Maximising First Year Students' Learning from University Lectures

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As a cultural object, the university lecture has withstood the passage of time despite challenges to its value. This paper reports on results from an online study focused on perceptions of students in the School of Social work & Social Policy about the university lecture. It asks how to maximise students' learning from lectures and what obstructs this. It uncovers a range of reasons for first year students attending lectures or staying away or their use of resources. Based on these research outcomes, other findings from the literature and reflections about these sources of data, the paper makes some suggestions about how lecturing processes could be adjusted to better support current first year students to become more engaged in their learning. Recent literature shows that in general university students appear less engaged than in the past but they also have clearer expectations about what they want from lectures and other learning processes. Students are also 'time poor' as many hours of paid work and other responsibilities mean they may question the need to attend lectures at all especially if teaching and learning processes do not capture their interest. As a consequence, lecturers feel increasing pressure to attract students' attendance by employing a range of other media. Literature from Australia and other countries however, critiques the value of both traditional and more innovative approaches to lecturing in universities.

University lectures; engaging first year students, maximising learning

Introduction

This paper explores factors influencing *internally* enrolled first year students' attendance at university lectures and presents ideas about how to increase students' active engagement in learning from these. The key question concerns *how to maximise commencing students' learning from lectures and what factors interfere with this.* The primary research basis of the paper was conducted in 2008 through the administration of a *Tell-Us* survey (an on-line anonymous process) of 180 students in three undergraduate programs within the school of Social work & Social Policy in the University of South Australia. These data are contextualised within a range of other findings as reported in Australian and international literature and the author's own extensive research and teaching experience.

Most lecturers would hope that internally enrolled students derive learning benefit from attending their lectures and Stanca (2006) suggests this is generally so. However, the Australasian Survey of Student Engagement - AUSSE (ACER 2008) reveals that less than a quarter of students in Australia and New Zealand spend significant amounts of time on campus – in lectures or in other ways. Some studies found that 60% of students do not attend *all* lectures (Shannon 2006), a widespread tendency noted also by Cleary-Holdforth (2007, p.1) who suggests, non-attendance at university lectures is 'an on-going problem that appears to transcend country, university and discipline'. Dropping attendance figures suggest their lives are getting in the way of good intentions to attend, despite costs for not doing so.

Sleigh & Ritzer (2001) surveyed over two hundred USA students and found that only eight percent reported that gaining notes from a missed lecture was as useful as attending the class. But more importantly, 'those who thought borrowed notes were as good as attending class had significantly lower reported grade point averages than those who valued attendance' (Sleigh & Ritzer 2001). Sleigh & Ritzer (2001) found students see pragmatic reasons for attending lectures when they can understand the extent to which their grades may be negatively impacted by their absence. Meikle, (2006) suggests tactics like students signing contracts to be present at lectures and awarding marks for being present may increase attendance. Rogers (2002) however makes the point that compelling students to attend does not necessarily correspond to better student performance nor would it seem to encourage good study habits. Respect for adult learning principles suggests that first year students need to be supported in learning to accept responsibility for their own learning, to develop self-efficacy (Bandura 1993) and to appreciate the connection between their own behaviour and their academic outcomes.

Other encouragement to attend and concentrate may be based on *information technology* (IT) Most academics now use a variety of IT processes to supplement other information presented in a lecture such as *PowerPoint* slides, You-Tube and DVD's to illustrate and entertain and then to *podcast* or media stream the lecture to maximise students' access to it. As well as the attraction of technological bells and whistles, Clay & Breslow (2006) also suggest the lecturer's ability to engage and entertain students is a stronger factor in their decision to attend or not. Phillips, Gosper, McNeill, Woo, Preston & Green (2007) suggest that availability of web based lecture techniques such as video streaming or Podcasting are only a minor influence on students' attendance. Instead they note other factors such as 'changing lifestyles, their attitudes to learning and their perceptions of the teaching they encounter when they do attend' as determining attendance patterns (Phillips et al 2007).

