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Dobozy, E., Edith Cowan University, Australia
‘Plan your study around your life, not the other way around’: How
are Semi-Engaged Students Coping with Flexible Access?

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ABSTRACT

Higher education ad campaigns that promote flexibility of study arrangements are gaining momentum in Australia and elsewhere. Edith Cowan University (ECU) acknowledged the competition between prospective students’ study time, paid work and/or family commitments with its slogan “Plan your study around your life, not the other way round”. ECU’s promotion of ‘flexibility’ is understandable in the current competitive and market-driven economic climate. However, what are the consequences of universities becoming so reactive and responsive to the demands of ‘paying customers’ and market pressures? What is the price of flexible access? This paper will analyse the rates of academic success of a sample of first-year teacher education students and their patterns of engagement. Although tentative at this point, the results of this preliminary study show that while ‘flexible access’ is desired by many, some students are not attending lectures and are not taking advantage of audio recording provisions. Thus, it is inferred that some first year students are not coping with flexible access provision. Following this line of analysis and discussion the conclusion is made that universities have an ethical obligation to assist students improve their engagement levels, especially in first year.

INTRODUCTION

It is widely recognised that student expectations of higher education provisions are increasing as students anticipate ready access to course materials in various forms, flexible course structures, recordings of lectures, extensive assignment support and feedback, speedy assignment returns, and ready access to lecturers and tutors (James, 2007; McInnis, James & Harvey, 2000; McInnis & James, 1995, Turnbull, Nettelbeck, Ward, LeCouteur, Sarris, Strelan, Crisp, Palmer & Schneider, 2006). As today’s university students’ expectations of university services intensify, a growing number of teaching staff raise concerns about student engagement and motivation levels, students’ time-on-task and presence in lectures, tutorials or workshops (Devin, James & Grigg, 2007; Goodyear, 2007, Kuh, 2003, McInnis, 2001). Universities feel under pressure to respond to student expectations (e.g. Turnbull, *et.al.*, 2006; Ipsos Mori, 2008). In addition, ad campaigns that promote flexibility of study arrangements seem to be gaining momentum. For example, Edith Cowan University (ECU) acknowledges the competition between prospective and enrolled students’ study time, paid work and/or family commitments with the slogan: “Plan your study around your life, not the other way around” (see Figure 1)(The Sunday Times, 2008; ECU web portal [August 2008]).

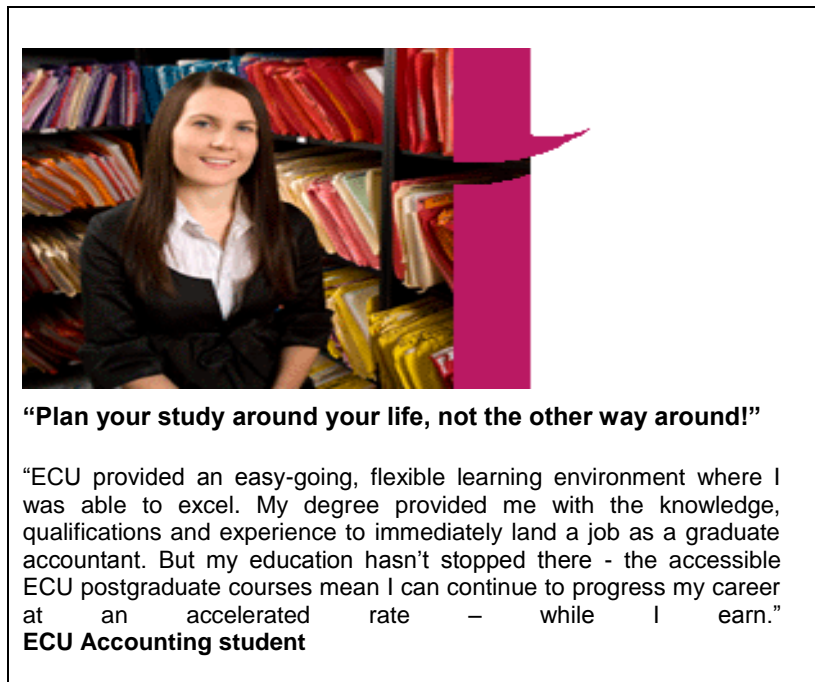


Figure 1: ECU Ad campaign

ECU’s promotion of ‘flexibility’ is strategic in the current competitive and market-driven economic climate. However, what are the possible ramifications of reactive and responsive strategies for semi-engaged students who fail or receive low pass grades?

