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Understanding the relationships between student identity and engagement with studies

Ian Solomonides

Macquarie University Sydney, Australia
ian.solomonides@mq.edu.au

Anna Reid

Macquarie University, Sydney, Australia
anna.reid@mq.edu.au

Previous empirical research by the authors, focussing on the experience of students studying design, has enabled the development of an illustrative model that may explain variation in the ways that students engage with their studies. This paper extrapolates from the outcomes of that research towards a more generic application of the model. This paper proposes an extension to the model and invites colleagues to reflect on the nature of engagement in various disciplines. At the core of this model 'sense of being' and 'sense of transformation' mediate the way in which students focus their attention on different experiences and elements of their studies. In this paper we explore the pedagogical implications of this model as it has the potential to help us understand the ways in which higher education inclines students towards different levels of engagement with their studies.

Keywords: engagement, sense of being, identity

Introduction

Universities seek to encourage learners to engage in activities that are known to promote quality learning and affiliation with the subject or institution (Bowden & Marton, 1998; Roff, 2002). This form of behaviour, or interaction, has come to be known as 'student engagement' even though there is some variation in the descriptions and conceptions of the phenomenon (Zhao & Kuh, 2004). Different activities, systems and processes may be considered beneficial in the promotion of student engagement but many of these are approached from the perspective of the teacher rather than the learner. Several researchers have sought to understand how students learn in various contexts (Prosser & Trigwell, 1999; Biggs, 2003; Meyer & Land, 2005), but not many have sought to explore the intersections between learning in specific disciplines and engagement (Abrandt Dahlgren, Reid, Dahlgren & Petocz, 2008; Markwell, 2007). In this paper we consider how an empirically derived model can help situate and understand those activities from the perspective of the students (Reid & Solomonides, 2007). This aligns with the suggestion by Krause & Coates (2008) that there are several dimensions to engagement and that is worth examining as a phenomenon.

Student engagement can be thought of as the involvement students have with their study and the things that support that study. It is a description of the behaviour toward, relationship with, and commitment to learning. Richardson, Long & Woodley (2003) suggest that the focus should be on the quality of effort of students, that is, oriented towards activities that are educationally purposeful. They also indicate that desired learning outcomes form a part of students' engaged practices. The concept of engagement is viewed in various ways depending

on the philosophical and pragmatic stances taken. Broadly, these stances may be thought of as focusing either on student behaviour including effort, time on task, and use of resources (Kuh 2006; Coates, 2006), or on socio-cultural factors, including a perceived sense of belonging to or lack of alienation from the group (Tinto, 1993; Astin, 1999; Kember, Lee & Li, 2001; Mann, 2001). Kearsley & Shneiderman (1998) use ‘engagement theory’ as a means to describe times where students are meaningfully engaged in learning activities through interaction with others and worthwhile tasks. They suggest engagement comprises three components, collaboration, project orientation, and authentic focus. In Wenger’s (1999) terms students have to ‘negotiate meaning’ in order to experience the world and to believe their engagement in it is meaningful. To negotiate or navigate the various learning spaces, and to achieve a *sense of being* that we have described in the model, students must *a priori* engage in a number of personally meaningful activities and thought processes.

Our, and phenomenographic-based research with students studying design disciplines, has led to the development of a model that goes some way in explaining the complex interactions described above (Reid & Solomonides, 2007, Figure 1).

