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Oral English, culture, and strategies: Propellers and road-blockers in learning for Chinese international students

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Abstract:

There has been a continuous growth in the number of Chinese international students in the pursuit of western higher education in Australia over last decade. The University of Tasmania (UTAS) Statistics Archive (2010) indicated that in 2009 the total number of Chinese international students occupied over 52% of the entire number of international students in UTAS. While international students in institutions of higher education in English-speaking countries make valuable educational and economic contributions, concerns have also risen in relation to the academic and social issues these students have faced. This research seeks to highlight the communicative problems Chinese international students encounter at UTAS. The strategies students utilise to overcome these communication barriers are also investigated in the research. A qualitative methodological research design, underpinned by a social constructivist theoretical framework, was used for this research. Thirty-five Chinese international students at UTAS were involved in an online survey for data collection. The data were analysed using a constant comparative qualitative data analysis approach. The results indicated that Chinese international students mainly employ compensation strategies (Oxford, 1990) to propel them forward in overcoming communicative barriers. However, the strategies students use also act as road-blockers that diminish student motivation to improve English competence. The findings also suggested that cultural and educational backgrounds play an important role in students' adjustment. Accordingly, there is a need for Chinese international students to be equipped with skills and strategies to improve oral English in a naturalistic linguistic environment.

Keywords:

Chinese international students, communicative barriers, language learning strategies

Introduction

English language skills are highly valued in Asian countries, especially in China, as English is considered to be a universal language which enables people to communicate and do business with different nations. Many Chinese people believe that sufficient English skills can lead to better careers with higher salaries in the future. In order to obtain such skills many people in China decide to study overseas. In countries where the English language is spoken, Australia is one of the most favourable choices. According to the current Australian Education International (2010) statistics, the total number of Chinese international students studying in Australia has shown a continuous growth to over 40,000 in 2009, nearly double its number in 2007. The University of Tasmania (UTAS) Statistics Archive (2010) also indicated that in 2009 the total number of Chinese international students occupied over 52% of the entire number of international students at UTAS. While international students in institutions of higher education in English-speaking countries make valuable educational and economic contributions (Australian Council for Private Education and Training, 2009), concerns have also risen in relation to the academic and social issues these students have faced.

Communicative barriers

One of the most common difficulties experienced by many Chinese international students is due to communicative barriers, which prevent them from effective learning and interaction in university activities (Skyrme, 2007). According to Ballard and Clanchy (1997), international students' insufficient communicative accountability in English also contributes to negative teacher-student relationships. For instance, academic staff may increasingly begrudge the time they spend with international students, whereas the students, working under the same pressure, may decide that their problems are really due to racism, discrimination, or to victimisation by unsympathetic staff. Besides, research also suggests that communicative barriers may result in a decrease in teaching efficiency (Beaver & Tuck, 1999; Li & Kaye, 1998), and in creating misconceptions and stereotypes (Chalmers & Volet, 1997; Ramburuth & McCormick, 2001).

Issues in oral English learning

Communication is the ultimate goal of learning a second language, as it is "... at the heart of modern English language teaching" (Luoma, 2004, p. ix). However, English learning classes in China tend to focus predominantly on one or two of the four identified language skills (listening, speaking, reading, and writing), sometimes to the exclusion of the others (Gass & Selinker, 2008). Research also indicates that speaking is usually the least developed skill in language classes in China (Burnaby & Sun, 1989; O'Neill & Gish, 2008). Based on the grammar-translation approach, the goal of English learning is for students to be able to read and translate passages and articles between Mandarin and English whilst speaking skills are vastly neglected by both teachers and students. Some teachers may perceive communicative English as only necessary for teaching Chinese

people who are about to go to English-speaking countries, but not for the majority of learners (Burnaby & Sun, 1989). Although debate about whether China should adopt the Communicative Language Teaching (CLT) method in modern English language classes is occurring at present (Liao, 2004; Rao, 2006), its implementation is not expected to be consistent or rapid. Due to these contextual constraints, it is expected that it will be a while before all English language learners can benefit from the CLT program.

Culture

Babiker, Cox and Miller (1980) developed the theory of “cultural distance” in which they suggested that the greater the distance between home culture and host culture, the more cultural difficulty overseas students experience. As China and Australia possess two distinctive social and cultural norms and customs, students may encounter culture shock after they arrive in Australia (Yue & Le, 2010). For instance, some Chinese international students indicated contradictive attitudes towards parties and socialising activities which are favoured by many Australians (Gao, 2000). Although the fact that Chinese international students try hard to blend into the local culture is evident in the research (Townsend & Poh, 2008; Xiao & Petraki, 2007), the conversational difficulties still cannot be ignored. One Chinese student elaborated that “when I’m talking to local students ... we just don’t have much common interest and this stops us from talking very much ... and our values and beliefs are different” (Campbell & Li, 2008, p. 385). Brislin (1981) described this type of phenomenon as an attempt to find “conversational currency” (p. 65). People in different countries have different conversational topics. For instance, the conversational topic of sport is, in Australia, a common “currency” used in a range of conversational situations. Australians are interested in footy, cricket and swimming, yet few of these topics are traditionally shared as sporting activities for Chinese people. Therefore, a lack of mutual interest is inevitable.

Strategies

There are numerous approaches which may result in oral English proficiency, such as attending intensive English classes, talking to native speakers, and self practising. All these approaches reflect what is called “learning strategies”. Studies in relation to second language learning strategies have evolved over time, and among which, Oxford’s (1990) work was one of the most significant contributions to the field. She defined learning strategies as “the specific action, behaviours, steps, or techniques that students use to improve their own progress in developing skills in a second or foreign language” (p. 3). Oxford also developed a learning strategies taxonomy, which comprised six categories: memory, cognitive, compensation, metacognitive, affective, and social strategies. This taxonomy has been seen as perhaps the most comprehensive classification of learning strategies to date (Ellis, 1994). The taxonomy has been referred to in many past studies in relation to second language research, and is also used in this paper.

Research suggests that Chinese students have a tendency to use metacognitive strategies in English learning behaviour (Goh & Foong, 1997; Li, 2007; Rao, 2006). Metacognitive means "... beyond, beside, or with the cognitive" (Oxford, 1990, p. 136) and refers to a type of learning behaviour which involves arranging, planning, and evaluating the learnt materials. However, considering the fact that few of these studies were conducted in a foreign setting, and none focused specifically on the communicative aspects of English learning for students, it could be suggested that students in these studies may not use the same strategies in overseas contexts.

The study

There are factors that maintain Chinese international students' commitment to communication in an English-speaking country and propel them forward. There are also factors that act as road-blockers, which diminish students' motivation in socialising and English language learning. These factors, coined propellers and road-blockers, respectively, are explored and discussed in the current study.

Participants

Thirty-five current Chinese international students participated in this research. The majority of students were between 20 and 30 years of age, and had been resident in Australia for at least six months. Students were randomly selected across different campuses, academic levels and faculties through the Chinese international students name list. The entire selection and recruitment processes were conducted by the International Students Service Adviser to ensure the confidentiality and anonymity of the participants. Ethical permission was granted by the Human Research Ethics Committee before the commencement of data collection.

