Coaching (and Mentoring) for University Undergraduates: Some Issues from the Literature.

Problems cannot be solved at the same level of thinking that created them (Einstein).

Building a network of contacts for information contact and support is critical factor in career and personal success (Whiting and Janasz, 2004).

Tinto (1987) offers six principles for supporting success and progression for first year undergraduates:

1) *students should have the opportunity to acquire the skills for academic success;*
2) *personal contact with students should extend beyond academic life;*
3) *retention actions should be systematic;*
4) *these actions should address students' needs early in the academic year;*
5) *they should be student-centred; and*
6) *they should have education as their goal. Tinto argues that the single most effective retention strategy for universities is teaching students how to learn, (Fox et al, 2010).*

Coach/mentoring as a branch of learning

A review of the student support literature suggests that, to be successful, student support schemes need to address teaching and learning issues as well as social issues; be discipline based; adopt a student-centred approach; and be delivered early in the academic year.

Hargreaves (2010) reports that' the biggest problem faced in implementing a mentoring scheme was convincing staff to accept that part of their responsibility was to act as a mentor, changing their attitude of "facilities are there, it is the students "responsibility to use them".'

Pitkethly and Prosser (2001) argue that most students either withdraw from, or fail to progress in, higher education courses because of their failure to adjust to environmental issues rather than on the basis of intellectual difficulties. Such factors include a lack of goals on the part of the student, a mismatch between the student and the course or university culture and feelings of isolation (Tinto, 1995).

For first year students 'academic and personal issues frequently co-exist, and cognitive, metacognitive and affective components need to be addressed' (Quinn *et al.*, 2002, referencing Hattie *et al* 1996).

Enhanced student success in higher education can be facilitated by programmes that address physical orientation, social interaction (Krause, 2001) and an awareness of teaching and learning issues (academic orientation) (Pitkethly and Prosser, 2001).

Durkin and Main (2002) argue that students value study skills courses that are discipline-based as opposed to university-wide study skills courses that are generic. In addition, Saunders (1992) maintains that student support programmes need to be student centred whilst Congos and Schoeps (1993) suggest that student attrition needs to be addressed by measures within the first six weeks of the beginning of a course (Fox *et al.* 2010).

What is happening to undergraduates during their degree programme?

Duff (2004) also found a positive relationship between the age of students and the adoption of deep and strategic approaches to learning; and Parry (2005) reports research claiming that teenagers lack skills such as goal-setting, priority-setting, planning, organization and impulse-inhibition because the relevant part of the brain does not develop these skills until late teens, or even early 20s.'

Vygotsky (1978) also suggests that, 'Learning is not a passive individual process of 'taking in information', but an active process of participating in systems of cultural practices' (Peterson *et al.*, 2010).

Peterson *et al* (2010) draw on Tinto's analysis that 'academic integration and social integration are two key constructs to conceptualise the student attrition process, and that integration into both is central to student persistence.

'Young people strive to develop a sense of career-related identity, and this task is difficult and especially salient during the student years' (Erikson 1950).

The novice moves to professional, and the mentoring functions involved are career, academic, psychosocial, and role-modelling (Packard, 2003).

Students both underestimate the academic expectations of a degree programme, and do not recognise that it is important to integrate interpersonal skills such as communication and problem solving with their technical knowledge (Mara and Pangbourn, 2001).

Wolffensperger (2010) draws on Pekrun *et al* (2002) in suggesting that students have *academic emotions*. 'The origin of these emotions lies in the threat that academic literacy discourse poses to their identity, because this is a secondary discourse that strives to be hegemonic and which is imposed on them – a discourse that clashes with the primary one that expresses their identity.' Wolffensperger also argues that: 'Contemporary mentoring and ALM literature indicates that the interpersonal relationship and its emotions may influence the thinking process.'

Later phases or a mentoring relationship may be less satisfactory as protégés enter peer relationships with their mentors, and thus the relationship needs to be reassessed (Quinn *et al.*, 2002).