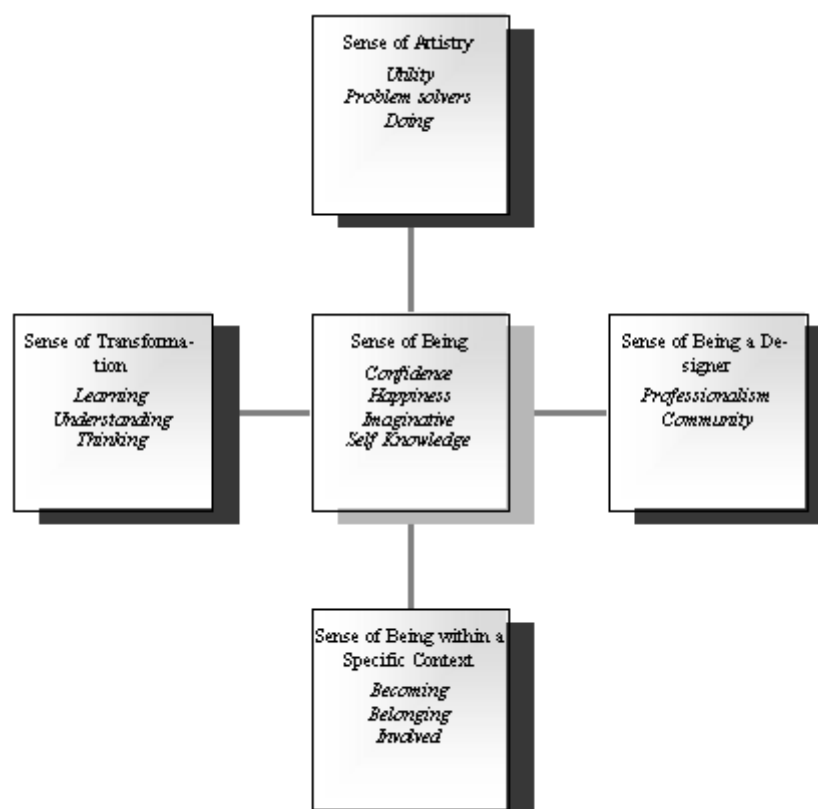


Figure 1: Elements of student engagement in the field of design.

At that time we described the core element of the model as a ‘sense of being’, or the phenomenon that mediates the way in which students focus their attention on different components of their studies. Ideally, as students progress through their studies they take on attributes and ideas that relate to their future profession, and this leads to a broader engagement with their studies. The *sense of being* describes a way of thinking about themselves that emphasises their confidence, happiness, imagination and self-knowledge. Students’ *sense of being* is central to their experience of *sense of artistry* (the practical utility

of work), *sense of being a designer* (being a professional, in this case, in the design industry), *sense of context* (the nature of becoming involved in a particular context, of belonging to a community of learners, etc.), and *sense of transformation* (the means through which the *sense of being* is expanded and enhanced). The original model and novel outcome space was developed following the analysis of students' verbal responses to trigger questions. The 81 students came from various design based disciplines, ranging from product design to fashion in the UK and Australia. Looking for the underlying meaning of the responses and then teasing out what is similar and what is different between them led to a set of categories that define the quality of difference between the experiences being described by the students (Marton & Booth 1997; Bowden & Green 2006). Focusing on the variation in students' experience of learning provides a background for tutors and students to understand and see the different ways learners understand and appreciate the complexity of tasks and their engagement with that task or learning environment. The categories together provide an understanding of the experience of engagement. Solomonides & Reid (2008, in press) went on to critique this original model. The current paper explores the new model in greater detail and, starting with the experience of teaching and learning in design, makes some suggestions for how the model might be applied across most disciplines.

A relational model of student engagement

In our original model, *sense of being* was located on its own at the centre of the student experience; it was an ontological expression describing an affective, internal relationship with learning. The students emphasised confidence, happiness, imagination and self-knowledge:

DEP S12: "*Basically it is not about money, it is not about what jobs you can get; it is about preferably doing what you want and being who you are.*"

Dall'Alba & Barnicle (2007) and Barnett (2004; 2005; 2007) raised a concern that epistemology was subordinating ontology in higher education. These authors are concerned with learning as embodied in a sense of being and who students are becoming: "... the question for students is not only what they know, but also who they are becoming" (Dall'Alba & Barnicle, 2007 p.683). It is the relationship the student has with learning that affects their *sense of being* and so it makes sense to closely align *sense of being* with *sense of transformation*. Barnett (2007) emphasises the point and asks the question at the heart of this paper:

"*We do not properly understand the student as separate from her educational settings, even if related to her educational settings. Rather, we understand the student more properly as being in her educational settings. The question is: what is the nature of that being?*" (p.27)

Our studies with design students suggested that the *sense of being* and *transformation* (which represent ontological dimensions) involved a complexity of interaction between *being a designer*, *artistry* and *context* (which represent epistemological dimensions). How might these concepts be described in more general terms applicable to other disciplines? Figure 2 is an attempt to describe a relational model of student engagement using terms that might be applicable in disciplines other than design. Here we have reconceptualised *being a designer* with a *sense of being a professional*; *sense of artistry* becomes a *sense of discipline knowledge*; and *sense of being within a specific context* might be considered as a *sense of*

engagement. *Sense of transformation* and *sense of being* are the inherently more general dimensions and concepts used to describe the nature of being.

Figure 2 is a representation of the key features of variation in students' experience of engagement. A core feature is that students suggest that a *sense of being* and *sense of transformation* predicate their engagement with their discipline and enable students to consider the personal effects of being engaged with the dominant discourse. 'Student engagement' here is a relational concept supported by the various elements in the model. We leave question marks to invite researchers and practitioners of other disciplines to consider what, if other, elements may also be identified. The models in Figures 1 and 2 are based on our earlier meta-analysis of student descriptions of engagement in the study of design (Reid & Solomonides, 2007) and illustrate alignment with indicative research publications that support each of the elements in the model.