Data collection

An online survey was developed for the data collection. The survey consisted mainly of open questions for students to elaborate on their personal communicative experiences while at UTAS. The data collection started in May, 2010, and took a period of six weeks to complete. All participants received an email invitation attached with an Information Sheet and a website link to the online survey. Participants were expected to complete the survey at their own convenience. A follow-up email reminder was sent every two weeks after the first invitation, which was also attached with the Information Sheet.

Data analysis

A constant comparative qualitative data analysis approach (Glaser & Strauss, 1967) was applied in this research. In the beginning, an open coding of each student’s responses was developed, and similar concepts were grouped. After sorting the concepts, comparisons were made in connection with relevant literature and thereby developed as axial codes. The final step was to further compare and contrast the axial coding to look for the themes or “big ideas” that underlie the research.

What are the road-blockers for communication?

The students’ responses reveal a number of difficulties, or road blockers, in relation to their communicative experiences at UTAS. The following section will present and discuss each road-blocker for communication respectively.

Vocabulary

The data suggest that a lack of vocabulary resources is the main contributing factor which prevents Chinese international students from participating and engaging in academic and social activities. For instance, when asked about the social experience with English-speaking people, a typical answer would be that:

The biggest problem is that I can't express my meaning very well, because I often can't find the right word to describe and express my opinion.

In fact, many students were concerned about their inability to use a suitable English word to express themselves. Some other times students may simply forget to use the word that they have learned before.

Accent and slang

Students’ unfamiliarity with English vocabulary not only creates difficulties in speaking, but also prevents them from listening to and understanding the conversation. The Australian accent coupled with the use of colloquial language and slang in daily conversations also contributed to the difficulties of comprehension in communication. For example, one participant recalled that:

When I talk to people outside the uni, especially local farmers, I feel difficult to understand them because of the accent... they pronounce several words together inside the mouth so I can't hear which words they are saying. Also, they sometimes use slang to make jokes. In these situations, I will not understand anything.

This student has particularly emphasised difficulties in listening to the local Tasmanian English, as sometimes the pronunciation was glued together and vowels were stretched.

Moreover, when colloquial or slang is used in sentences, it may double the difficulties of comprehension for the student.

Culture

The literature suggests that for people who are separated by “cultural distance” (Babiker et al., 1980), it is difficult to find a shared “conversational currency” (Brislin, 1981). Such difficulty was also reflected in the students’ data. For instance, a Chinese international student described her experience of talking to her classmates:

... the topic, that older generations always talk about their kids, gardening or housework, which I don't concern a lot. The younger one may talk about the Australian fashion which I don't know much. Some of them don't have enough patience to hear what I want to say. The way they think is quite different from us, and we may misunderstand each other most of the time... they are also busy with their kids and homework, so we don't have much time to get together to talk.

The effort this student put into a conversation was obvious, as she had been trying to talk to a range of people from different age groups. However, she was not successful in seeking a suitable conversational topic. Moreover, some of her classmates also lost patience in waiting for her responses in a conversation.

Confidence and motivation

Communicative difficulties have the potential to significantly reduce a student’s linguistic and social confidence. In the current study, a Chinese international student recalled a loss of motivation to participate in tutorials:

I never speak in tutorials. I need time to gather my thoughts and organize my speech in mind even though I know it can be casual. But most of the time when I'm ready to speak, other classmates have spoken my ideas already. They are faster than me and can better explain stuff. So I don't bother to speak.

This student has shown reluctance sharing ideas and opinions in the tutorial discussion, as he believed that his English-speaking classmates could better articulate the meanings than he could. It may be assumed that once this student has lost faith in his ability to communicate effectively, it would reduce the possibility of him making progress in the future.

Accordingly, to speak in public involves “risk taking” for Chinese international students, as they have to search for the right word and expression, try their best to understand the local accent, seek a conversational topic that has mutual interest between two cultures, and also strive to maintain confidence and motivation. These risks are tied together with each other, acting as “road-blockers” that hinder students’ achievements in effective communication.

The role of cultural and educational backgrounds in English learning

As discussed earlier, vocabulary limitation is the most concerning issue for many Chinese international students. The data suggest that the English knowledge students acquire in China does not prepare them for the real social interaction in an English-speaking country. In this sense, it is critical to examine the role that cultural and educational backgrounds play in English education for Chinese students. When asked about students' perceptions of the impact of social and cultural differences, a Chinese international student recalled that:

Local people always have more natural expressions which they use in daily communication. These expressions, however, never be introduced in textbooks in China. Life is much more than “nice to meet u” and much much more complicated than just to talk about the weather after all.

This student indicated dissatisfaction with her current English knowledge, attributing the communicative difficulties to the limits of her vocabulary and cultural understanding. This student has vividly outlined the English language learning experience in China as reading and repeating the materials from the English textbooks. A merit of using textbooks is that it is a standardised learning material which ensures every student acquires the same knowledge at the same pace. It also eases teachers' workloads as they only need to focus on delivering the knowledge without too much concern about the learning scope and sequence for large class sizes. However, perhaps one of the biggest drawbacks of learning from textbooks is that textbooks do not introduce and model authentic English usage and expression in diverse and unpredictable social situations. Moreover, it may be anticipated that English language teachers in China are not aware of the cultural knowledge required for authentic language teaching, and therefore do not recognise the need for the development of intercultural knowledge and understanding as preparation for students who plan to study in an English speaking context. In this sense, it is not surprising that Chinese international students report having limited control over authentic English communicative situations.

What are the propellers in communication?

Although road-blockers exist to prevent Chinese international students from effective social communication, students seek pathways out. According to the data, compensation strategies appeared to be the favoured choice for students to overcome the communicative barriers. Compensation strategies are intended to “...make up for an inadequate repertoire of grammar and, especially, of vocabulary” (Oxford, 1990, p. 47). In regards to the current research, Chinese international students have used different approaches to compensate for these communicative barriers and to propel them forward in social interactions. For instance, some common responses were:

I will express myself in an easier way of the same meaning.

I will use some gestures, or try to find some other words to describe what I want to say.

I'll use my body language and some common English words to explain my meaning.

It is certain that these Chinese international students have successfully applied compensation strategies to overcome the limits of their vocabulary. It cannot be denied that approaches such as using body language and synonyms are handy solutions in resolving communicative problems, especially in the immediate context. Through the use of compensation strategies, language constraints can be eased successfully, and misunderstandings are clarified spontaneously. In addition, the effective use of compensation strategies enables the student to maintain the flow of the conversation, and thereby protecting their communicative and social confidence. Therefore, it is acknowledged that compensation strategies play significant roles in social communication for Chinese international students.

The role of compensation strategies in English learning

It is critical to point out that although compensation strategies can effectively moderate international students' communicative constraints, they may not contribute towards the development of English proficiency for the students. The strategies that the students tend to rely on can perhaps be characterised as “short term” solutions that do not support the development of communicative English for the Chinese international students. For example, a Chinese international student demonstrated use of an English grammatical pattern to overcome the limit of her vocabulary:

I use words that have similar meanings to express my ideas. Sometimes if I want to say the word with the opposite meaning but I don't know the opposite word, I will use 'not', i.e. sufficient, not sufficient (in case I don't know 'insufficient'). Usually people can understand me and they have good guessing skills.

