

Focusing on first year assessment: Surface or deep approaches to learning?

Sharn Donnison

University of the Sunshine Coast, Sunshine Coast, Australia

Sorrel Penn-Edwards

Griffith University, Brisbane, Australia

Abstract

This paper investigates the assessment and learning approaches that some first year students employ to assist them in their transition into their first year of study and extends our previous work on first year student engagement and timely academic support (Penn-Edwards & Donnison, 2011). It is situated within the First Year transition and student engagement literature and specifically speaks to concepts of learning within that body of literature. In this paper we argue that while students are in the transitional period of their studies, the use of assessment as a motivator for learning (surface approach) is valid first year pedagogy and forms an initial learning stage in the student's progress towards being lifelong learners.

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Introduction

This paper argues that the “current innovations in university curricula [that] concentrate on shifting students towards deep approaches” to learning (Entwistle & Peterson, 2004, p. 423) may be premature when applied to commencing first year students. We focus on the relationship between first year transition in higher education, assessment and student approaches to learning to propose that assessment as motivation for learning is a critical stage in the first year transition.

There is an established body of literature on transition and engagement in the first year in higher education (Penn-Edwards, 2010; see also reviews of the literature by Evans, 2000; Harvey, Drew, & Smith, 2006; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; Prebble, Hargraves, Leach, Naidoo, Suddaby, & Zepke, 2005). This literature recognises the importance of institutional, academic, and social support for successful student transition and engagement with learning (Masters & Donnison, 2010; Wingate, 2007). It also notes that successful engagement with learning is dependent upon students dealing with new academic requirements and an understanding that a range of social, economic, and physical factors may impact on their successful transition (Tinto, 1993).

There is some research focusing specifically on learning in the transition period into higher education (Burton, Taylor, Dowling, & Lawrence, 2009), although it is scant. Most transition and learning literature focuses more generally on the importance of engagement with learning for successful student transition (Kuh, 2003). More specific issues about

approaches to learning in the transition period, timing and provision of teaching to facilitate deeper learning, and assessing student learning is under-researched. This paper addresses this area of need.

Learning approaches in higher education

The literature on learning in higher education, in general, is premised on a belief that higher education is about students undergoing conceptual change (Biggs & Tang, 2007; Entwistle & Peterson, 2004; Gamache, 2002) and learning how to learn (Wingate, 2007). Learning to learn in higher education is said to occur in two areas: understanding learning processes and becoming an autonomous learner; and understanding discipline knowledge and becoming competent in constructing that knowledge (Wingate, 2007, p. 394). Essentially, these two areas describe a deep approach to learning. Marton, Säljö, and Svensson in the 1970s (Entwistle & Peterson, 2004) were the first to categorise approaches to learning as *surface* or *deep*; a recent addition to this field of study includes a *strategic* approach to learning, or more accurately, to study (Entwistle & Peterson, 2004).

Surface approach to learning

The surface approach to learning is about achieving course requirements with the minimum of effort, “the terms ‘cutting corners’, and ‘sweeping under the carpet’ convey the idea: the job appears to have been done properly when it hasn’t” (Biggs & Tang, 2007, p. 22). Early descriptions of surface learning highlighted reproduction of content (rote learning) rather than seeking meaning. Refining these

descriptions, Entwistle and Peterson (2004) describe the surface approach as treating the course as unrelated bits of knowledge, routinely memorising facts and carrying out procedures, focusing narrowly on the minimum syllabus requirements, seeing little value or meaning in either course or set tasks, studying without reflecting on either purpose or strategy, and feeling undue pressure and anxiety about work (p. 415). Given these characteristics, McCune and Entwistle (2000, p. 2) propose that it would be more appropriately labelled as the *Surface Apathetic Approach* as it is essentially characterised by lack of understanding and purpose, syllabus dependency, and a fear of failure.