This paper reports on a preliminary study that begins to explore the nature of what is often termed ‘deep-engagement’ or ‘semi-engagement’ of students who either receive very high or very low grades in their first year of university study. The discussion begins with the provision of a brief overview of an understanding of deep engagement versus surface or semi-engagement and how engagement levels can best be measured. This is followed by a case study of one program’s transitional practices as it moves from fixed to more flexible learning provisions in response to changing student expectations. Next, a brief exploration of the importance of generational profiling, (most of our first year teacher education students are school leavers, Gen Y students) is offered. Finally, some contextual information about the study, its methodology, some key findings and possible implications is offered.

MEASURING ENGAGEMENT

The research literature on student engagement seems to agree on the definition that students who are motivated and skilled at employing learning strategies that suit their learning styles, are actively engaged in exerting effort, initiating action and spend significant time on task (Spanjers, Burns, & Wagner, 2008; The Australian Council for Educational Research, 2007). Conversely, less motivated and/or less skilled students “are passive, do not try hard, and give up easily in the face of challenges” (Skinner & Belmont, 1991, cited in Brewster & Fager, 2001). Following McLaughlin, McGrath, Burian-Fitzgerald, Lanahan, Scotcher, Enyart, and Salganik, (2005), the phrase ‘Student Content Engagement (SCE)’ is used as it focuses on the students’ relationship with specific subject matter knowledge. Further, the author steers clear of the term ‘disengagement’ or ‘shallow’ engagement and use the term ‘semi-engagement’ to avoid portraying ‘deficit’ views of students who more often than not seem to make deliberate choices, when and how to engage with the subject matter presented. McInnis (2001) notes:

Taking a deficit view makes it inevitable that our responses to the new realities of student expectations and aspirations will be inadequate. Such a view does certainly not help universities to respond to this generation of highly mobile and technologically connected students with demands and assumptions that many academics find difficult to accept. (p. 4)

The literature dealing with student engagement levels has grown considerably in recent years (Krause, 2005; ACER, 2007). Much of the past research focused on individual engagement levels in isolation. However, this is changing now as strategic plans on program-school-department levels are developed to better align services to students (Kraus, 2005; James, 2007).

NEWLY DRESSED TRADITIONAL PRACTICES

The reactivity of ECU is clearly visible in the slogans used in promotional materials, where ‘flexibility’ is seen as the ‘catch-cry’ (see Figure 1). Although there are comparable issues facing all universities, learning and teaching practices differ between and within universities, faculties, schools and programs. Here, the Kindergarten through Primary Program (K-7) at ECU is used as a case study. The intention is to demonstrate my understanding of the structural influence of some students’ semi-engagement. Newly enrolled students in the K-7 program at ECU are provided with a number of options of flexible access (see Table 1).

Table 1: Flexible access provisions in the K-7 program

Description of Service	Availability			Additional Information
Flexible entry	Yes			Students are able to commence their studies in February (Semester 1) or August (Semester 2)
Negotiating study load (a) Full-time or Part-time study			No, but...	Students are strongly encouraged to enrol on a full-time basis but can, if they wish to, enrol on a part-time basis or change their enrolment status to part-time during the course of the study.
Negotiating study load (b) fast-tracking/overloading			No, but...	In the past, first-year students were unable to enrol into units that are offered as second/third or fourth-year unit. However, since the commencement of this year, students can enrol in as many units they wish, without the need for a formal application of ‘unit variation’. Further, students who failed a unit previously can stay in lock-step with their ‘full-time’ peers and re-enrol in the unit they failed. This is referred to as ‘overload’.
Enrol as an external student		No		Students need to attend face-to-face (F2F) lectures and tutorial sessions.
Enrol into preferred tutorial time slots			Yes, but...	Students enrol on a ‘first-come-first served’ basis. Enrolment into tutorial sessions that directly follow the lecture are the most preferred.
Listen or view lecture recordings online			Maybe	More and more lecturers make lecture recordings available, but this is not a standardised practice and no policy directive is provided.

The possibilities open to newly enrolled students in the K-7 program are not clear cut. But, there is a trend towards increasing provisions for course flexibility. The transition from fixed to more open provisions, as exemplified in this case study, may be problematic, especially for students who ‘don’t know what they don’t know’. The mixed message of ‘maybe flexibility’ is not only confusing, but it may also weaken students’ commitment and engagement. This leads to the possible conclusion that the university culture and practices affect student engagement. Based on this view, it is contended that students should not be made solely or even primarily responsible for their choices. They are

themselves greatly responsive actors in a changing world. University teaching practices can enhance, but can also greatly hinder or constrain, student engagement (see Towler and Bamber, 2005).