The strength of this student is that she discovered and successfully exercised the English grammatical pattern such as putting the negation word “not” to describe an antonym. However, the drawback of relying on this grammatical pattern is that it does not help to expand the student's vocabulary bank. Furthermore, the real meaning that the student wants to convey may be lost or misunderstood due to inappropriate use of English grammatical patterns. Therefore, as Brown (1980) and Ellis (1986) note, the use of compensation strategies may actually prevent successful language learning as an overuse of compensation strategies may reduce the student's need or motivation for learning. A student who continually relies on compensation strategies to negotiate language learning situations may gain in the short term, yet this may not translate into a deep understanding of the way English is used in an authentic situation.

Conclusion

Due to the cultural and linguistic differences between China and Australia, Chinese international students have encountered numerous social and communicative difficulties while studying at UTAS. In the current research, student participants have shown awareness of their oral English constraints, which they attribute mainly to a lack of

vocabulary resources. Students have also demonstrated different learning strategies to deal with various communicative problems that they encounter in social activities. Through the lens of a social constructivist perspective, analysis of the data suggested that some strategies students use act as propellers to propel students forward in overcoming communicative barriers. However, such strategies also function as road-blockers which diminish the need for learning to a certain extent. Although it is commonly believed that an authentic linguistic environment can boost language proficiency, in terms of the current research, such boosting is not obvious. Accordingly, it is suggested that Chinese international students need to be equipped with strategies and skills that will enable them to improve oral English in a naturalistic linguistic environment.

While Chinese international students strive to improve their oral English at UTAS, the impact of their cultural and educational backgrounds on learning should not be negated by academic teaching staff. Instead, teachers of international students need to be aware of the existing mismatch between the past English learning experiences Chinese international students have had and the current learning approaches students encounter at UTAS. It is vital for academic teaching staff to employ explicit modelling and teaching strategies to Chinese international students, as it will foster students’ adjustments between two different cultural and educational practices, thereby allowing effective teaching and learning to take place at UTAS.

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Problem-based learning and the use of ICT: a tale of two units

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Abstract: *A Problem Based Learning (PBL) approach to unit design can address the issue of poor participation and engagement with subject matter by students, as was successfully demonstrated by an existing unit in the Master of Information Systems at the University of Tasmania (Ellis et al., 2009). However, the less-structured content and process involved in group work required through the use of a PBL approach generates the further issue of how to monitor and assess individual contributions in collaborative learning processes. Offering two PBL units within the one semester to the same cohort normally would impact student workload by having two problems to solve while working in different groups in each of the units. In this context, a new Masters unit introduced to the Masters of Information Management in 2010 was designed to complement and integrate with an existing unit that was already developed using a PBL approach. Both units utilised Information Communication Technology (ICT) to support group work and to more adequately assess individual contributions. This case study provides insight into the development, delivery and evaluation of these two units.*

The delivery method for both units was to provide nine three hour workshops supported by the institutional education platform (MyLO). The first seven workshops delivered the theory for each unit. The theory was delivered using group work learning supported by the instructor. The remaining two workshops combined units in which class members were formed into new groups with members from both units. Both classes were presented with the same problem situation that acted as context for the delivery of the theoretical material. Assessment items across both units were structurally aligned to support the learning process. Four of the five pieces of assessment took the same form, of which the final and major item of assessment required students to submit a single "solution" that was independently marked for each unit against the same criteria while addressing unit specific learning outcomes.

Critical reflection and assessment of individual contribution was supported by PebblePad technology. Students were required to create individual assets on a weekly basis that provided evidence of research and participation in both the initial seven workshops and then the development of the final "solution". Additionally group work interactions were supported by wiki technology in the new unit. Feedback from Student Evaluation of Teaching and Learning (SETL) indicated a positive response to embedding technology in assessment.

Keywords: Problem Based Learning (PBL), learning technologies, integrated assessment

Problem Based Learning

PBL originated in a medical school in the United States in 1969 and has been seen in many forms over the years at various educational levels. It was known as the “McMasters philosophy” that evolved into an education strategy we now know as Problem Based Learning (Bayard, 1994). There are three strategies for PBL: initiate learning with a problem; make exclusive use of real world problems; and use the lecturer as a facilitator (Gallagher & Stepien, 1995). The development of the problem and how to resolve it is more critical than the solution (Ward & Lee, 2002).

PBL has spread to other disciplines such as engineering, mathematics, business and architecture. In Australia the School of Electrical Engineering at Victoria University converted to a PBL approach in 2006. The conversion required an integrated approach to the teaching of the program across a number of different faculties and the internal Information Technology Group (Stojcevski, 2007). The embedding of technology into the program supported the students in achieving the learning outcomes (Stojcevski, 2007). This change helped the School of Electrical Engineering at Victoria University to re-position itself and attract students who would have previously chosen to study elsewhere.

First PBL Unit

In 2009 a PBL approach was adopted for one unit (KXI753) in a Masters program at UTAS in order to address the issue of poor participation and engagement by students (Ellis et al., 2009). The Masters unit was taught for three hours over a nine week period. In the first week the students were provided with an overview of the unit and introduced to the real world problem that they would work on during the nine weeks. Students were also given material relating to activities such as working in groups, lateral thinking and critical thinking to provide tools and skills to support their learning journey. The next six weeks were devoted to introducing the theory of the unit to the students which was then used to further analyse the problem. In the last two weeks of the unit the focus shifted from theory to solving the problem.

Students worked in self-managed groups of six for the duration of the unit. Each week one student from the self-managed group would act as leader and facilitate group discussion to complete the workshop tasks allocated. The leader was also responsible for preparing the group’s report presenting their findings for that workshop’s material. Leaders were evaluated on the quality and depth of the report. This report constituted 20% of the final mark. Other individual assessment pieces were a case study analysis weighted at 30% and active participation weighted at 10%. The final assessment piece was a group based solution to the problem weighted at 40%. Students were not presented with guidelines relating to the problem solution. The aim of the assessment was to provide the students with a strong self-managed group experience while ensuring the majority of the assessment was at an individual level. When reflecting on this unit it became apparent that the assessment was strongly weighted towards the solution rather than evaluating the students’ learning journey.

Design of two complementary and integrated units

In 2010 a new Masters unit (KXI721) was to be developed by a new casual staff member who was keen to use a PBL approach and work collaboratively with an experienced member of staff. It was decided to use the PBL model from KXI753 in 2009 as a base for the design of the new unit (KXI721) but revise the assessment. The majority of enrolments

in both units were international students mainly from China, India, Malaysia and Saudi Arabia. Both staff were keen to increase the level of engagement and participation of students in both units. Other units in the program had reverted to more traditional teaching patterns of lectures and tutorials as a way of overcoming the lack of engagement and participation. Those changes had been unsuccessful in achieving the desired outcomes.

Both units were delivered over a period of nine weeks using three hour intensive workshops. The structure from KXI753 presented students with the real world problem in workshop one along with the normal introductory material covered in a unit. In addition the students were provided with an overview of PBL and a lecture on lateral thinking and group work in preparation for the tasks they were about to undertake. The problem presented was relevant to both units. The next six workshops were devoted to the delivery of the theoretical content of each of the units. Each unit adopted a slightly different approach to these six workshops. KXI753 required students to pre-read a chapter of the prescribed text and then work in groups of six to complete workshop tasks, one of which was to reflect on how the chapter might help the group to solve the problem. In addition one group of students was required to deliver a presentation on an allocated topic each week. The instructor facilitated discussion of the information presented and related back to the problem. KXI721 required the students to work in groups and research the workshop topic prior to attending. The group members communicated with each other through a wiki. Both units required each student to act as the group leader once in the six weeks and to produce a report on behalf of the group. This report was a component of the assessment.