Surface approaches to learning are considered, in the main, to be ineffectual and commonly associated with poor academic performance. However, some surface approaches to learning such as memorisation are seen as having a place in certain areas of study such as languages, mathematics, and the sciences (Biggs & Tang, 2007; Chan, 2004; Entwistle & Peterson, 2004) and, as Ryan and Louie (2007) suggest, can be a precursor to deeper learning in these areas.

Many first year students, regardless of their area of study, adopt surface approaches to learning. Wingate (2007) explains that this is because they arrive “with epistemological beliefs that stem from their previous learning experience at school; [and] they see learning as the ‘passive absorption’ of external knowledge that is owned by authorities such as their tutors or their textbooks” (p. 395). Commencing school leavers are more likely to adopt surface approaches to learning than mature age students and a surface approach to learning was found to

correlate with lower grade point averages over the first semester of study (Burton et al., 2009, p. 72).

Deep approach to learning

A deep approach to learning is a “complex personal development process involving the change of perceptions, learning habits and epistemological beliefs” (Wingate, 2007, p. 395). It is also about meaningful engagement in tasks, focusing on underlying meanings, main ideas, themes and principles, refining ideas, using evidence and applying that knowledge across contexts (Biggs & Tang, 2007; McCune & Entwistle, 2000).

The terms “first year student” and “deep learning” are not necessarily contradictory. Some first year students use a deep approach to learning although this is limited by their inexperience (McCune & Entwistle, 2000); incapacity to “go beyond basic understandings of the course material” (p. 5); inability to show all characteristics associated with deep learning, to engage in deep learning continuously or to consistently engage even within a specific task (p. 13); and they show little development of their deep approach to learning over the year (p. 6).

Strategic approach to studying

A strategic approach to studying is also referred to as an *achieving* approach (Biggs & Tang, 2007) and is about “putting effort into organised studying” (Entwistle & Peterson, 2004, p. 415) with an intention of fulfilling assessment requirements while enhancing self esteem through competition (Burton et al., 2009). It is characterised by organised study, time management,

students monitoring their own effectiveness and motivation for achievement (McCune & Entwistle, 2000).

The literature on learning in higher education concludes that apart from obvious exceptions where rote-learning is needed (Biggs & Tang, 2007; Chan, 2004; Entwistle & Peterson, 2004), deep learning is preferable. However, paradoxically, the research literature also indicates that first year students, whether using a surface approach or a deep approach to learning, adopt certain surface strategies to studying and require academic intervention (Biggs, 1990). Biggs (1990), studying second language learners, suggests that using survival strategies “cut[s] across the notions of surface and deep [strategies]” (p. 25) and students using these might actually “bypass the usual approaches to learning” (p. 27). Chan (2004) argues that some surface strategies, for example memorisation, “can be used to deepen and develop understanding” (p. 14) and that students can adopt “an approach which combines aspects of both deep and surface learning” (p. 14) citing Kember and Gow (1990) who explained this as a “survival strategy to learn - with understanding, but highly focused and selectively, in order to be able to cope” (p. 14). Simpson (2003) concurs, suggesting that for a “complete education” we should aim for a balance between “survival” and “fulfilment” (p. 102). That is, there is a place in higher education for a surface approach to learning.

The study

In a previous study, we proposed a model *The Cycle of Academic Support Engagement in Higher Education* (Penn-Edwards & Donnison, 2011) as part of a proposal of

first year student engagement stages. The model was informed by survey and interview data that indicated that student engagement with academic resources and services was predominately led by assessment submission, for example, as *early engagement* upon receiving a description of the task in the course outline; or as *crisis-response engagement*, preparing at the last minute. Further, poor results at the individual assignment level, course, semester, or year level also prompted active student engagement.

Our engagement model demonstrated that first year students operate in a cycle of engagement prioritised by study unit needs (preparation, activities, and assessment) rather than semester or year programs. It is a personalised cycle where a student might simultaneously engage at different levels for different course requirements, reengaging as they feel necessary. For instance, a student may be at a pre- or early engagement point with one course but at a crisis-response engagement point with another course.