The adherence to a fixed structures of a one-hour lecture that is followed by a two-hour tutorial on the same day or a day close to the lecture, where attendance is greatly encouraged but not compulsory or enforced, is the norm in the K-7 program, as in many other courses at ECU and elsewhere. This may be an outdated practice, but this line of enquiry will not be pursued in this paper.

THE GEN Y FIRST-YEAR TEACHER EDUCATION STUDENT

Generational profiling is only one of many commonly used demographics and refers to the characteristics of people similar in age. Beside age, other demographical data used to profile people include race, gender, income, mobility, education attainment, home ownership, employment status, location etc. Educators, who wish to maintain and improve educational quality, need to gather reliable demographic data on their students. The term generation Y or 'net generation' (Oblinger, 2004), describes students who are born approximately between 1980 and 1994 (McCrinkle, 2008). Many of these students are now attending university. This particular student group is seen to be 'confident', 'tribal in nature', with 'zero tolerance for delays', and prefers multi-tasking (ACER, 2007; Jonas-Dwyer & Pospisil, 2004; Kennedy, Judd, Churchward, Gray, & Krause, 2008; McMahon & Pospisil, 2005). However, many of these character traits may be perceived to be challenging for educators as Krause so aptly notes:

For the multitasking Y Generation student ... university study runs the risk of simply becoming another appointment or engagement in the daily diary, along with paid work and a range of other commitments beyond the campus. (2005, p. 8)

Is there a need for awareness of, and, where possible, provision for Gen Y students' changing characteristics and life styles? ECU's promotional material seems to be addressing this question. However, as the case example (see Table 1) illustrates, the traditional course structures of the Kindergarten through Primary Program (K-7) teacher education program, constructed for an industrial age education population with very different mindsets and expectations, is slow to adjust and respond to the expectations and perceived needs of the busy, multi-tasking, confident, mainly Gen Y student cohorts entering the program as first-year students.

THE STUDY

The results presented in this paper are part of an ongoing study associated with the author's teaching duties in the Kindergarten through Primary Program (K-7) in the School of Education at ECU. This program is located on the Joondalup campus and student enrolment numbers have grown steadily since its inception in 2002.

Students' intrinsic involvement in learning, also referred to as student content engagement (SCE), can only be measured indirectly through process indicators, such as students' involvement with lectures, meaning not only attendance, but rather physical and mental presence. Agreeing with Krause (2005), it is noted that "while time spent on a particular activity is a limited indicator of engagement, it is nevertheless a useful starting point" in understanding how various student groups are coping with increased flexible access provisions (p.4). The systematic monitoring of academic learning time (ALT) and time-on-task (TOT) are now being increasingly used as a proxy for SCE (ie. Spanjers et al, 2008). In this case, on-task-behaviour means either attending face-to-face (F2F) lectures or listening to the lecture recording, as it cannot be disputed that "students require exposure to new knowledge in order to learn ...[and]... learning occurs through the cognitive engagement of the learner with the appropriate subject matter knowledge" McLaughlin et al, 2005, pp 2-3).

The main purpose of the pilot study was to explore the impact of some students' decision to attend or not attend F2F and/or access recorded lectures, with a particular concern to uncover the relationship between lecture attendance and academic performance of first-year teacher education students in one unit. The three research questions were: Who copes/struggles with flexible access provisions? Who attends F2F lectures? Who uses remote access provisions, such as lecture recordings? A related aim of the study has been to understand the potential effect of changing university practices in response to students' shifting expectations, especially the growing demand for flexible access. The idea is to gain a deeper understanding of the level of responsibility attributed to the individual student and the university system with regards to some students' semi-engagement.

The Design

The research design is a simple correlation between the two variables: (a) academic achievement and (b) lecture attendance (as proxy for engagement). Based on the student engagement literature cited above, students who achieved higher marks are expected to show higher attendance rates. The cases comprise sub-groups of students enrolled in one first year unit in the K-7 program. The unit entitled: *Becoming a Teacher* is a compulsory first-semester, first-year unit. Engagement levels of students who achieved a High Distinction grade (80% or above) or very high Distinction grade (78% or 79%) in the unit (HD/D-Sts) were compared to engagement levels of students who achieved a Fail grade (49% or below) or a low Pass Grade (52% - 50%) in the unit (F/P-Sts). F2F lecture attendance records and lecture recording access data were compiled over a 12-week period (Semester 1, 2008) and a data mining technique was used to analyse the data (see Table 2).