The final two workshops were devoted to finding a solution to the problem. Adopting a PBL approach to one unit can easily be done without unduly affecting the student workload. However, when adopting a PBL approach to two units within the same program student workload needs to be taken into consideration. By treating each unit separately students would be working in the last two workshops to solve two different problems and working in two different groups. For the two Masters units it was decided to join both units in the last two workshops and reassign the students to new groups to solve the real world problem. The problem focused on issues of strategy and business intelligence. The problem presented to the students was:

This organisation has issues with their data and information. Data is not easily transferred from one system to another and some of the data is collected manually. The large quantity of data collected by this organisation is not readily available to managers in a form that facilitates and informs decision-making and reporting.

The revised assessment framework was based on feedback from a paper presented at the 2nd Symposium on PBL (Ellis, Cummings & Turner, 2009). This feedback identified the need to realign the assessment task used in the 2009 delivery of KXI753 to focus on the student learning journey rather than the solution to the problem. In 2009 students were required to work in groups and the assessment weighting (60%) was focused on the individual. In 2010 the assessment was changed to consist of:

KXI753	KXI721
Participation 10%	
Presentation 10%	Exam 20%
Leaders Report 20%	Leaders Report 20%
Peer/Self Review 10%	Peer/Self Review 10%
Workshop ePortfolio 10%	Workshop ePortfolio 10%
Combined	
*Solution ePortfolio 10%	
*Solution to problem 30%	

* Group mark

Assessment pieces were not stand alone but integrated to measure both individual learning and individual contribution to group learning. The leader’s report was an individual assignment but required the leader to document the contributions of each of the group members. Each leader’s report was accompanied by a peer and self review (PSR) assessment. Additionally in KXI721, these two assessments were supported by the instructor’s evaluation of individual contributions on a wiki group page. Assessment of active and effective participation was not reliant only on attendance and lecturer observation but was supported by the integration of different pieces of assessment. The portfolios provided evidence of student learning and student contribution to their group; they were also linked to the PSR. The practical exercise was the solution to the problem and this was supported by the portfolio and PSR. KXI721 as a new unit was required by the Head of School to have an exam that specifically focused on and examined the theoretical knowledge in the unit. KXI753 as an existing unit (created while in a different faculty) has assessment that is 100% continuous assessment.

The PSR was designed to provide the students with an opportunity to comment and reflect on their contribution to the group but to also comment and reflect on their group members’ contribution to the group. One issue with PSR is that students, especially international students, tend to rank themselves and each other quite high. Lin et al. (2009) experimented with a web based peer evaluation system for problem based collaborative learning. Lin and his colleagues had the students rank themselves and their group peers using a 5 point Likert scale rating. Students, however, could only use a ranking once. For example, if a student ranked themselves as a 4 then no other student in the group could be ranked 4. This approach resolved the issue of students ranking themselves and their group too highly but limited the level of interpretation that could be made on group performance and individual contribution.

Therefore when designing the PSR instrument for the two units a three pronged approach was used. The PSR assessment required students to evaluate the quality of individual contribution to the group effort on a scale of 1 to 5. Students could evaluate their own and group members’ contribution as equal quality. However, students had to then rank each person in the group from most effective to least effective contribution. Finally students had to support the second ranking with qualitative comments.

Using technology to support the learning journey

Having aligned the assessment to the student learning journey, the instructors considered technologies to support student learning and its assessment. Within higher education

institutions the importance of retaining students, widening participation, and increasingly, reflective learning have also contributed to widening interest in e-portfolio tools and technologies (Joyes et al., 2010). The first piece of technology adopted was PebblePad to create an ePortfolio. For students the PebblePad technology provides a tool for them to document their individual learning journey by creating ‘assets’ that can be drawn upon as evidence of engagement and participation in the learning journey. Assets are best described as digital items: ideas, evidence, reflections, feedback, data which ‘present’ a selected audience with information about the subject of that ePortfolio (PebblePad, 2010).

Students were required to create a variety of assets such as action plans, meetings or thoughts over several weeks that they then incorporated in a ‘webfolio’ asset, or ePortfolio. Students documented their learning journey by creating assets on a weekly basis. The assets represented personal thoughts, research, contributions and individual performance.

An introduction to PebblePad was provided to both units in workshop one. Both staff demonstrated the software, supported by comprehensive information sheets. In addition students were provided with the URL to the United Kingdom PebblePad web site. This site offers online tutorials for the development of assets and ePortfolios. KXI753 left the exploration of PebblePad to the students and only offered a reminder relating to the first e-Portfolio two weeks before the due date. KXI721 use of PebblePad was scaffolded with regular in-class demonstrations of creating different assets that included class discussion and question-time on different levels of thinking and how PebblePad tools provided a structured introduction to different thinking processes.

Two ePortfolios were assessed with the first ePortfolio focusing on workshops two to seven and the theoretical content. The technology offered the opportunity for the students to not only capture but also reflect on their learning journey both as individuals and as a part of a group. The second ePortfolio required the students to comment and reflect on the new group they had been assigned to for the problem solution. The solution was a group mark and the creation of the ePortfolio allowed students to demonstrate their individual contribution to the development of the solution. Students were free to use assets that they perceived as supporting their demonstration of involvement.

Wiki technology was adopted in KXI721 to support the students’ learning journey. Students were allocated groups of five to work together over five weeks, each member organising the research effort for one workshop and writing a leader report that drew on the efforts of their group members. Each group member was required to research the topic and post information on the private wiki page provided to each group. Students were informed that the instructor would be monitoring their contributions for quality along the dimensions of Bloom’s taxonomy (Knowledge, Comprehension, Application, Analysis, Synthesis and Evaluation).

The instructor regularly posted commented on individual contributions from within each group wiki, reminding students to demonstrate use of higher order thinking skills. The instructor also constructed and updated a “Groups and Instructor Communications” wiki page accessible to all class members and regularly sent all students email links to new pages with information, advice, resources, generic critiques of common approaches and highlighted examples of excellence by individual group members.

Evaluation of the units

The University evaluates teaching and learning through Student Evaluation of Teaching and Learning surveys (SETL). The survey consists of ten standard questions and instructors can add additional questions for feedback. SETL are conducted separately for teaching practices and unit related activities. Teaching and Unit SETL were conducted in both the units. Additional questions focussed on PBL outcomes and the use of technology to support learning.

KXI753 Unit SETL achieved an average of 4.28 over the 10 standard questions. Ten additional questions were also asked with the most notable results aligning to:

I learned to feel responsible for my own learning (4.45)

Tutorials helped me to increase my ability to see another person's perspective (4.35)

I have learned to discuss (4.29)

KXI753 Teaching SETL achieved an average of 4.21 over the 10 standard questions. Ten additional questions were also asked with the most notable results aligning to:

I learned to discuss (4.51)

Interaction with other students was encouraged (4.45)

I had an opportunity to demonstrate what I had learned in the unit (4.38)

KXI721 Unit SETL achieved an average of 4.16 over the 10 standard questions. Ten additional questions were also asked with the most notable results aligning to:

I have learned to discuss (4.37)

I have learned to feel responsible for my own learning (4.12)

Tutorials helped me to increase my ability to see another person's perspective (3.93)

KXI721 Teaching SETL achieved an average of 4.21 over the 10 standard questions. Ten additional questions were also asked with the most notable results aligning to:

Interaction with other students was encouraged (4.33)

I have learned to discuss (4.16)

The technology allowed me to demonstrate my individual contribution to the group (4.09)

The PBL approach with the use of technology and integrated assessment adopted by these units provided a meaningful learning experience for the international Master's students. Students commented positively on the technology providing the opportunity to demonstrate their skills while motivating everyone to contribute.