It appears undeniable that university students' life experiences and their preparation for tertiary study have changed (Dobson, Sharma & Haydon 1997; James, McInnis & Devlin 2002; Oblinger 2003; Porter & Swing 2006; Mason Webber, Singleton & Hughes 2006, Wilson & Lizzio 2008; Cameron 2008). Because of students' pressured lives, Oblinger (2003, p.6) suggests lecturers often find themselves attempting to 'inspire students with zero tolerance for delay'. Whilst acknowledging this presents diverse challenges for today's academics, Ramsden recommends however that these are reasons to *teach more effectively* and that we do this 'by studying our students' learning' (2003, pp.5-6). Wilson & Lizzio (2008, p.1) suggests it is necessary to acknowledge *both* first year students' lack of preparation and some 'incongruence between staff and commencing students'. Lawrence (2002, p.9) also makes the point that diversity of student background has to be accepted as the norm and not as any justification for unsuccessful educational practices.

It is clear then, that for many first year students, learning from lectures needs to be more deliberately cultured than in the past and taken on as a major obligation by first year lecturers. McInnis and Krause (2002) agree that student identity is now, more than ever, a negotiated one so that students' engagement with their learning now needs to be carefully and deliberately cultivated. Nine years ago, McInnis, James & Hartley (2000) noted a developing trend of lower attachment, engagement and commitment by students, both to study and to the more general aspects of university life and according to other recent research, these trends have extended further into the student population (Porter & Swing 2006; Mason et al 2006).

For some first year students, not attending, being disengaged from their learning or even dropping out may be related to perceptions of the university as an alienating and rejecting space. As found by White (2006, p. 235) many students 'feel they don't matter' especially when their study experiences include lectures with large numbers, where no one knows their name or notes their attendance and where 'they are part of an anonymous mass' (White 2006, p.236). New students may need to process their own idealised perceptions of the university lecture as demonstrated in a previous study (Cameron 2004) where one student said, 'I had this view of university from what you see on the television - huge lectures where the lecturer walks backwards and forwards for three hours'. Unfortunately, it is still the case that most first year students are part of an anonymous crowd, encouraging perceptions that their attendance, or lack of it, will go unnoticed. In most instances, lectures are delivered to hundreds of first year students en masse by established and relatively permanent staff (with salaries paid from main budget sources) whereas most tutorials are delivered by casual staff whose status is tenuously supported by the softer funding basis of a yearly casual budget. On one level, this suggests tutorials are less important than lectures, despite student opinion to the contrary (Cameron 2008). Meanwhile university lecture theatres have become better equipped, with most having at least PowerPoint technology. Yet few of the high cost permanent staff members appear to have received specific training, either in using this technology or in teaching students how to maximise their learning from lectures.

The ability to encourages *all* students' engagement in learning has been recognised as a lynch pin of excellence in academia by others (Ramsden 2003; Lawrence 2002). Skene, Cluett & Hogan (2007, p.2) suggest however that some academic staff describe a sense of 'just keeping their footing on the edge of a slow moving landslide' as they struggle to 'engage a class as students fail to show for lectures, preferring to access the recorded version online in their own time'. Academics find it a challenge to achieve learning conditions in lectures that consistently catch and maintain all first year students' interest and engagement in their own learning and to foster study processes that provide a strong foundation to their further study. Bandura (1993) discusses the complex relationships between self esteem, self concept, locus of control – and self-efficacy. Students lacking in the development of these may blame others (staff, the system) for their difficulties. Students' self-efficacy beliefs have been correlated with motivational constructs related to their academic performances and achievement (Bandura 1993).

Engaged students make time and have energy for their studies and feel a personal commitment and sense of responsibility to do their best. The committed and engaged students in my study see that lectures provide invaluable sources of information about assessment as well as about wider intellectual issues. But not all first year students have developed 'sufficient self-regulation and problem solving capacity' (Wilson & Lizzio 2008, p.1) and this has deep implications for their academic success. Despite a growing emphasis on online resources for most courses, over 70% of first year students, said they did not consistently use these services (Cameron & Tesoriero 2003) and some mature age first year students did not own or use a computer before they started university (Cameron 2007) presenting sharp learning curves for them. It should not be presumed then that all students know how to make use of resources. Rather, it is often necessary to deliberately encourage commencing students' use of university support services, to demonstrate how to use online processes, to directly teach how to prepare for and learn from lectures and to discuss self-efficacy issues. Wilson & Lizzio (2008, p.2) note 'the pervasive paradox that students often most in need of assistance do not seek it' and this means that many requiring extra guidance

go unnoticed if it is presumed all are managing well. First year students, who do not attend lectures, nor use the resources provided, miss out on important opportunities for engaged learning. This paper however notes a gap in targeted investment in academic lecturers' skills, especially in ones that maximise first year students' learning from lectures and it suggests ways to address this need.