Perceived Advantages of a Data Mining Technique

In this research, a data mining technique is used to gather relevant data. Data mining, also referred to as 'knowledge discovery in databases' (KDD), is a research method that facilitates the extraction of meaningful information from unstructured data sets (Zhao & Luan, 2006). The author's preference for this method is based on the following three main reasons: First, there is growing evidence that survey response rates, which traditionally have been less-than-ideal, are falling (Porter & Umbach, 2006; Porter & Whitecomb, 2005). This phenomenon is commonly referred to as 'survey fatigue syndrome' (Coates, 2006; Porter, Whitcomb & Weitzer, 2004). Second, since participation in a research project is optional for students, it seems likely that the survey sample is skewed towards the more engaged students. Third, willingness to spend time and energy to engage with research for the common good rather than individual benefit may seem to be an even greater indicator of intrinsic involvement with learning for Gen Y than the general student population, based on their generational characteristics (McMahon & Pospisil, 2005). As this behaviour could have serious consequences for the validity and reliability of the data, and "if surveys of student engagement are being answered by a disproportionate percentage of engaged, cooperative students, the resulting data may reflect inherent biases that are not trivial to correct" (Clarkberg, Robertson & Einarson, 2008), there was a perceived need to use a research technique that was able to provide more reliable data.

Table 2: *Data source, data collection technique and data analysis*

Data Sources	Data collection techniques	Data analysis
(a) lecture attendance sheet	Data mining technique from readily available datasets.	The data has been used to create various graphical representations of the target audience to help answer several important questions: What patterns are there in my data? Which patterns are significant? What is the high level summary of the data collected?
(b) access data of lecture recordings in Blackboard	Creating two histograms or datasets (database of students (HD/D-Sts & F/P-Sts) who attended lectures & database of students who accessed lecture recordings)	
(c) final marks record sheets		

Participants

A small sample of first year teacher education students was used to carry out a detailed analysis of students' learning practices. The lecture attendance data (1 hour F2F lectures held on Monday mornings, 8:30 am to 9:15 am), lecture recording access data and performance data of 226 students enrolled in the unit EDL1000 – Becoming a Teacher were analysed. This is a compulsory first-semester, first-year unit for teacher education students enrolled in the K-7 program and is offered in the School of Education at the Joondalup Campus. The semester is 12 weeks long and contains a two-week study break. Although 272 students were initially enrolled in the unit, students who withdrew prematurely from the course or did not grant permission for their data to be used for research purposes were excluded. An ethics clearance was obtained. Out of the 226 eligible students, only 59 students qualified based on the categories outlined above.

The Findings

The histogram (Table 3) shows the student variables used in this study. Out of the total 59 students, 15 qualified as High Distinction Students (HD/Sts), four as high Distinction students (D+/Sts), six as Fail students (F/Sts), and ten as low Pass students (P-/Sts). Unfortunately a number of fail students needed to be excluded as they declined their permission for the data to be used in research.

Table 3: Histogram of eligible and participating students

Personal ID	Final Mark & Grade	F2F Lecture attendance (out of 11)	F2F Lecture attendance Pre semester break (out of 7)	F2F Lecture attendance Post semester break (out of 5)	Accessing lecture recordings (podcasts)
HD/ St-1	83	10	5	5	28
HD/ St-2	86	10	6	4	11
HD/ St-3	82	6	5	1	8
HD/ St-4	81	10	5	5	11
HD/ St-5	80	10	6	4	12
HD/ St-6	80	3	2	1	4
HD/ St-7	81	9	4	5	10
HD/ St-8	81	0	0	0	2
HD/ St-9	80	8	4	4	9
HD/ St-10	85	9	4	5	9
HD /St-11	81	9	4	5	13
HD /St-12	80	9	5	4	35
HD /St-13	82	2	2	0	13
HD /St-14	88	11	6	5	12
HD/ St-15	80	11	6	5	11
D+ /St-1	79	10	5	5	3
D+ /St-2	79	7	4	3	1
D+ /St-3	78	6	5	1	1
D+ /St-4	79	10	5	5	1
F/ St-1	18	7	3	4	0
F/ St-2	48	3	3	0	0
F/ St-3	47	7	4	3	0
F/ St-4	33	7	5	2	0
F/ St-5	47	7	6	1	0
F/ St-6	42	11	6	5	0
P-/ St-1	51	7	3	4	1
P-/ St-2	50	7	5	2	1
P-/ St-3	50	5	2	3	2