To test our engagement model, we conducted focus group interviews with first year primary preservice teachers on a regional campus of a metropolitan Australian university. One male and 13 females were involved in small focus groups (two or three students), which lasted for approximately 1 hour. The male to female ratio in the program is approximately 1 to 10 which is representative of the participant pool.

Data collected in this current study focused on students' identification of critical points in their first semester and their adoption of learning strategies at these critical points. Interviews were conducted at the end of first semester after students had received

Semester 1 results. Data were coded using Nvivo 8 where categories and themes were identified and each student de-identified. Aliases are used in this paper.

In the semi-structured interviews, the small focus groups were asked to discuss their preparation and presentation of assignments undertaken in four first semester core courses — a small group oral presentation on teaching and assessment practices, a scaffolded essay reflecting on their own acquisition of language, a digital portfolio for an ICT course, and a content exam in language and literacy—as well as significant or critical points in their first semester of study at university. They were then shown *The Cycle of Academic Support Engagement in Higher Education* model (Penn-Edwards & Donnison, 2011) charting the different stages of engagement and asked to comment and elaborate. Although the transcripts provided rich data on a number of topics, the area of interest for this report is the students' perceptions of learning and the role of course material in this process. Three themes related to student concepts of learning were identified; assessment and critical academic points, the relationship between learning and assessment, and learning support and assessment.

Data presentation

Assessment and critical academic points

In the previous study, we proposed that there are critical academic points in first year students' first semester of study and that these critical points were tied to assessment (Penn-Edwards & Donnison, 2011). The students interviewed in this second study confirmed the previous

findings that critical points were tied to assessment: "critical for me was [sic] the assessments because you needed them to pass ..." (Karen) and "[critical points] means assessment to me" (Cindy).

In addition, as this cohort had attended teaching practicums in week 3 of Semester 1, they included this as a critical point in their academic career:

I think your first lot of Prac [is a critical point]. Like when you're actually going out into the school and that's a real decider of whether or not you actually want to be a teacher. I find a lot of the courses we do, like obviously they're helpful, but a lot of people say don't worry about how you feel about your courses, like if you're not coping with them, but as long as you're enjoying Prac and you feel confident in that, you'll be fine. Obviously as long as you pass everything, but I really enjoyed Prac and that really helped me decide oh yeah, I really do want to be doing this. So I think that's really important for a lot of students. (Cindy)

Given the students' concerns about assessment and teaching practicums, it would seem evident that they would value teaching and learning that is applicable to these two concerns. This is apparent in the data where learning is most valued for its applicability to immediate needs.

The relationship between learning and assessment

The link between learning and assessment is such that learning is valued if it facilitates the students' immediate assessment or practicum needs. In the following excerpt, Rose and Sue clearly articulate the relationship between learning and assessment:

Focusing on first year assessment: Surface or deep approaches to learning

And then as the weeks went on it was more like focusing on OK you've got to get to know this stuff so you can pass your exams. So that was pretty much the focus. (Rose)

You're certainly more conscious of the information in a course knowing you've got an exam and having to re-fresh yourself on that at the end of the semester. I certainly feel confident about running records now whereas if it wasn't in an exam would I perhaps have taken that same interest in it? Perhaps not. (Sue)

Learning is also valued if it is related to practicum and the student's perceived future professional role. This is evident in the following where Anne believes that she has learnt more through her teaching practicum than at university and that the purpose of learning at University is to gain a degree, its relevance to teaching, at this point in time, being vague:

This is probably completely off the track but I learned a lot more on our Practicum, through that Practicum, than I have through lectures and tutes, everything. I learned a lot more from actually teaching than from anything else . . . Well for me the most important parts of each semester were the, easily in my mind, the Pracs. As I said before I don't really care about the exams until the end when they're there, but the Pracs that's what we're going to be doing after we finish the course, so that's what we're actually learning to do. That's why I don't understand why we don't have more of them. But to me that's the most important part. We're learning to actually be teachers and we're getting the experience to be teachers. (Anne)