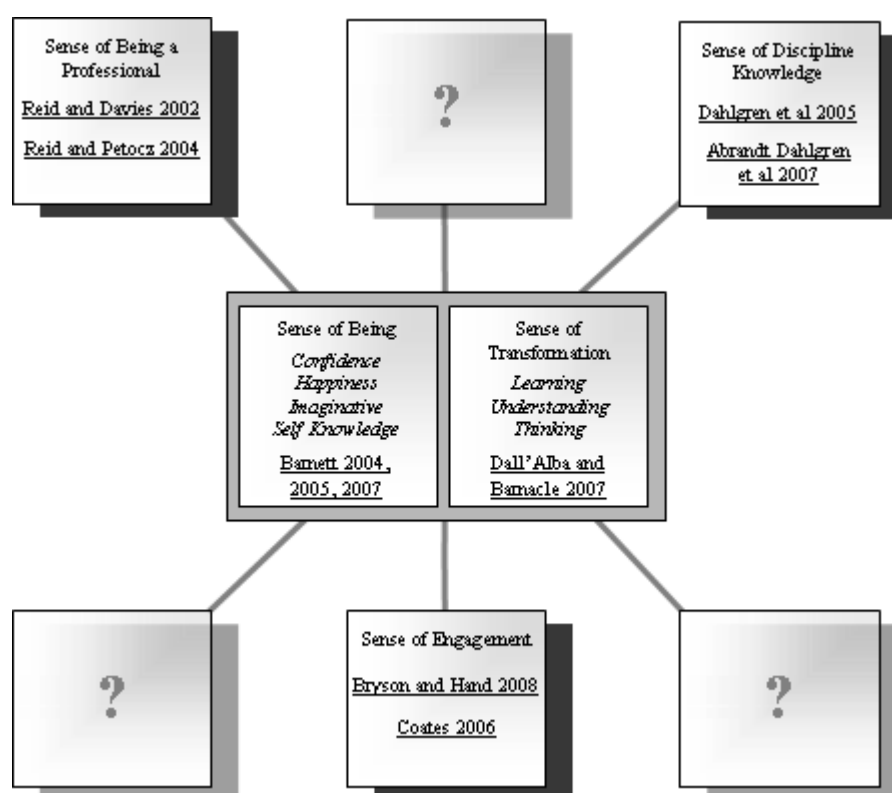


Figure 2: A relational model of student engagement

Figure 2 represents the centrality of what we have described as *sense of being* and *sense of transformation* and their relationship with other important concepts. The centre 'hub' represents the self and an axis about which, the outer components of the 'wheel' turn. The outer components of the wheel represent the qualitatively different ways that the students expressed their understandings of engagement that contributed to their understanding of 'self'. Additionally, the hub and wheel metaphor emphasises a dynamic relationship between components where students may direct their attention to one aspect or another. Aspects of intersection between the 'wheel' elements seemed to linger around the affective, emotional and attributed components of engagement. Considering the hub as the centre of the model, students indicated that their personal experience of engagement relied on their own *sense of being* and *sense of transformation*. These elements emphasised their confidence, happiness,

imagination and self-knowledge intertwined with learning. Placing *sense of being* and *sense of transformation* at the centre of the student experience aligns with Barnett's assertions that, "...pedagogical being is constructed around senses and feelings." (2007, p.30), and that, "...ontology trumps epistemology." (2005, p.795).

Each of the wheel components relates to a different aspect of the experience of being a student. When the students' responses were directed towards the activity of designing they described a *sense of artistry* (in Figure 1, and in Figure 2 described as *sense of discipline knowledge*) which focused on the practical utility of their work, their ability to solve design problems and the actual making of an object. Engagement is represented by the physical outcome to a problem while creativity was related to the aesthetic outcome of the object. Here the *sense of being a designer* (in Figure 1 and here in Figure 2 as *sense of being a professional*) is a category that involves being a professional with the design community. In this category students take on the attributes of the design professional and consider themselves as initiates within that specific community. A *sense of transformation* is a category that relates to the ways students' *sense of being* is changed through learning. Here, students indicate that they are personally transformed by their experience of study, designing, and becoming designers; that they develop an appreciation of the work and life of a designer over time and proximity to designers, tutors and peers, and that their modes of thinking develop. Students in our studies indicated that they were able to change their way of thinking and working when the context changed. They described a *sense of being within specific contexts* (in Figure 2 as a *sense of engagement*) that afforded them the ability to engage creatively with the activity to hand; the students recognised that part of their experience of the context was how they belonged to it and the nature of their involvement.