At first I found it so hard knowing that we have to do group assignments. I have already experienced the problems of group assignments. It is very hard to manage time to come together. and same thing happened for this unit as well at first when we were very confused about what to do and how to manage. Once we managed to meet but thank god there was wiki which had made it possible to do group assignments.

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Once I started using wiki all the confusion and problems were gone. [*Student Asset, KXI721*]

Students’ answers to the question, “What were the best aspects of this unit?” focused on the experience of working in a group, using the PebblePad and wiki technology and learning as a process.

The concept of learning process, the new technology used: pebble pad and wiki. The way of delivering teaching: more discussion and interaction.

Group work and developing a report every week and being a leader once.

Student suggestions for improvement focused on being allowed to choose group members and reducing the number of assessments.

Reflections

The introduction to PebblePad was the same for both the units. However, KXI721 also provided the students with ongoing support. The first ePortfolios assessed had limited numbers of assets and few students used the tools to engage in critical or reflective thinking. Students had been unclear as to what assets to generate and how they could be used to provide evidence of their learning journey in the first ePortfolio; many students did not start creating assets until several weeks into the course and used them superficially.

For KXI721 the wiki was the primary interface for interaction between student group members and also the communication tool used by the instructor (the ‘Group and Instructor Communication’ page could be updated and an email sent to the students to alert them to new information). Constant interaction with students by the instructor was labour intensive but had the advantages of: students understanding that their learning journey was supported by the instructor; students relying on the wiki postings as evidence of quality, quantity and timeliness of individual contributions (or failure); and establishing the wiki as an effective communication and collaboration tool for asynchronous group work. Students would have liked a chat function for synchronous collaboration.

In both units the PSR was administered at the end of every workshop. This assessment piece also requires instructors’ support. Students took some time to understand what was required of them. A number of the PSRs produced at the end of the first workshop had to be returned to students for correction. On reflection, a role play of group work and a demonstration of the PSR process would reduce confusion. There is also an opportunity to reduce the number of PSRs from nine to two: one PSR to be completed at the end of workshop seven, to reflect on the contribution and participation of the group formed for workshops two to seven. The second PSR to be completed at the end of workshop nine, to reflect on contribution and participation of the group formed to solve the problem. While there were benefits in having reviews each week the workload involved for the staff to carefully evaluate the PSRs was unsustainable.

The insistence that KXI721 have an exam that tested domain knowledge of the unit was an issue for the PBL approach. The KXI721 assessment was originally planned to align with the 100% internally assessed KXI753 unit and designed to encourage the students to become independent and self directed learners while addressing a real world problem. Ward and Lee (2002) identified that students taught using a PBL approach did not do as well on multiple choice tests as those who were taught using lecture based delivery. To support a formative approach to students acquiring domain knowledge, the exam was designed to use MyLO. Students had access to the test bank so they could practise and gauge the level of their comprehension of the text book. In the exam, students answered 80 randomly allocated multiple-choice questions. The majority of students achieved HD and DN grades, a testimony to their ability to memorise.

Conclusion

The overall outcomes of the delivery of the two units were positive. Students participated and were engaged and, more importantly, the newly designed assessment provided opportunities for the students to demonstrate their learning journey. The assessment design also supported a group learning focus while providing the students with individual grades (Duch et al., 2001).

In planning the PBL approach for the two units it was recognised that the students had only a short timeframe for developing group work and communication skills. This concern was intensified by creating new groups for the last two workshops when the students focused on the solution to the problem. However, in reality the students recognised the short timeframes involved and quickly raised themselves to the ‘performing’ stage of group development (Dwyer, 2002).

There were a number of benefits in having the same assessment for both units. Students were able to integrate knowledge from two topic domains and apply that knowledge to a single context. Moderation of marking was inbuilt for all criteria except subject knowledge for a specific unit. Student workload was more efficient as they were able to focus on a single context to apply two knowledge areas.

In reflecting on the units it is clear that a scaffolding approach is needed, especially relating to new technology, for example the generation of assets. Students value the support of instructors (Oliver & Omari, 1999). In future iterations of using PebblePad the instructors intend that the weighting of the first ePortfolio should be reduced and the assessment be formative, with scaffolding provided each week to demonstrate different types of assets and require students to use them as tools for structuring thinking about their learning journey. Then, students could reasonably be expected to create a second ePortfolio without requiring instructor support. The second ePortfolio would have significant weighting to reflect student effort and learning outcomes expected.

PBL that includes student self assessment results in increased active student participation and motivation (Popham, 2002). The PSR assessment was evaluated against actual contribution demonstrated by wiki postings. Students quickly understood that their PSR

grade was for the quality and reasonableness of their *evaluation* of self and peers, not the mark or ranking they allocated. Thus, while monitoring the wiki was time consuming, it also provided a reliable method of monitoring actual student contributions to group effort; evaluating quality of contributions against PSR ratings from group members; and identifying problem group-members and mentoring groups on how to resolve issues.

This case study presents a collaborative effort between two instructors to develop and deliver two Masters units using a PBL approach. The aims for the units were to address the particular problems of international students engaging and participating particularly in collaborative learning contexts such as group work. The use of ICT was integrated with the assessment design to support group work and to more adequately assess individual contributions. This case study has provided the insight that integrating two units with PBL has the positive effect of reducing student workload and allowing them to apply two knowledge domains to one problem. Technologies such as wiki and PebblePad support students to develop critical thinking and reflective skills. The technologies also support the instructors to monitor student progress and provide feedback as well as to assure students that individual contributions to group work were visible.

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eExams – high stakes summative assessment for the digital age

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Abstract: *Students at the University of Tasmania (UTAS) are using their personal computers in examinations for the fourth consecutive year in 2010. Rationales for this practice include extending online and blended learning practices into high stakes assessment; providing interactive and multi-media scenarios on the exam desk; providing digital scripts for computer-supported marking and moderation; and improving legibility of students’ scripts. To undertake an eExam, candidates start their computer from a USB stick or CD-ROM and work on-screen. The system interdicts all digital communications and local disk access. A strategic project funded by UTAS has allowed more Faculties to support eExams and trials have also been facilitated in the pre-tertiary sector.*

The introduction of eExams illustrates institutional innovation adoption, both within the University and by other organisations. eExams provoke consideration of several important issues such as equity in text production, the comparative achievements of keyboard and pen users, envisioning new kinds of digitally-based assessments, contrasting costs and reliability of ICT and paper. All these issues are important but can also serve to obscure the leverage effect of digital assessment on new learning practices in a jurisdiction selected for initial rollout of the national broadband network which will require more advanced computing skills for commercial benefit to be realised.

Keywords: eExams, laptop, innovation

Introduction

Assessment is crucial to learning and teaching. Its nature can determine course content. As academics, we strive to link assessment with the sorts of learning activities in which students engage and to employ a variety of assessment methods. As online learning becomes used more extensively, and students increasingly use computers for formative assessment, there is a natural interest in using technology for high stakes summative methods of assessment as part of a balanced regime. Therefore, this project has allowed students to use personal laptops in examinations to include computer-based simulations, video and other ICT-based activities within a proctored environment which retains certainty of authorship.

