'University with training wheels': A case study of a secondary school's approach to student learning

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Abstract

This paper addresses the transition to first year in higher education. It reports on one secondary school's approach to preparing students for university by looking at student learning and not student subject choice or final results. Corpus Christi Catholic High School has Learning and Teaching Principles that focus on the transformational nature of learning developed through quality relationships and independent learning strategies. Students are allocated to 'learning circles' and are encouraged by their 'learning advisors' to work collaboratively and to reflect on their learning. This case study presents qualitative data obtained from questionnaires distributed to staff and students at the school seeking views on how the school's approach to learning might impact on student success in postschool environments. The results will be of interest to first year university teachers and coordinators and highlight the need for secondary schools to be actively engaged in the discussions surrounding transition to university.

Introduction

The first year experience of Australian university students has been a frequent focus of attention of researchers, higher education institutions and governments for more than a decade. A series of national studies has provided information on the experiences of first year students over time (James et al., 2010; Krause et al., 2005). This research has become even more useful as the sector continues to grow and diversify in response to changes in federal government policies and targets following the recent review of higher education (Bradley et al., 2008).

In response to this research, significant resources have been directed to first year programs at individual institutions (Kift et al., 2010) and to identifying first year curriculum principles and a transition pedagogy (Kift, 2009). Universities are responding to transition and progression issues by implementing 'first year experience projects' (Pitkethly & Prosser, 2001) and developing 'enabling' programs designed for and implemented in the period immediately before students commence tertiary studies (Smith, 2010).

It has been two decades since Clark and Ramsay (1990) called for improved links between tertiary and secondary education to bridge "the gulf between the orientation provided by secondary schools and the needs of higher education" (p.48). Lowe and Cook (2003) more recently lamented the apparent lack of evidence of better communication between secondary institutions and universities. Some aspects of the relationships between schools and

universities have been explored. Studies of transition from school to university and concerns about retention and non-completion have looked at, for example, the effect of subject choice at school (Gallagher & Tamir, 1980); course diversity in secondary schools (Wright, 2010) and student choice of higher education institution and course (Ozga & Sukhnandan, 1998). There is also a growing body of literature investigating factors such as past academic achievement and other predictors of success in first year university subjects and programs (Archer et al., 1999; Clark & Ramsay, 1990; Dickson et al., 2000; McKenzie & Schweitzer, 2001; Torenbeek et al., 2010).

Very little attention has been given to how secondary schools are examining different modes of learning and engaging students in the curriculum with a view to preparing them for the transition to post-school learning. All teachers of first year university students are undoubtedly interested in what subjects their students completed at school and in how well they performed in those subjects. They may not have considered how their students approached their learning before they attended their first university class and how this will affect their learning at university.

This paper describes the first stage of a study exploring the development of independent learning skills in high school and determining whether these skills transfer into the tertiary context. It gives an overview of one school's approach to preparing students for the university experience by developing their ability to articulate their understanding of the way in which they learn by establishing key support networks of teachers and students to achieve the best outcomes. The paper also emphasises the importance of secondary schools becoming part of the discussion about transition, enabling universities to build on the efforts of schools to enhance the success of their first year programs.

Literature Review

Relationships are important to learning. Studies have identified the importance of the relationship between student and teacher for learning in school. Raider-Roth (2005) postulates that there are four central features to this learning relationship: the capacity of teachers to be connected to their students, their genuine interest in nurturing the ideas of their students, collaborative study between teacher and student, and creation of an environment of trust. According to Smyth (2007), relationships are the key to student engagement because they are 'at the centre of learning' (p.229).

Higher education studies have also looked at student expectations of staff-student relationships as an important factor in successful transition to university (Lowe & Cook, 2003). The importance of the relationship between university students and teachers was highlighted by James et al. (2010) who recommended that

greater attention needs to be paid to ensuring all students have the opportunity for closer personal interactions with academic staff at least at some stage during the first year. This is not a cry for a return to an imagined halcyon era, rather our recommendation is based in the belief that teacher empathy, demonstrated interest in students as individuals and respect for students are important factors in students' academic and social engagement. (p. 5-6).

Lowe & Cook (2003) have suggested that university induction programs should promote peer group interaction as well as staff-student interaction. Relationship between students is equally as important as "learners help each other and learn by teaching" (Clark & Ramsay, 1990, p.57).

