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### FULL CIRCLE: BALANCING THE KNOWLEDGE EQUILIBRIUM BETWEEN NEWLY-ENROLLED DESIGN STUDENTS AND THEIR DESIGN SCHOOL

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#### ABSTRACT

In a relationship where one party has less knowledge than the other, research suggests that providing the former with more context specific knowledge can reduce the anxiety experienced by this party. I propose that for a newly-enrolled design undergraduate, the knowledge balance in the university-student relationship is shifted towards the institution, both in terms of subject-specific and person-specific knowledge. I argue this imbalance in the 'knowledge equilibrium' may help to explain research findings which argue that many newly-enrolled first-year university students can experience anxiety. Issues linked with anxiety can be argued to be of particular relevance in the field of design.

A more equal distribution of knowledge engenders an adult-adult relationship, helping to create a 'mutuality of participation' between protagonists. Design Schools provide adult learning. Movement towards an adult-adult relationship between 'the university' and 'the student' can be facilitated through creating an environment where knowledge can be more equally distributed.

This paper describes a project developed for newly-enrolled first years at a Design School situated within an English university and makes use of a publication containing input from students, tutors and alumni associated with the 3D Curriculum. This project aims to move towards facilitating a balance to the university-student knowledge relationship by providing students with knowledge that goes over and above that given in the usual induction events such as those related to library usage.

Initial results have shown this knowledge has been important in reducing student anxiety at a time when individuals are particularly vulnerable to it.

*Keywords: Reducing student anxiety, knowledge distribution, storytelling, adult-adult relationships, design pedagogy* 

#### **1** INTRODUCTION

Research suggests that the first few days in a student's university experience can be extremely important and can affect progress in subsequent years of study [1]. For newly-enrolled undergraduates, there can be a sense of a loss of status accompanied by a feeling of sacrifice with regards having to pay fees and the deferment of the potential to acquire significant earnings [2]. In the UK secondary school system, students tend to live at home but once they enter the higher education system, they tend to live away from home [1]. Some first year university students can experience a feeling of a loss of connection with their home environment and the things that give them a sense of belonging [2]. Fisher and Hood, cited in Wong et al. [3] have suggested that the transition period associated with arriving at university can cause psychological morbidity for newly-enrolled UK students. Other researchers have also argued this to be the case [4].

For many newly-enrolled first years, the feeling of 'start[ing] with nothing, knowing nobody' [2: p.23] adds to worries. It has been suggested that students who do not make an adequate transition to life at university are more likely to under-achieve and to drop-out [4]. Thomas [5: p.431] suggests that students who feel they do not 'fit in' at university may be prone to leaving without completing their programme of study. Student retention is an important issue in UK universities [5]. It is claimed that the majority of students who choose to drop-out do so within their first year and that the majority of such students leave their programmes of study within the first few months of enrolling [6]. Psychological morbidity [3] may contribute to the high drop-out rate in the first year of study. It has been suggested that the anxiety felt by some new full-time first years is akin to that experienced by

newly recruited soldiers, one in which an irrational state of mind cannot localise and navigate seemingly small problems or issues effectively; instead, these issues become one all-consuming anxiety [2]. Moreover, emotions such as anxiety are linked to the 'unsuccessful avoidance of undesired end states' [7: p.782] amongst affected individuals. Furthermore, anxiety can affect academic progression, personal wellbeing and relations with family members [3].

Issues related to anxiety can be argued to be of particular relevance in the field of design. It has been argued that problem-solving is an important skill for designers to possess [8]. In their meta-analysis of research related to emotional states and cognition, Bass et al. [7: p.784-785] present data which argues that anxiety results in the narrowing of cognitive categories, a narrowed attention focus and reduced cognitive flexibility. Thus, anxiety can impede problem-solving activities. It has been suggested that design-related problem-solving requires creativity [9]. Anxiety has been argued to reduce levels of creativity in individuals [7].

#### 2 KNOWLEDGE ISSUES

I propose that for an incoming design undergraduate, the knowledge balance in the university-student relationship is shifted towards the institution, both in terms of 'subject-specific' and 'person-specific' knowledge. With regards individuals employed by the university, subject-specific knowledge can be argued to be represented though the attainment of graduate (and post-graduate) certification in a relevant area of design, the completion of an 'educator training programme', membership of relevant professional bodies, relevant design industry experience and experience as a design educator within higher education. I propose that newly enrolled first years will have less subject-specific knowledge than relevant individuals employed by the university. Person-specific knowledge relates to information on newly-enrolled students relating to the age, personal (and parent/guardian) contact details and references which individuals employed by the institution have access to. Newly-enrolled student do not have access to high levels of person-specific knowledge pertaining to individuals employed by the university.