P-/ St-4	52	8	4	4	1
P-/ St-5	51	10	5	5	1
P-/ St-6	53	6	4	2	12
P-/ St-7	52	5	5	0	1
P-/ St-8	50	3	3	0	2
P-/ St-9	52	6	5	1	1
P-/ St-10	52	11	6	5	3

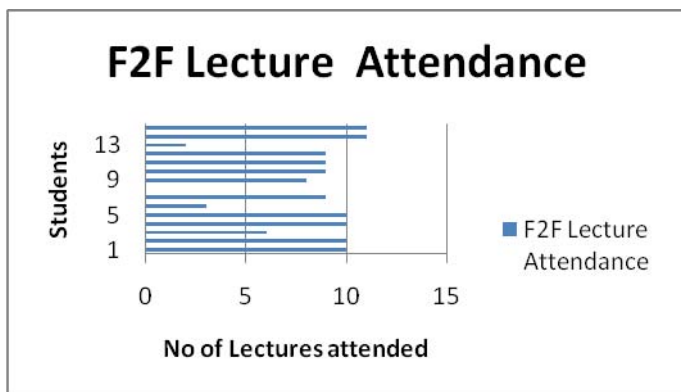


Figure 2a: HD/Sts – F2F Lecture Attendance

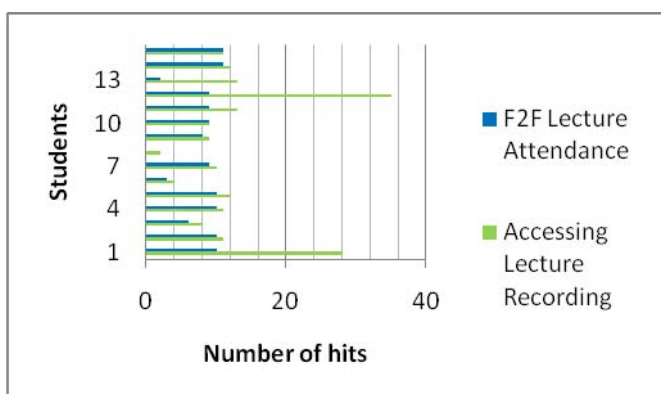


Figure 2b: HD/Sts – F2F Lecture Attendance & Lecture Recording hits

HD/Sts’ Engagement Levels

These graphs illustrate that HD/Sts are generally attending a high number of F2F lectures and accessing lecture recordings regularly. Students who were attending less than 90% of lectures (fewer than 9 out of 11 lectures), kept up to date with the content and processes of the lectures via lecture recording access. This is most prominently evident with HD/Sts-13. Interestingly, HD/Sts-8 did not attend any lectures and made minimal use of lecture recordings. The written support materials provided in the unit must have been sufficient for this student to succeed.