Learning approaches

Fox *et al* (2010) find three learning approaches reported in the literature. A 'surface' approach when the student directs attention to the text itself, and has a reproductive approach based on rote learning. A 'deep' approach has the student directed towards understanding what the author wants to say, the 'intentional content of the learning material'. A strategic approach is based on the determination to achieve the highest possible grades, and involves organised study and awareness of assessment requirements. While the deep approach is widely regarded as the most desirable at university, some authors suggest that high achieving students adopt the strategic, or a combination of the deep and the strategic. The deep approach may be influenced by, for example, intrinsic motivation, or an interest in the specific topic.

'Hall *et al.,* (2004) noted that by altering the tutorial design to incorporate more student-centred group work an increase in the deep learning approach and a decrease in the surface learning approach of first-year students could be achieved.'

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In their literature review Fox and Stevenson (2006) indentify a number of ways of categorising learning styles:

- Reichmann and Grasha (1974) suggest independent, dependant, avoidant, participant, collaborative, and competitive.

- Fleming (2001) suggests four student instructional preferences: visual, aural, read/write/ kinesthetic.

- Kolb proposes a cycle: reflection and observation; conceptualisation and analysis; testing and application of ideas.

- Kolb also suggests four categories of learner: accommodators, divergers, assimilators, convergers, later characterised as thinkers, feelers, doers and observers (not necessarily in the same order in both lists.)

While it has been suggested that teachers should match their teaching to the learning style of the student, the range of learning styles indicates that any single approach may work for some students but not for all, and so a range of approaches is required.

However Prosser and Trigwell (1999) place learning in context, and suggest that student learning is influenced by such factors as previous experiences, course design and context, and that it is continuously evolving. Thus a Vygotskian analysis, that student learning is enhanced by 'expert scaffolding' from a 'more capable peer' or 'adult', is appropriate.

Issues in accessing coach/mentoring and other support

Marra and Pangborn (2001) suggest that 'men and women participate in different ways in the classroom, respond differently to different learning environments, and may be treated differently by predominantly male faculty'. Thus women may perceive and experience greater barriers to establishing mentoring relationships (Packard, 2003). The traditional dyadic model can appear supportive of male 'grooming' designed to produce clones. (Packard, 2003). The hypothesis that mentoring experiences vary by race and ethnicity is supported by some research (Peterson *et al*, 2010).

One programme identified a single science mentor with whom students at risk of failing were required to book a session, and who at another time was provided with a list of at-risk students. It became clear that it was hard to separate problems with content and problems with study skills. The programme identified common issues such as not understanding the level of synthesis and detail required to provide a good examination answer However 61% of those at risk accessed no study support during the programme. It is possible that this was the result of low motivation (Quinn *et al.*, 2002).

The status of the mentor can be an inhibitor in asking for help especially for first year students who may see lecturers as too busy (Quinn *et al.*, 2002). Very few students, even those experiencing difficulties, accessed generic learning support (Quinn *et al.*, 2002).

Quinn *et al* .(2002) suggest two models of support: the 'integrated' model where study skills support is embedded in the curriculum. Alternatively, the 'remedial' model focuses those perceived to be in deficit. Hattie (1996) recommends that 'training for study skills should be 'in context, use tasks within the same domain as the target content, and promote a high degree of student activity and metacognitive awareness.' (Quinn *et al.*, 2002). One-to-one work is essential for some students.

While educational aspiration is accepted as an important factor in persistence and the completion of degree courses, Peterson *et al*'s (2010) study indicated that educational aspiration may be 'a critical factor in determining the dynamics of mentoring , and consequently its effect on student persistence.' Where one parent had at least a baccalaureate level of education or higher, students were more likely to access mentoring support. Thus students who are first-in-family to university may be less inclined to access support such as mentoring. Peterson *et al* (2010) suggest the following possible reasons:

- They may not feel confident to meet a mentor;
- They may not feel comfortable in a meeting with a mentor;
- They may be reluctant to acknowledge problems;
- They may be unwilling to take the initiative in discussing any problems.

Therefore mentors may need to be more proactive in engaging students who are first in family to university.

Does a higher engagement between mentor and mentee signal greater need or higher motivation? However lack of motivation is also a contributing factor to not accessing support including mentoring support (Quinn *et al.*, 2002). Nevertheless, since study habits are amenable to change, this indicates that coach/mentoring could have a positive impact (Quinn *et al.*, 2002).