Research Design

Methodology

I approached this student-based research in the spirit of modern hermeneutic interpretation in seeking awareness of the current conditions that surround students. In the following study both qualitative and quantitative data were gathered, with any quantitative analysis limited to simple percentages. The central task was one of making sense of first year students' perceptions of their activities and opinions, but without imposing my own views. Writing is socially constructed and resonates with what Garfinkel (1967) terms *reflexivity* and so it is in the telling (the writing) that the interpretation of students' experiences takes shape. So I employed multiple lines of sight to analyse student data along with other literature, thus providing layers of meaning. In doing so, I remained part of a 'mutual gazing' (Heron 1996:1) and mindful of engaging in this inquiry with proper integrity.

The Research Instrument

The questionnaire comprised 15 questions using either single or multiple choice response patterns with some free text opportunities. The focus of the research instrument was on key factors influencing students' attendance and their learning from lectures. The anonymity of this online instrument enabled a level of distance between the researcher and respondents and was intended to provide students with confidence that they could respond honestly without divulging their individual identity.

The sample

The student sample was gained through sending an email with a link to a *Tell-Us* online survey attached. Only students *studying internally* were solicited as the overall focus was lecture attendance and learning from lectures. In all, 180 students submitted it but in fact only 174 students fully completed the survey. The sample size comprised around 25% of the total undergraduate students internally enrolled in the school and as such, is large enough for some statistically valid conclusions to be made. The majority of those responding were studying fulltime.

Results

This was a primarily female group of students with the question about gender revealing an 8:2 female to male split, an unsurprising result in light of the firm gender bias in social work and similarly focused study fields in the sample group. The span of student ages was from 18 – 60 years, but there was a clumping of the majority in the 20's, 30's and 40's. Most were studying several courses and were full time or over-enrolled. The full-time nature of study brings added pressure at assessment points where four or more assignments may be due within a week of each other and skipping lectures at these points becomes a real temptation. Learning opportunities from lectures were blocked by *lack of attendance* and *poor concentration* during them.

Attendance at lectures

Being at a lecture is the first requirement for learning from it and so participants were asked to estimate how many lectures they attended. A group of 20% said they 'attended all of them'. A majority group (60%) agreed they attended 'most and only missed a few'. The smaller group of 16 % said they 'missed about half of them' and only 4% 'missed most of them' or attended 'only a few'. No one said they attended 'none'. The number who say they attended most lectures does not match the observation of staff in my school who complain that less than 10% attend some lectures (at points of assignment pressure) or toward the end of a course. As Cleary-Holdforth (2007, p.1) notes, some overestimation derives from their ambition to attend rather than the reality.

Non-attendance was linked to two main issues - 'life pressures on due assignments' and 'the qualities of the lecturer'. Assignment due at the same time was a commonly cited influence against attendance as was a range of intersecting personal pressures such as 'family health problems', 'transport problems' and 'child care pressures'. Other issues like 'the time of the lecture' and 'the number of hours between the lecture and its tutorial' were seen as mildly influential. A set of comments focused on negative lecturer qualities as discouraging their attendance – no passion for the topic; poor delivery (boring; talking too fast, too softly, unclear, going off the topic); unskilled with IT, fumbling about; just reading the slides or textbook; and badly organised slides – e.g. crowded print. Annoying behaviour of other students (chatting during the lecture) was a discouragement to attend as was the inability or unwillingness of lecturers to manage this. These all appear to reflect some students' lack of self-efficacy (Bandura 1993).