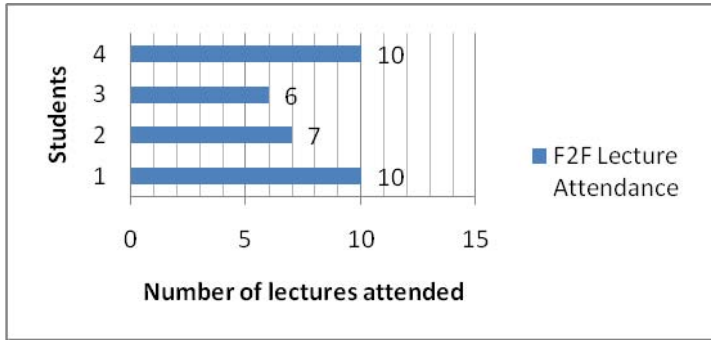


Figure 3a: D+/Sts – F2F Lecture Attendance

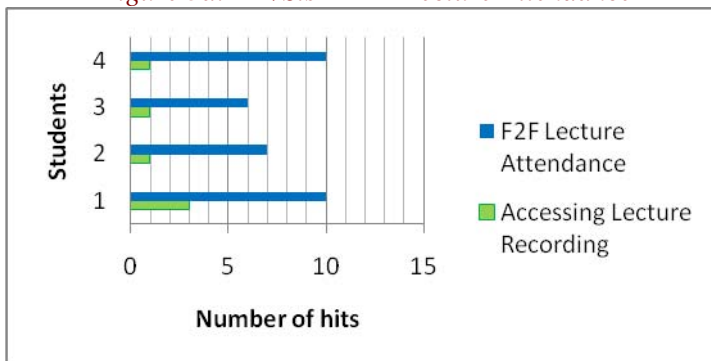


Figure 3b: D+/Sts – F2F Lecture Attendance & Lecture Recording hits

D+/Sts' Engagement Levels

The above graphs (Figures 3a & 3b) show that the four students recorded varied attendance rates between 55% - 90% of F2F lectures. Interestingly, these students accessed the lecture recordings to a significantly lower level than HD/Sts.

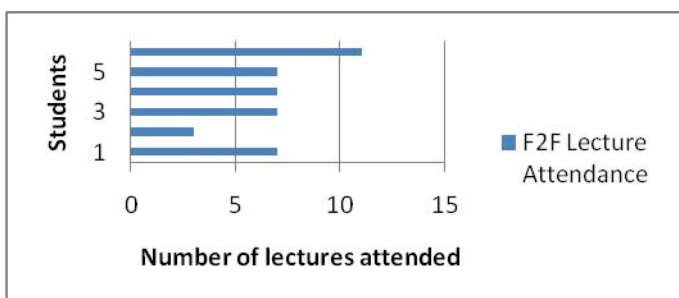


Figure 4a: F/Sts – F2F Lecture Attendance

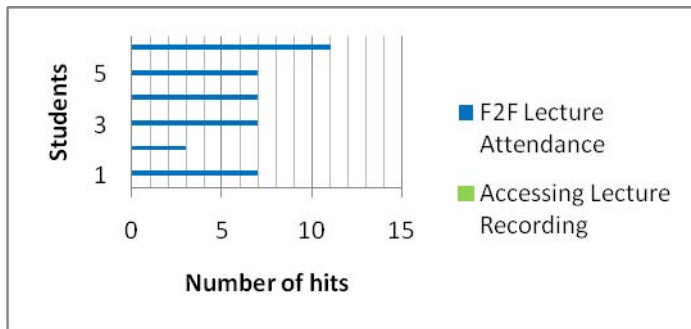


Figure 4b: F/Sts – F2F Lecture Attendance & Lecture Recording hits

F/Sts' Engagement Levels

The most interesting finding is that there is not a significant difference between the above two sets of graphs (Figures 4a & 4b). This means that none of the six F/Sts accessed the lecture recordings. The zero recording of hits suggests that most likely these students did not even attempt to access any of the 11 recordings. However, it may be possible that they could have accessed the downloaded recording of another student, but I deem this a rather unlikely scenario. One student who failed the unit, F/St-6, attended 100% of F2F lectures and four students attended 64% of F2F lectures. These students may show engagement that they are unable to convert into positive academic achievement results.