Anne's belief about the purpose of learning is common. Learning that does not relate to

assessment or future professional needs is not highly valued; this especially applies to learning to learn or learning for learning's sake. The following excerpt exemplifies this belief. Students do not value learning a new computer program as it does not appear to have any relevance to current assessment:

During our tute time they were teaching us how to use stuff like Movie Maker and this weird sound thing, which personally I didn't see as relevant because we had this huge assessment to do and they were more concerned with teaching us how to use stupid programs. (Susan)

That's how it was – it was literally playing around with things like 'Movie Maker' and just taking photos and cropping them – which didn't essentially seem relevant to the assignments that we were doing. (Helen)

. . . I still don't think it was a necessary thing to do. I don't know what how I am going to benefit from using it. (Cindy)

Interestingly, the main aim of this course is to develop generic skills for teaching 21st century learners and computer skills are critical for completion of assessments in second semester; neither of which are clear to the students.

The data also revealed that students value learning support and particularly learning support that assisted them to complete assessments. They were also clear about the type of support and when that support should be available.

Learning support and assessment

The students value learning support when it clearly assists them to complete current

assessment rather than as an aid to engagement in learning. This is particularly evident in Susan's comment where she values tutorials that focus on completing the assessment.

Learning Theories was all about the assignment and how to write it and what was expected and where to find the information and what they wanted written and how to write it and how it all fits together. But we actually got time to write it and to ask questions and could get one-on-one help. That's the first tute I've ever been to where I felt like it was worthwhile. (Susan)

The students recognise that scaffolded, appropriate and timely learning support for assessment is important for their academic success. This is evident in the following where Vicky notes that scaffolding and the timing of learning support is critical:

At the start they really, really look after you make you feel so welcome, happy as anything. They go through things clearly and then I think it kind of drops off and obviously it's because we're expected to know . . . So at the start it was so clear and we were being daily fed. . . I'd also add Semester 2 is quite an anticipation. There's such a big gap of holidays and it feels like you haven't even been to university and you come back and you've forgotten a lot of things and that's why I think they need refreshers on everything. It's like it hasn't really happened – and as first years I feel like we've been at uni for a couple of weeks. (Vicki)

The data show that students are assessment-driven and that they value teaching and learning and learning support that facilitates their successful completion of assessments and field experience. These

data support and reinforce findings of our previous study (Penn-Edwards & Donnison, 2011) that investigated the provision of timely and individualised learning support in their first year of higher education; that students equate critical points in the first semester with assessment. That students are assessment-driven is not new. However, conversations around the relationship between learning and assessment in the transition period—namely, the role of assessment in first year learning and the role of surface learning in the transitional first year experience period—are lacking. The following discussion considers these relationships.

Discussion

Assessment in higher education is often regarded as distinct from teaching and learning where “it is seen as something tacked on, punitive, discriminatory, and all-too-rarely designed to help students to come to grips with their own learning processes, their own understandings, their own strengths and weaknesses” (Candy, Crebert & O'Leary, 1994, p. 149). Most commonly, assessment in first year is summative and used to assess how much students have learnt or what they have learned (Biggs & Tang, 2007). It is less commonly viewed as integral to teaching and learning, especially in terms of being essential scaffolding for ongoing learning or learning-to-learn (Candy et al.). This is partially because of a preoccupation with measurable outcomes in higher education (Biggs & Tang). A learning-to-learn approach moves away from a Biggs and Tang tangible and measureable (hard) outcomes approach to intellectual and skill development by advocating for soft outcomes or outcomes that focus on

developmental stages (Zepke & Leach, 2010) as an ongoing process of learning.

Unfortunately, institutional assessment practices often discourage soft outcomes or learning-to-learn. This is partially due to wider institutional requirements that encourage assessment-driven curricula as academic staff workloads increase while face-to-face class time, number of assessment items, and marking time constantly diminish. The drive to lessen the number of Pass/Fail courses and remove zero-weighted experiential courses, such as learning support courses, impacts on the types and motivations for assessment and arguably leads academics to focus on teaching to measurable outcomes and students to focus on “learning for the test.”