Thus, it can be argued that the 'knowledge relationship' between the university and a newly-enrolled design student has paternalistic overtones. This notion is of interest when one considers that the vast majority of students at UK universities are adults and therefore share the same legal status as their professional employees. The notion of paternalism facilitates an adult-child relationship between protagonists. It can be suggested that the knowledge relationship between the university and a newly-enrolled design student facilitates an adult-child relationship between the institution and such students. It is possible to hypothesise that this situation can contribute to Earwaker's [2] notion that life for a newly-enrolled first year can be an anxious one.

In a relationship where one party has less knowledge than the other, research suggests that providing the former with more context-specific knowledge can reduce the anxiety experienced by this party [10; 20]. With the move towards facilitating a more equally distributed 'knowledge balance' between the institution and newly-enrolled first years in mind, the School of Design initiated a publication entitled 'Full Circle' [11]. The aim of this publication was to provide newly-enrolled design first years with knowledge that goes over and above that given in the usual induction events, such as those related to using the library and the health and safety protocols in workshop.

#### **3 PROJECT REMIT**

The remit for the Full Circle publication was open to input from existing students, teaching staff and successful alumni associated with the programmes of study which (at the time) made up the undergraduate 3D Academic Group. These programmes were Transportation Design BA (Hons), Design for Industry BA (Hons), Product Design Technology BA (Hons), Interior Design BA (Hons) and Three Dimensional Design & Fine Product BA (Hons). This publication was given to all newly enrolled students attached to these programmes at the beginning of the 2009-10 academic year. In this paper, these students will be referred to as '3D design' students. The publication can be downloaded at: http://designcollaboration.org/fullcircle.php.

Written feedback was collected from a representative sample of 10 students from each cohort of students. In this feedback, students were asked to reflect on feelings related to their programme of study. Feedback was initially provided at the beginning of the academic year - before students had been given the publication. A second set of feedback was provided at the end of the first semester of study – upon which students had been given an opportunity to read the publication.

The discussion in this paper will relate to students' feedback on what I will term 'Stories from Students'. This term is used to combine material from the publication which relates to skills tutorials, background personal information and project synopses provided by students in years 2-4 (the relevant programmes of study are between 3 and 4 years in duration) on the featured programmes of study. Such 'Stories from Students' are pertinent to the discussion of this paper as contributing students have more experience of the institution and of their programmes of study. People who are viewed as having greater experience of an environment can be argued to act as mentors for newcomers [12]. Koskinen and Vartia suggest that 'mentors who talk about themselves and their experiences establish a rapport that makes them 'learning leaders' [12: p.11].

#### **4 STORIES FROM STUDENTS**

Feedback from many newly-enrolled first years suggested that, upon entering the institution, with regards to their own perceived standard of work, there was indeed a feeling of anxiety. For example, students reported:

'Feeling very inadequate about my drawing skills at this current stage in time.'

'When I first started the design course, I always felt over-whelmed and intimidated by the standard of work produced by students in the later years, 'thinking that I'm never going to reach that standard'.'

Many students reported that 'Stories from Students' helped to ease anxieties associated with learningrelated activities. For example, students stated:

'It was good to read about how others felt as they progressed through the course and made me feel at ease when I came up against a challenge.'

'[They] helped me understand people's backgrounds of how they got into design and the work they did to accompany their degrees. These stories again comforted me in learning that there is nothing particularly special about these students. It was also encouraging to hear other people in the same position as me, and how student's preferences of design change.'

'Learning that [a student featured in Full Circle] was unsure as to where he would go in the design field gave me confidence that you didn't have to be from a certain design background. You would begin to learn the skills required, in time to become a designer if you put the time and effort in.'

Although much feedback from the students was specific to programme-related 'work issues', some also added that the Full Circle publication helped to address more general anxieties:

'[It's] an excellent preparation tool, not just for design techniques but to address any anxiety towards starting a design degree answering questions like how our skills will be utilised and out future be developed effectively in design and how we will fit in with each other and university life?'

'I used the summer before I started the course intensively [preparing]...it would have been reassuring and beneficial to me to be able to read the experiences of the design students [then].'