Learning through relationship with others also fosters independent learning (Knowles, 1980). Independent learning is also a vital factor in the successful transition to tertiary study. Good supportive relationships with peers and teachers, ongoing dialogue and individual reflection on learning increase prospects of success.

For many students who aspire to go to university, their efforts in secondary school tend to be focussed on assessments and results (Rowley et al., 2008). Such students may be surprised that universities emphasise and value independent learning.

In their study of incoming students entering a range of faculties and discipline study areas, Lowe and Cook (2003) found that almost one third of students reported problems with being responsible for their own learning at university.

Smith and Hopkins (2005) focussed on students studying English and found that while they were not concerned about their ability to study the subject matter at university, students indicated the mode of learning at university was problematic. It was a challenge for students to move towards a more independent approach to learning English at university without having the support they were used to a school. The emphasis on independent study and independent learning was considered to be "*the* major difference between A-level and university" (Smith & Hopkins, 2005, p.309). It was suggested that 'getting students to at least think about independent learning before coming to university would put them in a better position' (Smith & Hopkins, 2005, p.310).

A recent study of teacher training students also found that students were not prepared for independent study and were surprised that university involved student-led learning and not more directed teacher-led learning (Murtagh, 2010).

"For many, the first year at university was based on very little experience of working independently, and on a lack of understanding of what it actually involves; indeed ... students perceive independent learning as 'homework' – that is, they see it as something additional to their study, not part of it." (Murtagh, 2010, p.414).

Most studies looking at whether students are prepared for university, investigate this research question by asking university students (and teachers) through questionnaires and interviews, about their expectations before coming to university and their experiences during the early stages of their university studies (Gallagher & Tamir, 1980; Lowe & Cook, 2003; Murtagh, 2010; Ozga & Sukhnandan, 1998; Torenbeek et al., 2010). There are obvious problems with this approach. Torenbeek et al. (2010) acknowledge the limitations of research involving retrospective perceptions of first-year students including unreliability of memory of past experiences and the influence of achievement in first year on student perceptions.

As Smith and Hopkins (2005) have noted:

"These students ... have already experienced university and will describe their expectations through their lived experience. The only way to tap into actual preuniversity expectations is to explore them with those who are still at school." (p. 306-7)

Accordingly, in their study, Smith and Hopkins (2005) collected data about expectations of university study from focus group interviews of school students and compared that with first year university students' actual experiences of transition.

Fewer researchers have gone into secondary schools to ask students about their expectations of university study with a follow up interview in the first year of post-school study. This is the approach taken in the study described in this paper. Although this study is small scale involving only one secondary school, plans to track the students post-school will provide much needed longitudinal data that is lacking in this field (McInnis, 2001).

The Study

Context - Corpus Christi Catholic High School (Corpus Christi)

Corpus Christi is a co-educational high school 100 kilometres south of Sydney. The school began in 2006 with 140 students and will present its first cohort of 80 students for the NSW Higher School Certificate in 2011. Parental expectations of student achievement at the school are high and many of the students will go on to undertake some form of post-school training.

The school was established by the Wollongong Catholic Education Office to provide a contemporary response to the needs of 21st century learners through the development of learning skills using innovative pedagogies and collaborative strategies within an IT rich environment. Corpus Christi's Learning and Teaching Principles outline the school's focus on the relational and transformational nature of learning developed through quality relationships (Corpus Christi, 2006). While junior students work in face-to-face sessions, senior students use a mixture of online and face-to-face learning (blended delivery). Learning Circles (small groups) combine students with similar patterns of study to facilitate collaborative work during independent learning sessions. Different learning strategies for older students recognise that their needs are different from those of younger students and that this approach more approximates what will be expected when students begin tertiary studies.

The school adopted a new language to express this approach and to place the student in the role of active participant in their learning. Teachers in the school are referred to as *Learning Advisors* (LAs). In addition to their role as subject specialists they offer a significant and supportive relationship for those in their *Learning Circle* (LC), a group of 17-18 students. The LA works with the LC every day over the school year. The aim is to maximize student engagement in learning across all subjects, encourage independence and enable the development of a positive connection with the school. Student-led *dialogues* are held twice a term. A *dialogue* is a one-to-one formal discussion between LA and student about the student's learning focussing on personal engagement in learning, course interest and collaboration. The dialogue process is designed to encourage students to deepen their understanding of what it means to be an independent learner and enable them to articulate this through personal reflection. The vision and mission of the school, including the Learning Advisory Program, is outlined in staff documents at the school (Corpus Christi, 2010). The

school's focus evident in these practices is on relational learning and the development of independent learning skills in an environment that is engaging.