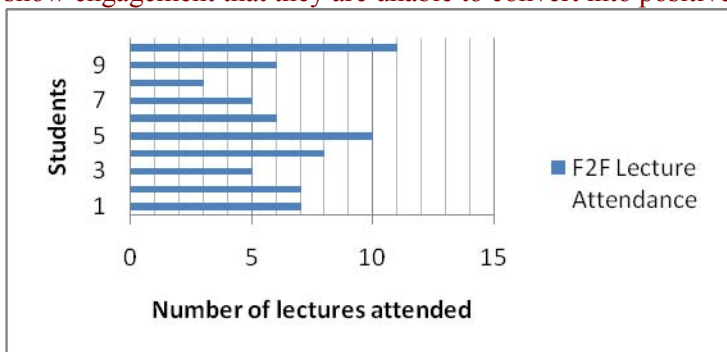


Figure 5a: P-/Sts – F2F Lecture Attendance

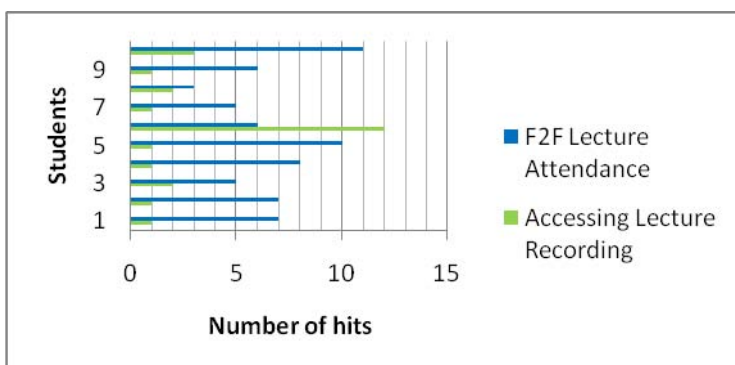


Figure 5b: F/Sts – F2F Lecture Attendance & Lecture Recording hits

P-/Sts' Engagement Levels

The above data (Figures 5a & 5b) set reveals that the majority of these students attended over 50% of the F2F lectures and attempted to access lecture recordings to varying degrees. At least three of these

students seem surprisingly engaged (St-5; St-6; St-10), whereas St-8, St-7, and St-3 seem to be struggling with engagement.

Comparing Pre- and Post-Semester Break Engagement Levels

The comparison between pre- and post- semester break data was sought to reveal a more precise picture of SCE and who copes/struggles with flexible access to study as increasingly demanded by Gen Y students and promoted by ECU.

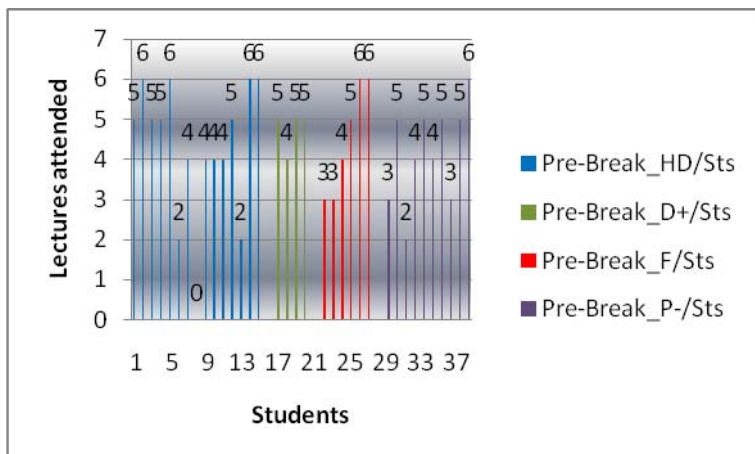


Figure 6: Lecture Attendance comparison – Pre- Semester Break

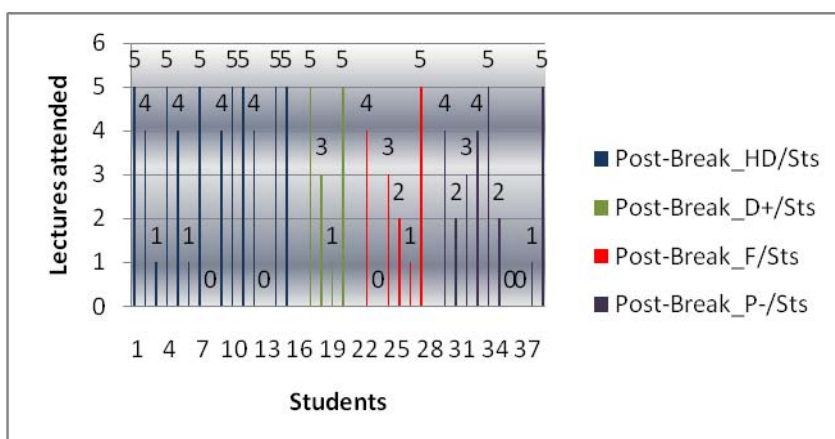


Figure 7: Lecture Attendance comparison – Post- Semester Break

As the above data sets (Figures 6 & 7) show, there is a clear pattern of lecture attendance for the four sub-groups. Whereas the students in all the sub-groups attended pre-semester break lectures to similar degrees, the data shows greater variation between pre-and post-semester break attendance for F/Sts and P-/Sts.

Discussion

The quality of student engagement with a first-year education studies unit with the title *Becoming a Teacher* (EDL1000) as measured through lecture attendance and recording ‘hits’ shows some distinctive patterns. Low attendance rates of F2F lectures, compounded by the neglect to access lecture recordings, stands out as a factor associated with (and maybe even contributing to) low achievement for some of these first year students. Students’ time-on-task as measured through attendance of lectures and lecture recording hits was markedly lower for the majority of F/Sts and P-/Sts compared with that of high achieving students in this unit.