Encouraging their attendance were factors such as 'the lecturer's entertaining style of delivery' and 'effective use of Audio Visual (AV) or IT'. Clicker technology was popular. This is software called *TurningPoint*, where quizzes are imbedded in *PowerPoint* presentations. Students answer questions by using individual clickers, which reveal answers in a graph on a *PowerPoint* slide. They felt this helped keep them focused on the key points from the lecture.

Concentrating in lectures

Even when they do attend, staying focussed in lectures is clearly is problem. Just over 70% of participants agree they often have trouble concentrating for a range of reasons such as boring lectures with only 30% suggesting they 'concentrate really well on what is being said all the time'. Some accept they 'miss a lot, because my mind is usually on other unrelated things' or they 'often have trouble understanding unclear lecturers and then cannot concentrate very well'. A few admit they do other things in the lecture like catching up on reading or writing, do some phone texting or go to sleep. Again it is apparent that learning is compromised by loss of mental focus (or consciousness) but that this is frequently attributed to outside factors (the lecturer's lack of entertaining style for instance), again reflecting some lack of self-efficacy (Bandura 1993).

Benefits to learning of online PowerPoint slides and podcasting

Most first year students (70%) said they made good use of online *PowerPoint* slides by printing them and taking them to the lecture to aid concentration or looking at them later for revision. A smaller percentage (30%) did not use them - either because they like just listening or because they have never bothered to view or download them. An International student commented 'Sometimes I can't manage to follow the lecture by my writing, so I can use on-line slides to help me' *Podcasting* is not used across all courses yet so around 60% of students had no lectures offered in this way. A small group have used *podcast* lectures and

liked them as they can make up for missed lectures when and where they wish to listen to it. A few saw *podcasts* and/or online slides as obviating the need to attend any lectures. Many students saw slides, other IT or AV resources as supplementing their learning from the lecture. One commented 'You can't replace listening to a lecturer as they explain things in more detail than the slides but the slides are great for revision and to add to'. Another suggested *PowerPoint* slides 'can enhance the subject; and provide material to reflect on before and after the lecture and for assignment preparation'. Several obviously engaged students raised self-motivational issues – feeling committed, keen to learn and not wanting to miss anything important. As one commented, 'I know that I can get the most by preparing for and attending the lectures and ultimately this helps with my assignments and the exam.' These students made the connection and saw how using resources and attending was the first step in maximising their learning from lectures. A considerable group however, did not attend consistently or use *PowerPoint* slides and so would have missed any opportunities for contextualised understanding.

Overall student commentary

A consistent student theme focused on the qualities and abilities of the lecturer – both positive and negative – as impacting on their learning from lectures. Several reiterated general appreciation of lecturers that inspired and uplifted them and had passion for their topic. They especially liked 'entertaining and/or humorous lecturers who make me think' and those who use 'You-Tube clips, videos/DVD and clicker processes'. Again lack of student self-efficacy shows here too. Students also liked lecturers who make good links to tutorial activities. A pragmatic few commented on getting value for their financial outlay on HECS fees by going to lectures.

Blocks to learning from lectures

There are several apparent blocks to first year students' learning from lectures and a basic one is the actual attendance problem. Research indicates poor attendance is linked to students' general preoccupation with other aspects of their lives where they have limited time for study, despite good intentions. That most participants in this small study are full-time students points to the pressured nature of their study. Some self-aware students in the survey acknowledged that they do better on assessments and get better grades when they consistently attend lectures, as Sleigh & Ritzer (2001) also note. These self motivated students are not the ones Wilson & Lizzio (2008), Porter & Swing (2006); or Mason et al (2006) are concerned about. For many first year students however who lack self-efficacy (Bandura 1993), they believe that life blocks both their attendance at lectures and their learning from these. When they do attend, concentration flags, at least some of the time for all, but especially when lectures fail to entertain or inspire them. Students who were critical of lecturers that cannot use IT or AV processes efficiently and who fumble about in trying to load or activate these, saw this blocked their learning. They like online PowerPoint notes provided in advance as they say this enables them to listen rather than trying to write down everything - or to not attend at all. It is a concern however that some students attend sporadically, if at all, make limited use of online slides and appear not to appreciate how to use these to facilitate learning during lectures, students that Wilson & Lizzio (2008, p.2) say are 'most in need of assistance' and require targeted intervention.