The importance of storytelling has being recognised in higher education [13]. It has been suggested that narratives are important in facilitating sense-making [13; 14; 15] and that storytelling is useful in encouraging a constructivist approach in education [16]. Stories can be beneficial in offering reassurance [17] for those privy to them. Schanck, cited in McKillop [16] suggests that for storytelling to be effective, a story should not be passively consumed and Forte [15: p.162] claims that 'storytelling requires mutuality'. The feedback from students above suggests that 'Stories from Students' were actively processed by readers, have helped to 'make sense' of a new situation and have helped to reassure readers. It can be suggested that 'Stories from Students' provided newly-enrolled design students with knowledge over and above that provided in the usual induction events conducted by the institution. I belief this knowledge has been a contributing factor in easing anxiety through helping to balance the 'knowledge equilibrium' between newly-enrolled design students and their institution. Interestingly, it has been argued that because of cultural issues, a 'buddy system' (my emphasis) where peers in higher years of study mentor those in years below them is not as effective in UK-based universities as it is in other cultures [2]. With this in mind, it can be hypothesised that a more 'distant' (my emphasis) means of mentoring via storytelling through a publication may serve to be more beneficial in such institutions.

Earwaker [2] claims it is important for students to be exposed to challenges in higher education and that these challenges should be tackled in increasingly independent ways. For Earwaker [2], the goal of higher education is to facilitate autonomy and the development of a new status in the individual student. I agree with Earwaker on these points, but I believe that the 'delicate status' of some newly-enrolled first years necessitates the provision of knowledge about their institution which goes over and

above that provided in the usual induction events. Initial results from the Full Circle publication have suggested that such a move can facilitate the easing of anxiety amongst many newly-enrolled '3D design' undergraduate first years.

#### **5 ADVANCES IN KNOWING**

I suggest that '3D design' programmes on offer at higher education can take guidance in terms of the adjustment of the knowledge equilibrium between the university and newly-enrolled students from the medical profession. I have proposed that the relationship between the university and a newly-enrolled first year design student can be viewed as one with paternalistic overtones, and that this situation can facilitate an adult-child relationship. Goodyear-Smith and Buetow [18: p.450] suggest the medical profession has been traditionally viewed as a 'typically patriarchal system', the doctor being viewed as the adult and the patient being seen as the child. According to Goodyear-Smith and Buetow, in more recent times, the 'adult-child' [18: p.451] relationship has given way to one in which it is possible in many instances to infer an 'adult-adult' [18: p.451] relationship and that through this 'the patient has come of age' [18: p.451]. Goodyear-Smith and Buetow [18] suggest that this change in the relationship between doctor and patient has been facilitated through the recognition that there needs to be a more equal distribution of knowledge between both parties. It has been suggested that the greater the imbalance of knowledge between two parties, the greater the capacity for its misuse [18; 19]. A more equal distribution of knowledge between protagonists helps create a 'mutuality of participation' [18: pp.451-452]. I suggest a climate which promotes a mutuality of participation would be beneficial for newly-enrolled '3D design' students and their university.

Interestingly, the UK-based Student Charter Group has recently and independently recommended that higher education institutions should individually provide what they term a 'Student Charter' [20]. The Student Charter Group recommends that the Student Charter would be beneficial for newly-enrolled students and suggests that this document should inform students '...what they should be able to expect, what is required of them, and what to do if things do not meet expected standards.' [20: p.7] The Student Charter Group recommends that, with regards the relationship between students and the

institution, 'emphasis should be on partnership working between staff and students' [20: p.8]. This suggests the Student Charter Group recommends the facilitation of mutuality and an adult-adult relationship between the university and students. The UK's Minister of State for Universities and Science has welcomed the recommendations from the Student Charter Group [21].

Given that more experienced students are more 'entrenched' actors within the institution than new students, their stories can help to balance the distribution of knowledge between the institution and newly-enrolled first years. I suggest the institution's role in making these available is important in facilitating the movement towards an adult-adult relationship between itself and newly-enrolled '3D design' students.

#### **6** CONCLUSION

Many newly-enrolled first year students can experience anxiety. Student anxiety can affect educational progression, individual wellbeing and relationships with family members. With particular relevance to design, anxiety can reduce creativity. In a relationship where one party has less knowledge than the other, the former's anxiety can be eased through providing the former with knowledge. The balancing of the knowledge relationship between protagonists can facilitate the creation of an adult-adult relationship.

UK design schools provide adult learning and their students share the same legal status as their professional employees. Thus, I believe institutions should introduce measures that promote the further facilitation of an adult-adult relationship between themselves and newly-enrolled first years. Without such a move, it could be argued that professionals concerned with '3D design' higher education provision could be 'lagging behind' with regards facilitating a 'balance in knowledge' between protagonists when compared to professionals concerned with health care provision.

I recommend that more studies should be conducted into the further facilitation of an adult-adult relationship between institutions and newly enrolled first years in design schools. It would be interesting to learn of the implications of such moves for both students and academics.

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