We know from our data, wider reading, and personal experience that first year students’ motivation for learning is assessment-driven. The discourse around motivation for preferred higher education learning favours intrinsic motivation, characteristic of a deep approach to learning, where the student engages in learning for interest or learning sake (Kyndt, Dochy, Struyven, & Cascallar, 2011). Extrinsic motivation, such as being assessment-driven, is less desired academically as it is associated with a surface approach to learning (Biggs & Tang, 2007; Entwistle & Peterson, 2004). Assessment-driven surface approaches to learning have been somewhat demonised in teaching and learning. Biggs and Tang argue that surface approaches to learning should be discouraged and deeper approaches encouraged. However, we question whether such a belief supports best practice in the transitional first year to higher education.

While acknowledging the academic, intellectual, and developmental value of deep approaches to learning, we propose that there is a need to rethink how we understand surface and deep approaches to learning in the first year in higher education particularly in terms of the valued goals of higher education and the role that assessment can play in achieving those goals.

Firstly, we suggest that there is a need to reframe how we understand surface approaches to learning in the first year of study. Arguably, one of the purposes of undergraduate education is to develop students’ lifelong learning skills and attitudes (Candy et al., 1994) and to progress them towards deeper approaches to learning. Kift (2009) argues that the first year “should be designed to be consistent and explicit in assisting students’ transition from their previous experience to the nature of learning in higher education and learning in their discipline as part of their lifelong learning” (p. 1). To expect first year students to *consistently* engage with deep learning is unreasonable. As indicated in our previous study, students move between deep and surface approaches to learning dependent on critical points in their transitional year that are tied to assessment (Penn-Edwards & Donnison, 2011). We propose that, rather than being demonised, surface learning should be considered a necessary and critical initial phase in a cycle of learning in higher education. How first year courses can best achieve this with first year students and academically justify their program of study directs our ongoing research.

Secondly, we suggest that there is a need to reconsider how we view assessment in the first year. If, as our data suggests, students engage with learning because of

assessment demands then using assessment to leverage learning (Rawson, 2000) would seem appropriate. Rather than be seen as determining student achievement against hard outcomes, we argue that assessment practices in the first year can be an effective pedagogic strategy in moving students from an initial instrumentalist approach to learning to developing the attributes of a lifelong learner. This would mean focusing, as Zepke and Leach (2010) maintain, on *soft outcomes* as a bridge towards post-transitional deep learning. Such an approach, where assessment is used as scaffolding, is especially important in the transition period as a foundation to learning to learn and yet is relatively rare in an Australian higher education context. To facilitate this, it is necessary to consider teacher practices and how learning is structured, valued and presented within the students' first year of study.

Finally, we argue that there is a need to make their learning processes transparent to first year students. Much of the research on first year students is conducted on them but not disseminated back to them. In a forthcoming paper (Donnison & Penn-Edwards, 2012), we argue for enabling first year students by giving them a language with which to talk about their experiences. Part of this is educating first year students on what is learning, how to be autonomous learners, phases of learning and the relationship between learning and assessment. Ideally, this understanding gives meaning to the students' learning and improves their understanding of the purposes for assessment and its role in their ongoing learning.

Our combined 38 years of higher education teaching experience suggests that more first year students withdraw from studies

because of failure in assessment than because they fail to engage at a deeper level. Persisting students have found strategies which allow them to pass assessment items – from studies mentioned in this paper this appears to be a mix of strategically applied surface and deep learning. We suggest that persistence (Kuh, Cruce, Shoup, Kinzie & Gonyea, 2008), or *staying the course* through the transitional first year, be accepted as a priority for first year in higher education and that assessment-driven surface learning be seen as having a valuable role in this.

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Focusing on first year assessment: Surface or deep approaches to learning

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Focusing on first year assessment: Surface or deep approaches to learning