The project builds on two years (2007-8) of successful piloting with an eExam system using institutional equipment. Further development has brought the security of the eExam system to a level considered similar to that pertaining in the standard examination hall and allows students to use their own personal computer. The current version runs

very quickly from a USB stick on each student’s machine, denying access to local hard drives or communication systems. This prevents use of unauthorised material or collusion.

Having proven the concept in the UTAS Faculty of Education, the next step in 2010 has been to extend the range of use to other Faculties and to the pre-tertiary sector. This extension allows others to perceive the benefits of the system, an essential step to adoption of an innovation (Rogers, 2003).

Strategic innovation is the discovery of a fundamentally different strategy (or way of competing) in an existing industry (Anderson & Markides, 2006; Hamel, 1996, 2000; Kim & Mauborgne, 1997). Thus innovations break the rules and usher in a new paradigm. One of the challenges for this project will be to scale it up sufficiently rapidly to achieve this.

Background literature

Society and learning are being transformed by computers (Gosper et al., 2008). The Australian Government is committed to a Digital Education Revolution with a focus on students in Years 9-12 who will shortly percolate into universities (Rudd, Smith & Conroy, 2007). Government is concerned about lethargic ICT-based transformation in education: “while ICT has fundamentally reshaped whole industries, revolutionised production processes and generated massive improvements in productivity in our workplaces, our education systems have been slower in adapting” (Gillard, 2008). This makes the adoption of ICT in education a problem of national significance, and therefore understanding the use of ICT in assessment is vital. This has been recognised overseas with an annual conference on eAssessment in the UK over the past 13 years (Ross, 2006) which involves many accreditation agencies. Research into school student acceptance of eAssessment is being conducted by the National Foundation for Educational Research (Burge, Foster & Lewis, 2006). In addition, there are emerging regulatory principles for eAssessment in school education (e.g. Qualifications and Curriculum Authority, UK, 2007). To remain competitive, Australia cannot be complacent as certification frameworks of other nations evolve to use 21st Century assessments for 21st Century learning.

Australian institutions aspire to systemic transformative uses of educational computers (Downes et al., 2002; Fluck, 2003). Therefore they need assurance high-stakes assessments will not remain dependent on old technology (i.e. on the use of pen and paper). Very little technology is allowed into the conventional examination hall. Mobile phones are banned, calculators are required to be identified on the exam paper, but a few dictionaries may be permitted. Assessment is a key driver of student learning (Biggs, 2002). Thus, student learning is unlikely to change in response to ICT without a transformation of assessment practices. Major computer companies have recently asserted the need for assessment to adopt computers in assessment because this is a pre-condition for curriculum transformation (Cisco, Intel and Microsoft, 2009). Their interest may be commercial, but they are also acutely aware of innovation adoption processes. Other factors may influence transformation such as infrastructure and training, but this project focuses on the role of formal summative assessment and its relationship with ICT-based curriculum transformation.

Previous Australian Learning and Teaching Council (ALTC) projects have looked at computers as a way of automating assessment (Crisp, 2008; Freney & Wood, 2008). These techniques require a high level of specific skill (designing java applets, QuickTime VR and interactive spreadsheets) on the part of assessors and the process is vulnerable to one-point failure at the server (Meyer et al., 2007). Other emphases have been upon diagnostic or adaptive testing, restricted to a specific discipline area (Newby, 2008; Solomon, 2006). A related project looks at digital formats for external assessment, particularly performance recording (Newhouse & Williams, 2008). In pre-tertiary assessment, discussions have begun in England about moving in the direction of eExams with a substantial market for successful systems (Shepherd, 2010), particularly ones that can overcome the logistical problems.

These projects in Australia and abroad provide the background for the UTAS strategic project described in this paper.

Methodology

The project has used a robust theoretical framework, based on Rogers’ dissemination of innovations (2003), and aligned with the Australian Learning and Teaching Council (ALTC) commitments to promote and support strategic change in higher education institutions for the enhancement of learning and teaching, including curriculum development and assessment. Based on the Rogers’ framework, the project is providing opportunities for potential adopters to perceive the relative advantage of the innovation. This affords UTAS an opportunity to facilitate a national approach to address how technology affects learning and teaching. Simultaneously, teachers of pre-tertiary subjects in Tasmania have used the eExam System to conduct trials with mid-year examinations.

In the pilot stage of this project, cohorts of approximately 180 students were assessed through a supervised computer-based examination system. Institutional computers were started up from a specially prepared ‘live’ CD-ROM. The preparation of this CD-ROM was analogous to the printing of an examination paper. The examination was pre-burnt onto the ‘live’ CD-ROM, automatically appearing as a desktop folder once the computer had completed the boot-up procedure. The exam system on the CD interdicted network functionality, and prevented them inspecting the local hard disk drive. The inclusion of a unique artistic feature on the desktop background allowed non-technical supervisors to ensure the correct operating environment was present on each candidate’s computer. Students were able to complete short answer questions and provide sketch drawings. The system was extremely reliable, and resilient to operator error or equipment failure. The completed scripts were collected from each workstation using a USB data-stick, copied on a computer and then e-mailed to the external marker. The results of this piloting have been extensively reported elsewhere together with analysis of surveys and student comments (Fluck, Pullen & Harper, 2009).

In the development stage reported in this paper, the eExam System has been further developed and an additional cohort of students has used this new version in 2009. This

second version has also been used in five Tasmanian schools for mid-year examinations in 2010. Preparation of large numbers of complex USB sticks has been simplified by the acquisition of a NexCopy duplicator which can be considered the digital age equivalent of a photocopier.

The underlying live operating system for the eExam System is Ubuntu. Ubuntu is a free and open source operating system, in contrast to other commercial products such as Microsoft Windows or Apple OS-X. Like other operating systems, it provides the capacity for a modern computer to undertake basic functions such as respond to keyboard and mouse, and place results onto the screen or printer. As Ubuntu is progressively improved, the eExam System has to be re-constructed on the latest release. The project has now converted the computer start-up procedure to work from USB data sticks (flash drives) which also contain separate partitions for the examination questions and the answer scripts. This makes it much easier for candidates, because they only need to insert the USB stick into their laptop to begin the exam. A technical difference means Apple Macintosh computers still need the optical medium, but this works in conjunction with the same USB stick as for all other candidates.

Evaluation of the 2010 cohort was restricted because some students felt they were forced to adopt a novel examination environment purely because the researcher wanted to collect data. Therefore ethical clearance was not sought nor was data formally collected from this cohort.



Figure 1: A set of USB sticks each containing the eExamination system, question paper and answer partition

A risk analysis was carried out which considered innovation engineering problems and technological issues. These were divided into high and low probability scenarios which were matched with possible responses. This is an example of a low probability, low impact innovation engineering risk:

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A student or lecturer refuses to participate in a mandated eExamination on grounds of principle.

The project presumes pen-on-paper alternatives will be made available as backup or for conscientious objectors through the piloting phase to reduce the incidence of such stances.

Results

Two uses of the eExam System are reported here. The first was with university students undertaking a compulsory unit in computer education. The second was with Year eleven and twelve students across Tasmania taking the university entrance subject *Information Technology and Systems*.