This research investigates how the approach to learning used at Corpus Christi might impact on student success in post-school learning environments. The initial study outlined in this paper was conducted with Year 11 students and their Learning Advisors in 2010 and involved obtaining qualitative data about their perceptions of the school's approach to learning. Approval for this research was given by the Principal of Corpus Christi and by the Catholic Education Office of the Diocese of Wollongong and permission was received from staff, students and parents for use of the questionnaire data in this paper. In a planned follow-up study, this data will be matched to student experiences once students have moved to their post-school options.

Methodology

The study used three modes of data collection: open-ended questionnaires distributed to 80 students; open-ended questionnaires distributed to 45 members of staff; and interview with the leader of the Learning Circle program. This approach offered an opportunity for data triangulation and consequently might provide some opportunity to determine which elements are perceived as key to post-school success and which aspects were not considered important by participants in the study.

A total of 80 questionnaires were distributed to students and 60 were returned. Questionaries were distributed to all staff whether or not they were currently teaching this cohort and 13 of these were returned. One possible reason for the lower return rate was that not all staff felt qualified to respond as they were not currently teaching these students.

Three open ended questions were included in each questionnaire seeking responses about blended learning¹, relational learning and the development of independent learning skills.

Students were asked the following questions:

- How do the Learning Circles (where students have similar patterns of study) and Learning Circle LAs (staff working in Stage 6) provide support for your senior pattern of study?

- In what ways do you think this approach to learning in Stage 6 will prepare you for university or other post-school training?

Corresponding questions were asked of staff members to ascertain their views on how the Learning Circles provided support to senior students and how the approach to learning prepared students for university or other post school training.

The questionnaires were distributed in May 2010 during students first semester of Year 11 and provided a free text box for students and staff to provide qualitative responses to questions. Focus group discussions are planned for August 2011 during their Higher School Certificate year. In 2012 these students will be tracked using emails and phone calls to provide the students with an opportunity to provide feedback on the ease to post school

¹ Although each questionnaire included the following question - What do you feel are the benefits of the blended delivery model (face to face and on-line) currently used at CCCHS? – a discussion of the effectiveness of blended learning is outside the scope of this paper.

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options and to provide the school with feedback on the effectiveness of the program.

A semi-structured interview was conducted with the leader of the Learning Circle program (Leader) who is also Assistant Principal at the school in charge of Pastoral Care and the Mission of the school. Questions were left relatively open to allow the Leader to reflect on the staff and student responses and the Leader's own understanding of the objectives of the approach.

Responses were analysed in relation to the key themes and de-identified to ensure confidentiality. The next section of the paper explores staff and student responses to the ideas of relational learning and the development of independent learning skills.

Research Findings and Discussion

The findings from the study so far cover both relational learning and independent learning.

Relational Learning

The evidence from the data indicates that relationships are important in learning - whether the relationships are between the Leader and staff or the staff and students or between students. For example, one LA said:

Students develop a relationship with their Learning Circle Advisor and are better able to articulate their learning difficulties than they would be in a larger class situation. (LA13)

Teacher connectedness and interest in students is clearly valued in the responses. The role of the Learning Advisor is important in ensuring that students understand and reflect on their learning gains during the year. The development of a relationship built on trust is one that enables the student to develop regular and positive patterns of study at school and at home, as indicated in the following student responses:

The LAs are always there to help and support students and make sure we have a well organised and structured learning environment. (S35)

Our teachers know our study patterns and that helps them/us keep on track. (S37)

Student responses also recognise the important role of collaborative study. Benefit was seen in the learning gains from sharing their understanding with other students. Working with students who have similar patterns of study allows learners to develop good study habits and to work with their Learning Circle peers to support all the learners in the group. Responses explaining these benefits include:

I think this is excellent for our learning. It allows collaborative work and creates a motivated and work enhancing environment. (S57)

Small LCs are good especially with students who have similar subjects to work with because we work together and tutor each other. (S51)

It gives me the opportunity to seek out help from the students if/when I may need. They may understand something I don't or vice versa and we are able to help each other.

(S13).

