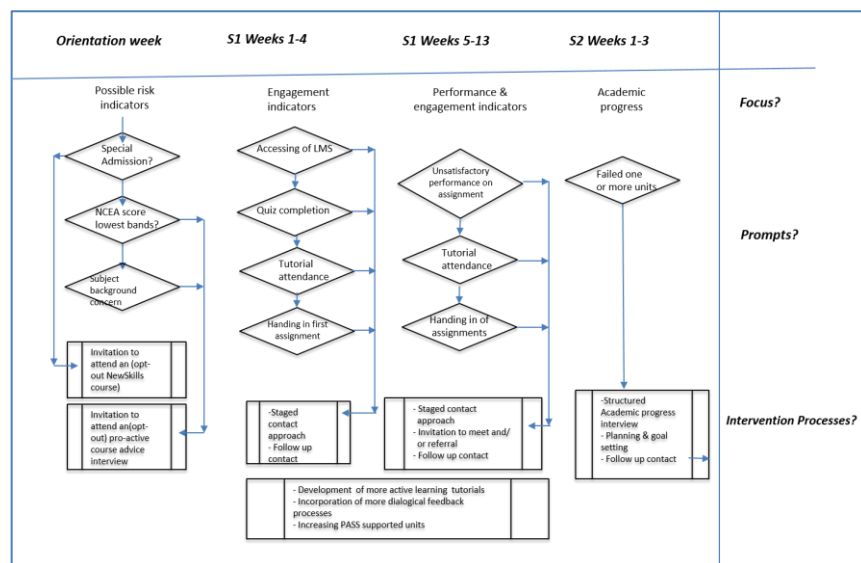
- “Here, at the University of Otago we care about students – we want each student to have a chance to be successful”.
- “Many students at some point in their university career will benefit from good advice and/or support – being open and willing to accept advice/help is a sign of strength”.
- “There is wealth of research about what helps students in their first year at university to be successful. The reason we may contact you (e.g. if you have not completed an assignment, or if we are concerned about you as you missed a tutorial) is because at Otago we care about students and we want you to be successful”.

In consultation with various stakeholders or interested parties, we will aim to establish a clear protocol for student contact, structured data gathering about any contact with students, and the development of semi-structured scripts for interviews with students relevant for the different stages of intervention.

A systematic strategy

This university would like to come to a point whereby we strategically invest our efforts in interventions that are most effective. Over the next few years we intend to pilot various interventions that are relevant for the context of this university, and aim to develop means to assess their effectiveness. The key aspects of the full project approach as currently conceptualised, are depicted in the following diagram.

In 2017, we piloted an intervention before the semester starts with identified groups of at-risk students, based on analysis from previous years' paper results. Factors include students who did not have the ideal school prerequisites for their chosen course, or who were too ambitious in the number and choice of courses (units, papers) based on their prior achievement. This intervention will aim to be a friendly and constructive student-advicing meeting.



A second planned intervention will be a more structured approach to interviewing students who have failed more than half of their course/units at the end of the first semester. Although some of this is happening at the moment, too many students fall between the cracks, there is no structured approach to the interviews and there are no clear follow up procedures. Also there is no a shared understanding of the key message of 'care'. The development of clear protocols and scripts is essential part of this intervention.

Although most of the planned actions are respond to student indicators proactively, there will also be some pre-emptive initiatives. In one 'Division' of the university, the PASS programme will be expanded so that more courses are supported and professional development opportunities will be aimed at encouraging more first-year courses to adopt active learning approaches in tutorials, dialogical feedback processes (Boud & Molloy, 2013), and peer learning opportunities. A specific resource is being developed for this purpose. Tutors will also be encouraged to record students' attendance.

Findings from the first stage pilot.

In 2016, sixteen courses first-semester participated in a pilot to identify lack of early student engagement (N=977). This was assessed through monitoring students' general engagement with the Learning Management Systems (LMS) and their engagement with a LMS-based survey within the first three weeks of the first semester. A temporary staff member contacted students who did not access the LMS. Later in the semester she also made contact with students identified as at-risk by not attending tutorials or handing-in their first assignment

Multiple hierarchical regression revealed that 36% of the variance was explained with a clear indication that the proxy indicators for non-engagement did indeed predict a lower first semester GPA. Controlling for high school scores, the results suggest that non-engaged students may have been academically less strong upon entry. However, the model still predict a lower GPA of about 7 marks for students who had referred to the retention officer, even after controlling for academic ability at point of entry. The results for both models, whether

controlling for prior academic ability or not, suggest that students who attended PASS sessions for at least one of their courses, and students who lived in residential colleges, had an overall better performance. In model 2, controlling for high school scores, students who would attend 12 weekly sessions of PASS in one unit of study were predicted to gain over 5 marks in their GPA score in the first semester. For some academically weaker students this could mean passing a course (unit/paper) of study or not.

Table 1: Results of multiple hierarchical regression with high school scores, Model 1, and without high school scores, Model 2.

Predictors	Model 1 school				Model 2			
	Unstandardized B	Std. Error	Standardized Beta	Sig.	Unstandardized B	Std.	Standardized Beta	Sig.
(Constant)	64.12	18.53		0.00	5.25	16.18		0.75
Domestic/international	-16.42	11.55	-0.05	0.16	-7.50	9.87	-0.02	0.45
English first language	12.17	4.74	0.10	0.01	5.27	4.06	0.04	0.20
Gender	1.69	1.13	0.05	0.14	0.67	0.96	0.02	0.49
Age	-0.26	0.78	-0.01	0.74	1.81	0.68	0.08	0.01
Decile school	1.11	0.97	0.04	0.25	0.20	0.83	0.01	0.81
Total School Roll	0.00	0.00	0.01	0.90	0.00	0.00	0.01	0.82
Accommodation	6.50	1.59	0.18	0.00	2.95	1.37	0.08	0.03
Local student	2.29	2.05	0.05	0.27	-0.11	1.76	0.00	0.95
PASS sessions	0.50	0.15	0.12	0.00	0.45	0.12	0.11	0.00
Survey completed	5.97	1.13	0.19	0.00	4.08	0.97	0.13	0.00
Contacted by officer	-11.49	2.18	-0.18	0.00	-7.47	1.88	-0.12	0.00
High school scores					0.10	0.01	0.52	0.00
Adjusted R-Square	.12 F=10.63				Adjusted R-Square .36 F=37.50			

Challenging questions to explore

- Are we being overly optimistic in wanting to change the discourse to one of care rather than deficit given the traditional nature of an established university?
- How can we persuade academic/general staff to take on more of a caring student centred approach and buy into a monitoring role? This is in the context of many competing demands in the current academic context?
- How could we assess the impact of these interventions other than just GPA and retention rates?

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