At the end of 2009 one hundred and twenty three students took an eExam at the Newnham and Cradle Coast UTAS campuses using mostly their own laptop computers and some institutional laptops (for about 10% of the cohort) or desktop computers. In preparation for this event, a copy of the eExam System was made available to the students beforehand (with an old question paper) and a one hour tutorial was devoted to demonstrating and practising with the system. When the students entered the examination hall, they had access to filtered mains power and a printed copy of the question paper to read during the booting up phase. In this assessment, every candidate used a computer except for a few exceptions. The exceptions included two students for whom the USB stick would not insert sufficiently deeply into their computer to make electronic connection: extension cables have been added to the equipment list to cater for this eventuality. The written paper was used by a couple of students who appeared to be resisting the change of format on principle.

As previously mentioned, because of the stressful nature of the examination experience, students had requested no formal data collection take place on this unique occasion. Since extensive data had been collected during previous iterations, and reported in the literature as noted above, this request was complied with. According to anecdotal comments by the students, the vast majority were exceptionally pleased with the exercise. Questioned by the UTAS exams office staff, all approached were very happy with the smoothness of the examination. Noise was not a problem - the quiet working environment mirrored that of conventional examinations. As a consequence of this success, an article was published in a national newspaper (Lane, 2009).

In the pre-tertiary sector in mid-2010, fifty-six students in five schools used the eExam System to take their mid-year assessments. They were all shown or given a practice copy beforehand to become familiar with the system. It was noted that institutional-owned equipment was used throughout.

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Feedback from the pre-tertiary teachers was generally positive and noted the resilience of the system. A similar technical incident with a networked or communication-dependent system may have affected every student instead of just one.

- *Had one incident where a student's computer locked up and they had to reboot, but document was saved and no other problems ensued. Was a capable student so coped, but a lesser student may have been thrown.*
- *Went very smoothly*
- *All went very well, easy to use system for this type of exam.*
- *I liked the ability to mark work without having to be able to read handwriting. However, eExams are not exploiting the possibilities e.g. videos describing the case study etc.*
- *It was good*

Feedback from students was also generally positive, but one potential security flaw was identified:

- *Happy with process*
- *No problems at all. It was just like using Microsoft Word.*
- *Yes, enjoyed it very much.*
- *Power failure could be a potential problem. Scrolling up and down was required.*
- *I don't see there being any advantages to the end-of-year exam being a written exam. I would much rather another computer based exam.*
- *No advice needed for the eExam system designer. I believe that the eExam was good. All exams should be done on computers.*
- *Students like it - technology was not a handicap - all could type fast.*
- *Students weren't fazed. They all refused the choice of doing the exam on paper.*
- *My 2 best students weren't impressed with the security. Felt that it was too easy to save the answer document into the Answers folder, go back into normal [operating system - Windows] log on and re-open it where you could access other documents/internet.*

Cheating in examinations is a constant threat to validity, and the eExam development team are working on encrypted log files for startups/shutdowns to address risks such as the one illustrated in the final comment. Vigilant supervisors with technical assistants will be important in any transition phase.

The overall assessment from participants was very positive and indicates further trials should be conducted. The trial revealed the resilience of the system (coping with a major equipment failure) and also a security concern (which further development is addressing). This small scale exercise required supervising teachers to mark scripts from the USB sticks themselves. In a larger scale trial these should be batched and data collected automatically, then copied to CD-ROM. This provides a permanent medium for the student scripts (which can then be further reticulated in digital format) but also rapidly releases the USB sticks for use in another examination.

Discussion

The introduction of eExams as an alternative to handwritten examinations is just a first step. This first step can be accomplished with little or no change in practice for examiners

who submit their question papers digitally for printing. However, in the future it will become possible for examiners to write questions such as the following (note the use of hyperlinks to particular resources):

Watch the video [Complex DNA](#) [95 seconds] and use the [enzyme replication simulation software](#) to construct a molecular junction to inhibit the binding process. Submit your enzyme design template together with an explanation of how it will perform the required task.

Thus, not only can question papers be set in digital format, but responses can be data files for the specialist software used for the answers. This kind of change will reflect potential changes in teaching practice and should not involve great skill acquisition on the part of examiners. Conversations with pre-tertiary teachers of information technology and systems reveal their interest in short video case studies of business situations. This will ameliorate the time taken to read detailed descriptions of the same situation, and reduce the complex literacy burden from candidates.

These outputs offer many advantages over other systems since candidates can take the test on screen without requiring an internet connection; there is no restriction as to question types (standard examination formats can be used to require essays, diagrams or even video responses, as well as the multiple choice types). Test preparation only requires the same skills as if preparing for the paper to be printed. Being open-source, the system is low-cost and can be improved/adapted by adopting institutions. This open-source licence also makes it legal to give students practice examinations based on the system. The successful piloting indicates these outcomes are realistically attainable.

The eExam system has raised numerous questions which are all worthy of consideration. Here are some of which the author has become aware:

1. Should every student use a computer or should this be a choice of writing tool as is currently the case (some use biros, some use fountain pens, others use pencils etc.)?
2. Does the kind of computer give any specific advantage to candidates?
3. At what point in the innovation process should we move on from replication of pen-on-paper exams to incorporate features only possible in a digital environment such as video-based scenarios, questions requiring complex analysis with software tools (e.g. calculus and computer algebra systems or spreadsheet-based mathematical models) etc.?
4. How are the pre-tertiary and university sectors linked in respect to this assessment innovation?
5. Will the advent of digitally-based high stakes assessment tools automatically engender the adoption of ICT tools in teaching?

Conclusion

The national benefit from this project has been new knowledge about the relationship between ICT-based assessment practices and ICT adoption for curriculum transformation.

In addition, there is a potentially commercialisable tool for economically replacing printed examination papers with a digital equivalent. The benefits for students include bridging the gulf between IT-based learning and paper-based assessment; the capacity to perform changes and re-organise written replies at any time up until the end of the examination without messy crossing out; and fewer students with disabilities permitting keyboard use will need separate rooms, leading to inclusivity of practice. For university staff, the system offers a simple way to transfer examinations into a computer environment; invigilation is made easy through the use of a unique desktop image for each paper; and marking is simplified through digital duplication of all candidate scripts.

The project outcomes are significant for higher education in Australia because the collection together of several hundred computers solely for examination purposes is unlikely to happen on cost and logistical grounds. The project makes it possible for students to bring their own laptop into the examination hall, because the assessor can choose to forbid access to the local disc drive and/or networking. The adoption of a computer-mediated supervised examination framework is strategic in terms of change management and cultural adoption. This contributes to the enhancement of learning and teaching in higher education by allowing high stakes assessment to be conducted with minimal assessor development, by students using personal computers or laptops. Once this become accepted as a genuine alternative, curriculum transformation becomes possible, since eExaminations can be based upon new software and new digitally mediated ways of understanding the world. There are significant environmental savings to be made by eliminating or reducing the use of paper.