The Learning Circle has several benefits for members. Students generally found the support of both the students and Learning Advisor in their Learning Circle enhanced their ability to engage with the learning and develop skills that would assist them towards achieving success at school. The benefits were also recognised by the staff. For example, one response was as follows:

In my years of experience as a teacher this is the closest I have worked with students and I feel within the Learning Circle they feel valued and that their learning has meaning and purpose. (Leader)

Independent Learning

Development of independent learning skills in the Learning Circle is a key element in the transition for students moving to post-school study opportunities, ensuring students become engaged and autonomous learners in a new environment.

Student responses demonstrated awareness that the Learning Circle was providing them with the opportunity to develop independence as learners. Typical responses included:

Our independent learning will be our biggest asset. (S37)

It connects well with the ways of university and other pathways giving us more responsibility. (S57)

It prepares you for working independently when you go to uni. Not always getting help from teachers but finding your own resources. (S74)

I think that the fact that we learn in different ways and learn to adapt to change will help us for further education. (S39)

Learning Advisors recognise this also, for example:

Honestly, I have not seen any other model which prepares students better..... All the theories and literature which I have read recommend using the same systems which we have in place here. (LA6)

One key characteristic of independent learning is effective time management. Students saw the dedication of time during study sessions with peers and their Learning Advisor as an excellent forum for the development of time management skills.

It has taught me a positive way of learning. When I go to university I will know how to manage my time properly so that I'll be able to get my study and tasks done in order to do well. (S49)

It will help me manage time well and improve concentration. (S20)

One of the most interesting aspects of this study was the feedback the staff gave regarding their perceptions of the benefits of this approach for senior students. Many staff members are relatively recent graduates (five to ten years) and their experience of university would be fresh. Their comments included the following:

It is very common for students leaving High School struggling to cope with the independent discovery learning strategies implemented within Universities...The model implemented at CCCHS will provide a smoother transition for students moving into tertiary education. (LA5)

It is university with training wheels. (LA8)

This approach provides greater flexibility and empowers students to take control of their learning. (LA10)

It's better for students learning, feedback, and keeping track of progress and for student/student student/teacher teacher/teacher collaboration. (LA11)

The data from the student and staff questionnaires indicated that the development of student relationships within their Learning Circle and with their Learning Advisor provided ongoing support for their learning as they negotiated the curriculum in their senior studies. Students recognised that peer-to-peer learning had benefits for the 'tutor' in helping them understand the skills and content of the course material. Learning Advisors focused on the Learning Circle Advisor as key in ensuring that students maintained focus and application as well as providing assistance for students in need of learning support. Students appeared to understand that the benefits of the skill of independent learning would extend beyond their HSC year.

The learning needs to be transferable and not dependent on the teacher in front of them so ultimately it is important that they own their learning. (Leader)

Implications and Conclusion

Torenbeek et al. (2010) have found that the 'fit' between school and university in terms of the resemblance between learning environments, is a key factor determining student success in the first year of higher education. Accordingly, they argue that either university needs to be more like school or the learning environment at secondary school needs to be attuned to the learning environment of university. While Smith (2003) notes that problems of transition to and completion of university courses are not limited to any particular field of study or any particular country, he concludes that:

"Above all, more liaison is required between school and university – and each level needs to be aware of, and respond to, significant developments at the other." (p.97)

This paper has presented data from a secondary school case study which although preliminary has relevance for thinking about the role of secondary schools in the transition to university study. Research tells us that students who are not independent learners have difficulties in their first year at university.

The school's objective is that students should graduate with skills of resilience, independence and motivation. These skills have been acquired in the context of Corpus Christi's holistic approach to learning. The curriculum structure encourages independent learning through the use of dedicated time with Learning Advisors outside the regular subject sessions. The focus for students and staff in the Learning Circles is not on maximising marks, but on becoming a better learner. This is done in a positive non-competitive atmosphere where the emphasis is on collaboration and team work.

The data from both students and staff indicates that current strategies are effective. Learning in a relational context and the development of independent learning strategies were seen by both staff and students as important to student development as a learner. Whether these strategies result in better learning outcomes in the future will be explored in the next stage of our research once this first cohort of students leaves Corpus Christi.

This study also highlights the importance of the role of secondary schools in the transition to university and the need for secondary schools to be actively engaged in discussions with first year university teachers and coordinators about the first year experience. Linkages between secondary schools and universities should be encouraged as should the development of similar strategies as those described in this case study. In this way, the programs and resources of schools and universities could be better aligned to ensure a smoother transition to the first year in higher education.

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