The importance of feedback

Quinn *et al.*, (2002) suggest that early feedback is critical in the first term so students have time to recognise issues and do something about them. However, even after feedback, students do not necessarily accept that they have a problem. There is therefore a potential role for a coach/mentor in helping new students understand that they have an issue. However, recognition of an issue is not the same as making the changes to resolve it. Nevertheless the first step is to recognise that there is a problem.

Recognition of a problem is not the same as solving it, but does increase the likelihood of taking action to solve it (Prochaska). 'There are distinct stages involved in changing behaviour, and if people are not ready, change will not happen no matter what interventions occur (*Quinn et al.*, 2002).

In a study focussing on student teachers in the context of peer observation:

The students coached each other in the field after they received a training workshop that introduced them to a protocol of Praise– Question–Polish conferencing style, where peers started with praise of teaching aspects well done, then asked questions about practice and closed up with strengths and areas for future improvement, (Lu 2010).

This study references other studies which found that peer coaching:

- enables students to become active learners as both practitioner teachers and coaches of a fellow teacher;
- facilitates collaboration and collegiality among student teachers;
- Generates structured professional conversations between student teachers (Lu 2010).

However two studies found that peer coaches lacked the skills to 'analyse lessons and provide meaningful feedback' (Lu 2010). Therefore peer coaching is likely to be insufficient in itself to address all student needs.

A role for alumni

One project with positive outcomes paired student experiencing problems with the course, with alumni mentors who provided encouragement but not tutoring via email (Packard,2003). Examples shared by an external mentor will resonate more strongly than from an internal faculty member (Whiting and Janasz).

The role of the coachee

It is essential to make it clear to all participants, both coach/mentors and coachee/mentees, that students are active participants in mentoring (and coaching) and that they contribute to its success (Marra and Pangborn, 2001).

There is a tension between helping student achieve short term study goals such as passing examinations, and developing them as independent learners. Over-supportive mentoring can encourage 'learned helplessness' (Quinn *et a.l*, 2002). Anderson and Shore (2008) suggest that since undergraduates have less real power and less perceived power than academics, there is the risk that coaching and mentoring could place the undergraduate 'especially when things go wrong, in a situation perilously close to a learned helplessness paradigm' (Seligman, 1975).

Models of coach/mentoring support

Quinn *et al*., (2002) note that Kram (1985) identified two distinct areas of support: instrumental and psychosocial, and later researchers added networking as a third element.

Rowley (2005) suggest s that where socio-emotional support is seen as less valuable than a focus on instructional standards, this can shield mentees from the need to reflect deeply.

A model which develops a range of contacts with different functions requires the mentee to be proactive in developing a network. Observational learning (Bandura, 1997) which does not require a direct relationship can also be powerful (Packard, 2003). Whiting and Janasz suggest that mentoring involves developing a number of relationships that vary in terms of strength, function and duration. This means the mentee can receive different perspectives and from different knowledge bases.

Fox *et al* found that accountancy students in their first year at university who participated in their peer mentoring (MAP) scheme, maintained their deep, strategic and surface approaches to learning, while those who did not experienced a significant decrease in their deep and strategic approaches, and a significant increase in their surface learning scores. This scheme appears to be similar to the PAL scheme at BU.

Peterson *et al*. (2010) also reference Crisp (2007) who proposed 'a theoretical model for academic mentoring comprised of four domains: Psychological or emotional support; goal setting and career paths; academic subject knowledge support; and the existence of a role model.'

A specific model using external coaches

Stanford University conducted a randomised experiment, with coaching provided in two distinct academic years across a number of universities with a range of profiles. A randomised sample of students was coached by InsideTrack, a company with successful experience of coaching over 250,000 university students. Regular contact was made with the identified students by phone, email and text message. The study found that:

'While coaching was taking place during the first year, coached students were about 5 percentage points more likely to persist in college. This represents a 9 to 12 percent increase in retention. We also find that the effect of coaching on persistence does not disappear after the treatment. Coached students were 3-4 percentage points more likely to persist after 18 months and 24 months. These represented roughly a 15 percent increase in college retention among our sample. All of these effects were statistically significant. For the three campuses for which we have degree completion data, we find that coached students had graduation rates four percentage points higher than uncoached students after four years' (Bettinger and Baker, 2011).

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