As stated above, the model shows students' various foci of attention or concern relative to their development as students and as emerging design professionals. In and through exposure to various pedagogic practices (studio activity, critiques, design briefs, work-integrated learning, contextual studies, assessment, generic skills, etc) students would experience engagement relative to their *sense of being* and *transformation*. In describing this *sense of being*, students emphasised their confidence, happiness, imagination, and self-knowledge as outcomes of design education. In turn these qualities would be referential to other cognitive and emotional states such as a *sense of being a professional*, *sense of discipline knowledge* and *sense of engagement*. The experience of learning would therefore be strongly related to a central sense of self and the pedagogic practices employed in education would at their best, support the development of the *sense of being* and *transformation*. The question remains though, what might we understand of a *sense of being* and *transformation* related to pedagogic practices common in higher education?

Sense of being a professional

Consider a pedagogic practice (say work-integrated learning) where the focus shifts from discipline specific development of understanding to one where the focus is more on the development of professionalism and the application of understanding in a community of practice. Here the *sense of being a professional* is encouraged as students are exposed to the professional community and its rituals, practices and practitioners. The opportunity to engage with the profession and the community is perhaps where students will most come to realise a *sense of being a professional*. In an extension to the practicum described by Schon (1988), students begin to professionalise their practice and learn from and within a real context rather than a virtual or vicarious representation of it. This is a tremendously valuable experience and

really legitimises the students' place in their chosen profession. In addition these students return to university with an enhanced set of skills which they then apply to the conclusion of their studies but also share within the academy. At its best this relationship between the university, the workplace and the student helps to alert students moving through the system to the status of the profession, as well as the facilitation of community engagement and the flow of knowledge between universities and industry. In our experience the flow of knowledge is not unidirectional as implied by the term 'knowledge transfer' (Argote & Ingram, 2000) but is much more reciprocal. Indeed this reciprocity, especially related to design and small to medium sized industry is now acknowledged and actively promoted by governments (see for example, Lambert, 2003; Cox, 2005; DEST, 2006; West, 2006). The relationship with industry and the awareness of the profession is further enhanced through the employment of adjunct staff, often practicing professionals.

If education is to prepare students for an uncertain future (Barnett, 2004; 2007) then this collaboration with for example, industry, users, and the context of use, becomes paramount in students' formation. It is important that students have some appreciation of their future professional roles (Wood & Solomonides, 2008). Dahlgren et al. (2005) demonstrate this in their model of professional engagement where they show that a 'diffuse' sense of the social importance of a student's targeted profession will result in a lack of engagement with their studies, and that professions with 'clear' representation of social importance encourage students to become engaged with their studies.

Sense of discipline knowledge

A *sense of discipline knowledge* is also recognised in the pedagogic literature. Abrandt et al. (2008), suggest that that all educational programmes include *rational* knowledge and skills which emphasises the utility value of knowledge and comprises *substantive* skills that are content specific and contextually situated and *generic* skills, transferable between different contexts. However, they also identify that some programmes are *ritual* in character, where the connection to a specific context of application is lacking and the most important feature is the exchange value of knowledge. In talking about design specifically, Schon (1988) argued that 'artistry' is fundamental to the professions and that regardless of the discipline artefacts of some sort are produced. For Schon, the design studio in particular:

"...is a practicum, a virtual world that represents the real world of practice but is relatively free of its pressures, distractions, and risks. Here students learn, by doing, to recognize competent practice, appreciate where they stand in relation to it, and map a path to it. They learn the "practice" of the practicum, its tools, methods, and media. They do these things under the guidance of a studio master who functions less as a teacher than as a coach who demonstrates, advises, questions, and criticizes. They work with other students, who sometimes play the coach's role. As they immerse themselves in the shared world of the practicum, they unconsciously acquire a kind of background learning of which they will become aware as they move to other settings later on." (p.4)

Within this practical setting the student develops their *sense of discipline knowledge* by doing. It is not possible to learn to be a designer without designing but with this caveat comes some issues for the student, largely around a feeling of discomfort.

DEP S43: *"Sometimes I feel like I don't know what I'm doing but I know I want to do it... it's almost as if I have to feel my way into the problem but then you get a really clear idea what it is you want to do and that's fantastic. That's what I call engagement."*

Schon (1988) calls this a "paradox of learning to design" (p.6) implying that some of the 'doing' is done without knowing exactly what is needed to be learnt. With a similar concern and view of the development of understanding, Meyer & Land (2005) used the term 'liminality' to describe this paradox and threshold in any discipline, between doing and being, knowing and understanding.