Ways to maximise commencing students' learning from lectures

Fostering engaged learning in lectures is a key obligation and includes talking about this as a concept and how it operators in students' lives. It may include practical things like demonstrating to first year students how to make use of online *PowerPoint* slides, how to

download and print these in ways that provide room for note taking to maximise more active learning in the lecture and why this matters in terms of their academic results. It may also involve discussing self-efficacy and how becoming an engaged and responsible learner operates beneficially in students' lives.

PowerPoint slides used well by the lecturer add structure and focus to a lecture, provide learning hooks and tag key content and knowledge issues. Links between lecture material, assessment activities and tutorials need to be made explicit to maximise first year students' learning. Providing contextual links between lectures, assessment, grading and feedback provides an aligned foundation of students' understanding for as Orrell states, 'without this alignment, assessment becomes merely a postscript for learning and teaching' (2006, p. 441). In lectures, assessment activities are linked to content points and to related marking criteria so all students are clear about these. Tutorials, usually well attended and seen by students to provide key sources of academic support (Cameron 2008), need to be clearly linked to lectures so they both relate consistently to assessment activities.

TurningPoint and individual clickers can be used to quiz students on lecture content issues, with answers followed up both during the lecture and by tutors in tutorial sessions. Clicker technology used well can better involve students by highlighting key learning points from the lecture, relating these to assessment tasks and breaking up the lecture to assist their concentration. Clicker technology, as well as encouraging learning and keeping students better focused, can also be used to record who is present at the lecture and consistently used, this may encourage better student attendance.

Training in presentation skills for lecturers, at least in how to speak clearly and with energy and how to use IT processes, is essential. Most first year students expect to feel inspired and the most consistent student commentary strongly underlines the appreciation of lecturers who have energetic delivery, passion for the topic, good organisation and who can effectively use <code>PowerPoint</code>, <code>TurningPoint/clickers</code> and other AV processes. Workshops with other more skilled lecturers, or with specialists in IT and AV processes, can provide opportunities to share techniques and to develop teaching excellence. Many lecturers have had little training in public speaking or in how to use IT procedures and without this, may just keep doing the same ineffective things. Greater investment in the skills of the lecturer in this range of areas is clearly indicated.

Conclusion

In this paper, suggestions about how to maximise students' learning from lectures was based in part on first year students' opinions about these matters and on related literature from a range of sources around the Western world. It is apparent that students expect academic staff to present their lectures with passion, creativity and IT savvy even though many lecturers lack specific training in these areas. Students also need to be actively encouraged to become engaged and responsible learners with self-efficacy as consumers of education. A range of unique pressures within modern universities, combined with first year students' diverse needs, will continue to place demands on academic staff. Orrell (2006, p.454) points out that 'Institutional procedures and practices are required to support constructive, non-defensive teaching reform and collaborative action by teaching groups' and this is central to supporting the engagement of first year students, especially where the battle for space in their lives means many do not prioritise lecture attendance as a key feature of their learning.

References

- ACER (2008) Australian Council for Educational Research *Attracting, Engaging and Retaining: Australasian Student Engagement Report*: Australasian Survey of Student Engagement:

 Retrieved 27/9/2008 http://www.acer.edu.au/ausse/
 - Bandura A. (1993) 'Perceived self-efficacy in cognitive development and functioning' *Educational Psychologist, No. 28*, pp. 117-148.
- Cameron H (2008) 'Focusing Feedback to Better Engage First Year Students' Refereed paper for 11th Pacific Rim First Year in Higher Education Conference, An Apple for the Learner: Celebrating the First Year Experience, Hobart 2008
- Cameron H (2007) 'Assessment & Feedback in Higher Education: Key Links in the Learning Chain', Assessment That Works: ERGA Conference, Adelaide University
- Cameron H (2004), 'Paving the Way? The Path to Uni for TAFE Students', Refereed paper for the 8th Pacific Rim First Year in Higher Education Conference, Monash University
- Cameron H & Tesoriero F (2003) 'First Year at Uni', Refereed paper for 7th Pacific Rim First Year in Higher Education Conference Enhancing the Transition to Higher Education Strategies that Work, Brisbane
- Clay, T. & Breslow, L. (2006) 'Why students don't attend class' MIT Faculty Newsletter.
- Cleary-Holdforth J (2007) 'Student non-attendance in higher education: A phenomenon of student apathy or poor pedagogy?' *Level 3*, June 2007, Issue 5
- Dobson, I Sharma, R & Haydon T (1997) Commencing Undergraduates in Australian Universities: Enrolment and Performance Trends 1993-1995, AVCC, Canberra
- Garfinkel H, (1967) Studies in Ethno-methodology, Polity Press, Cambridge
- Heron J (1996) Co-operative Inquiry: Research into the Human Condition, Sage Publications, London
- James, R, McInnis, C & Devlin, M (2002) *Assessing Learning in Australian Universities*, Centre for the Study of Higher Education, University of Melbourne.
- Lawrence, J (2002), 'The 'deficit-discourse' shift: university teachers and their role in helping first year students persevere and succeed in the new university culture' *Changing Agendas Te Ao Hurihuri* 6th *Pacific Rim First Year in Higher Education Conference*, Christchurch, 9-10 July 2002.
- Mason, K, Webber, R, Singleton, A & Hughes, P (2006) *The Spirit of Generation Y*, Retrieved 9/3/2008 http://dlibrary.acu.edu.au/research/ccls/spir/sppub/sppub.htm
- McInnis, C & Krause, K (2002) 'Getting students connected' *Changing Agendas Te Ao Hurihuri 6th Pacific Rim First Year in Higher Education Conference*, Christchurch, 9-10 July 2002.
- McInnis, C James, R & Hartley, R (2000) *Trends in the First Year Experience In Australian Universities*, DETYA, Canberra.
- Meikle, J. (2006) 'Students told: turn up or face expulsion', The Guardian
- Oblinger, D (2003) 'Boomers, Gen-Xers & Millenials: Understanding the New Students' *EDUCAUSE Review*, July/Aug, pp. 37 47
- Orrell, J (2006) 'Feedback on learning achievement: rhetoric and reality', *Teaching in Higher Education*, Vol. 11, No. 4, October 2006, pp. 441-456
- Phillips, R, Gosper M, McNeill M, Woo, K Preston G & Green D (2007) 'Staff and student perspectives on web based lecture technologies: Insights into the great divide', *Ascilite Conference*; Singapore: pp. 854 –864, Retrieved 11/3/2008 http://www.ascilite.org.au/conferences/singapore07/procs/phillips.pdf
- Porter, S & Swing R (2006) 'Understanding How First Year Seminars Affect Persistence', *Research in Higher Education*, Vol.47, No.1, pp.89 107
- Ramsden, P (2003) Learning to Teach in Higher Education, Routledge Falmer, London

- Rogers, J. (2002) 'Encouraging tutorial attendance at university did not improve performance', *Australian Economic Papers*, No.2. pp. 255-266.
- Shannon, S. (2006) 'Why don't students attend lectures and what can be done about it through using iPod nanos?,' 23rd Annual Ascilite Conference Sydney .pp. 753 756. Retrieved 11/3/2008 http://www.ascilite.org.au/conferences/sydney06/procs/shannon.pdf
- Skene J, Cluett, L & Hogan J (2007) 'Engaging Gen Y students at university: what web tools do they have, how do they use them and what do they want?' Refereed paper for 10th Pacific Rim First Year in Higher Education Conference, Regenerate, engage experiment; Brisbane
- Sleigh M J & Ritzer D R (2001) 'Encouraging Student Attendance', *Observer*, Vol 14, No. 9 http://www.psychologicalscience.org/observer/1101/tips.html
- Stanca L (2006) 'The effects of attendance on academic performance' *Journal of Economic Education*, Vol.37 No.3, pp.251-266.
- Wilson K & Lizzio, A, (2008), A 'just in time intervention' to support the academic efficacy of at-risk first-year students' Refereed paper for 11th Pacific Rim First Year in Higher Education Conference, An Apple for the Learner: Celebrating the First Year Experience, Hobart 2008
- White, N R (2006) 'Tertiary Education in the Noughties: the student perspective', *Higher Education Research & Development*, Vol 25, No 3, pp.231-246