Having access to lecture recordings does not necessarily imply automatic and frequent usage of that service. According to the limited, preliminary data available, it seems to be possible to link trends of usage with academic performance (high achieving students are users and low achieving students are non-users). In other words, HD/StS seemed to have taken the greatest advantage of this service, whereas F/StS have taken the least advantage of it. The reasons for lecture attendance or non-attendance and choosing to (not) access lecture recordings are unclear. It is clear that the uncertainty about the relationship between users and non-users of lecture recordings and their associated impact (difference in academic performance) necessitates further research.

POLICY IMPLICATIONS

Unsurprisingly, this study showed that intrinsic involvement levels of Gen Y students vary greatly. First-year students who achieved a low Pass (P-/StS) or Fail (F/StS) grade and were staying in a unit, completing all assignment requirements were clearly engaged. However, their SCE may not have been sufficient to achieve results that are below or just 'at' the minimum required benchmark to pass the unit. In addition, the implications of semi-engagement may not seem clear to some of these students. ECU, with its promotion of flexible access to study, may need to invest in research that would investigate the price students pay for semi-engagement. Consequently, it is vital for a number of key stakeholders to recognise the importance of tracking student engagement levels to guide policy decision-making on a number of levels. For example, increased monitoring of students' content engagement and lecture involvement could enable the building of capabilities at a micro level for lecturers to gather and share lecture attendance data, and at a macro level, it could mean creating institutional mechanisms for repositories of trend data, which may guide the development of strategic short-term intervention plans, tailored to the specific student profiles and needs. Although a minority, highly engaged, but underperforming students (shown in Figures 6 & 7) may need help with study skills, whereas semi-engaged, low performing students may need help to achieve greater intrinsic motivation for their studies. But, as it seems, all of the low performing students could benefit from targeted intervention, which would help them turn access of flexible learning provisions (lecture recordings) into increased usage of such provisions (ensuring students realise the benefit of lecture recordings). What it cannot mean is to simply blame the students for their engagement. Further investigation is needed to clarify the problem that flexible access brings.

CONCLUSION

A comparison of F2F lecture attendance of the high achievers (HD/StS and D+/StS) and the low achievers (F/StS and P-/StS) in the first-year teacher education unit *Becoming a Teacher*, as a proxy for student content engagement reveals a striking asymmetry. The correlation between student semi-engagement and academic achievement was measured using lecture attendance data of students achieving low or very low grades (18-53 points) and comparing those to lecture attendance data from students achieving high grades (78-87 points) out of a possible 100 points in one first semester, first year unit.

This asymmetrical student behaviour, especially in regards to lecture attendance and recording usage following the mid-semester break, has potentially great implications for the university. It is inadequate to regard the divide in achievement levels of students as a simple division between those who are deeply engaged with their studies and those who are not. Clearly the matter is complex and more research is needed, even on the nature of lecture attendance and recording access.

As our student demographics are changing, and flexible learning provisions are emerging, lecturers need increased capacities to monitor student engagement levels and learning experiences. While university study becomes more accessible and flexible access is not only desired but demanded by students, there is a need for comprehensive understanding why a group of students may inadvertently or even actively choose to exclude themselves from the possibilities of successful learning through

lecture absenteeism. This research contribute to the awareness of concerns about Gen Y first-year students' engagement levels in two ways: First, it contributes in general ways to emerging conversations about how universities can approach policy decisions brought about by changing societal models of life, work and study patterns of first-year students. Second, this research may invite others to think creatively about the need to develop systematic institutional responses, and avoid simplistic views of students' lack of commitment to study. Unlike students who drop out in the middle of a unit, underperforming students have shown a level of commitment and engagement through their continued enrolment and submission of all assignment requirements that needs to be acknowledged. Thus, they chose to take part in university culture, without perhaps fully understanding what commitment levels this decision entails. At a minimum, it is suggested that low-performing students' intentions be recognised and greater support is given to assist them to become aware of how their choices of semi-engagement influence their performance. Moreover, based on the concern for first-year teacher education students presented in this paper, and, although not yet possessing sufficient evidence to draw hard conclusions, the author's analysis of students' reactions to flexible access to their studies, gives her enough scope to argue that the university has an ethical responsibility to ensure these students make informed decisions about possible consequences of their actions. Collecting evidence about the extent to which SCE measured through attendance/access to lectures affects academic achievements may not be sufficient. Investment into evidence-based intervention programs needs to be made to increase the success rate of low performing first-year teacher education students.

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