Sense of engagement

In a previous study (Reid & Solomonides, 2007) we discussed a *sense of being within specific contexts* that afforded learners the ability to engage creatively with the activity in hand. Bryson & Hand (2008), evoking the work of Fromm (1976) and Perry (1970) call for more of an emphasis on the 'becoming' and 'belonging' aspects of learning, suggesting that:

"Taking this perspective means that we must be cautious about focusing too narrowly on one facet of learning – such as deep v. surface, or learning styles or orientations, or motivation – however insightful they appear, because they are insufficient to describe holistically the full individual experience of learning. We propose that engagement might be such an holistic concept." (Bryson & Hand, 2008, p.8)

The students we spoke to recognised that part of their experience of the context was how they belonged to it and the nature of their involvement; belonging to a learning context and being part of the general community where their work is appreciated. A *sense of engagement* is encouraged as students become more aware of the epistemology and ontology of their discipline and adopt philosophical and moral stances relative to their own *sense of being*.

DEP S17: *"I think there has to be a breaking of the boundary between teacher and student; it has to be more of one level relationship rather than dogmatic teaching. I think there has to be a more a passing on of knowledge rather than enforcing that this is how you do it, this is how you should think. There should be a generation of ideas, a generation of a way of thinking rather than saying these are my philosophies and this how you shall think, this how you should put into your design practice."*

Conclusion

Sense of being and *transformation* are proposed as central to student engagement and the cumulative effects of pedagogic practices where everything from generic skills to discipline knowledge and understanding conspire together to produce a graduate who is confident, happy, imaginative and has knowledge of themselves and their capability. The characteristics of the *sense of transformation* focus on the level of personal change. In order to facilitate such change lecturers and tutors could develop authentic activities that are obviously important within a specific discipline area's associated professional area. Tutors could focus more on students, that is, their conceptions of the discipline, their perception of the professional environment and their approach to learning in that area (Abrandt Dahlgren et al., 2007).

Transformative learning also occurs where there is robust engagement with student and professional peers that is related to those authentic tasks (Boud, 1999). If the student successfully perceives the artistry of their subject, the sense of working in their chosen profession, the epistemology and ontology of their discipline and the ways in which they themselves have been transformed by the experience of learning, then hopefully they are better engaged.

In the *sense of engagement* we find that students are able to make use of their studies if the specific learning tasks are placed within a more general social, political and economic landscape. This encourages them to take a critical approach to their learning that involves discursive practices, personal and peer judgements, debate and argument, and facilitates their development of ethical, moral and cultural positions. The *sense of discipline knowledge* evokes a core value of the professional discipline. For musicians this may be re-considered as a *sense of musicality*, or for a statistician a *sense of variation*, and so on. This component describes what constitutes the essential utility of a discipline area. Therefore pedagogic practices associated that area could demonstrate the utility of the discipline area or profession for society, could focus on authentic project work so that students can form a picture of the usefulness of their future work. Tutors could use group and peer problem generating and solving activities that would help generate discomfort and cognitive dissonance (Abraham, 1998). The *sense of discipline knowledge* is then strongly related to the final wheel component – *sense of being a professional* (designer, engineer, film maker, doctor, etc). This component emphasises students' identification with a particular profession. Pedagogic suggestions for encouraging students to identify strongly with a profession could include component of work-integrated learning, the involvement of tutors who are also professionals, the opportunity to critique professional work practices, engagement with the community using authentic learning tasks, the provision of strong links between university style learning and professional work, and the provision of interdisciplinary activities.

As the interest in student engagement continues to grow (Zhao & Kuh, 2004; Coates, 2006) we must ensure that the concept of engagement takes into account the realities of students' experience and the various foci of attention influencing their *sense of being* and *transformation*. We suggest that tutors and curriculum developers consider carefully the way in which *sense of being* and *transformation* in their own discipline are constituted and how the relationships with the other elements are manifested within learning environments. Failing to do so will mean that we have an impoverished understanding of the cognitive and emotional transitions students make in 'becoming an (X)' and the influence of the learning context and the opportunities for learning on those transitions. It is easy to underestimate the importance of students' feelings of happiness and confidence in relation to their pre-professional learning experiences. Our research with design students suggests that, far from being a fluffy sort of a concept, student happiness and confidence is integrally linked with their ability to apply and appreciate disciplinary-based knowledge. A *sense of being* and *transformation* are also tied to students' capacity for critical reflection; an activity that could be practiced and encouraged during formal studies. As such, it is an important component of in being able to know something of themselves and their new professional positions and identity.

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