This eExam project has built upon two years of successful piloting at UTAS (Fluck, 2009) and exemplifies the key principles for such digital assessment:

- Portability – it should be possible to set it up using almost any available equipment, including a student’s own personal computer.
- Equity – it should be accessible to a wide range to students, including those with disabilities.
- Familiarity – students should have every opportunity to practice essential skills in this environment.
- Technical capacity – it should not limit students’ creativity or expression.
- Archivability – the environment should produce material which will be accessible in future years.
- Inviolable – students should not be able to alter the environment to gain an unfair advantage. (Fluck, 2004)

As we come to the end of 2010, two other Faculties are introducing eExaminations (Law and Arts) as an optional text production method by allowing the use of computer keyboards instead of pens. The trial in the mid-year pre-tertiary assessments for the Tasmanian Qualifications Authority (TQA) has been provided to the TQA Board as it makes strategic decisions about adoption of eAssessment at that level and considers a state-wide rollout. The eExam System has provoked a useful set of institutional responses. It remains to be seen how rapidly the paradigm for high stakes assessment will change, and whether this will have flow-on effects in curriculum.

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Curriculum redesign as a faculty-centred approach to plagiarism reduction

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Abstract: *The incidence of plagiarism is increasing, exacerbated by the availability of many information sources via the internet. The massification of higher education, coupled with increasing numbers of students for whom English is not the first language, heightens concerns about the risk of plagiarism in an environment characterised by varying degrees of academic literacy and different cultural perceptions about academic scholarship. Traditional approaches for tackling plagiarism reflect two distinct philosophies: educate the students or catch and punish inappropriate behaviour. Both assume that responsibility for avoiding plagiarism is the student's, and whenever a problem is encountered, the blame rests with the student. In 2002, the Australian Government established the Australian Universities Teaching Committee (AUTC) which recommended a strategy reflecting a philosophy of sharing the responsibility for countering plagiarism across the student, staff and the institution. A key component of the strategy relates to assessment design, and it is this aspect that is a key focus of this paper. The first aim is to determine whether perceptions of staff at the University of Tasmania (UTAS) about causes of plagiarism appear to underpin response strategies. Secondly, actual practices regarding assessment (and other) strategies at UTAS are documented. Thirdly, staff attitudes regarding the effectiveness of these strategies are identified. Finally, impediments to implementing innovative assessment strategies are considered. By identifying the strategies that staff see as effective and the barriers to their implementation, policy makers can be forewarned about attitudes, obstacles, and associated resourcing implications that might be pertinent if the plagiarism response is to become a holistic one in which all involved bear some responsibility.*

Key words: *plagiarism, assessment innovation, assessment strategies*

Introduction

It is generally acknowledged that the incidence of plagiarism is increasing, a situation exacerbated by the ready availability of a variety of information sources via the internet (e.g. see Devlin, 2006; Stoney & McMahon, 2004; Taylor, 2003). In fact, Stoney and McMahon (2004) describe plagiarism “as a battleground, where a war is waged between students and institutions, and played out using all of the means afforded by contemporary digital technologies” (p. 2). On the one hand, students turn to the web as a primary, familiar and convenient information source, the use of which might lead to intentional or unintentional plagiarism, while, on the other, institutions are increasing investment in digital detection capabilities, such as Turnitin software, as a defence. This is occurring in the context of massification of higher education and increasing numbers of students for whom English is not the first language. These factors heighten concerns about the risk of plagiarism in an environment characterised by varying degrees of academic literacy and different cultural perceptions about academic scholarship.

Traditional approaches for tackling plagiarism reflect two distinct philosophies: either educate the students by providing and reinforcing information about correct citation and referencing, acceptable collaboration and so on; or catch and punish behaviour deemed unacceptable (Hart & Freisner, 2004; Taylor, 2003). Taylor (2003) and Macdonald and Carroll (2006) note that both approaches carry the implicit assumption that the responsibility for avoiding plagiarism is the student’s, and whenever a problem is encountered, the blame rests with the student rather than with faculty or the institution. However, commentators are beginning to make calls for educators to consider pedagogy and assessment design as a key means of reducing the likelihood of plagiarism (e.g. Hart & Freisner, 2004; Hughes, 2009; Macdonald & Carroll, 2006; McGowan, 2005; N-Learning, 2009; Stoney & McMahon, 2004).

Despite the growing interest in assessment design, Hughes (2009) describes the literature on assessment task design and plagiarism minimisation as “surprisingly light” (p. 554). The purpose of this paper is to contribute to this area of the literature by focussing on attitudes and practices regarding assessment design and plagiarism. The specific aims of this study are:

- to determine whether beliefs about why students plagiarise, and the extent of the problem, appear to underpin attitudes and actions of UTAS staff regarding response strategies;
- to document actual practices regarding assessment (and other) strategies at UTAS to assess the range and extent of existing responses;
- to identify which strategies UTAS staff see as being more (or less) effective in reducing the likelihood of plagiarism; and
- to identify what UTAS staff consider to be key impediments to implementing innovative assessment strategies.

Strategies to reduce plagiarism

In 2000, the Australian Government established the Australian Universities Teaching Committee (AUTC) with the brief to identify emerging issues in teaching and learning across Australian universities (ALTC, 2009). In 2002, the Centre for Study for Higher Education (CSHE) for the AUTC completed and reported on the findings of a major

project investigating the ideas and strategies that lead to quality in student assessment (James, McInnis & Devlin, 2002). One part of the report considered approaches to minimise plagiarism and recommended a four-part strategy comprising:

1. a collaborative effort at all levels from the individual staff member through to the institutional and policy level to counter plagiarism;
2. educating students appropriately;
3. designing assessment so that the possibility of plagiarism is minimised; and
4. implementing highly visible detection and monitoring procedures accompanied by appropriate punitive measures (James, McInnis & Devlin 2002, p. 37).

The first arm of the strategy reflects a philosophy of sharing the responsibility for countering plagiarism across the student, the individual faculty member and the institution. Macdonald and Carroll (2006) argue that such a holistic approach is essential to countering the complex problem of plagiarism, a view echoed by Devlin (2006), Pickard (2006), Pittman-Munke and Berghoef (2008) and East (2009). The second arm reflects the traditional “educate” approach of providing information about appropriate behaviour, teaching necessary skills and communicating expectations as to what is acceptable and what is not. The CSHE (2002) outlines 36 strategies to minimise plagiarism, of which six relate to educating students and communicating expectations. Items here include creating a culture of honesty, teaching skills of summarising, critical analysis, referencing and citation, and warning about theft of unprotected work. The fourth arm of the AUTC/CSHE approach is reflective of the “catch and punish” philosophy. It relates to detection and deterrents, and the visibility of efforts related to monitoring and punishment. Eight of the CSHE’s (2002) minimisation strategies fall into this area, and include such items as: requiring electronic submission, educating yourself about electronic sources that students might find attractive, using coversheets, and enforcing deterrence penalties.

The remaining part of the four-part strategy relates to assessment design, encouraging innovative assessment practices that reduce the likelihood of plagiarism and/or the opportunities for it to occur. The remainder of the CSHE’s (2002) minimisation strategies relate to assessment. A review of the literature suggests that approaches can be categorised into three broad groups, reflecting the “what”, the “how” and the “when” of assessment. “What” issues relate to both the question focus and to the specific aspects of the entire assignment process that are assessed. A very common and basic recommendation is to change the questions asked from year to year (Alam, 2004; Brown, 2001; Hart & Friesner, 2004; Taylor, 2003). Further, these questions should set out clear expectations and require higher order thinking rather than mere data collection and descriptive reporting (Hart & Friesner, 2004; Olt, 2002; Stefani & Carroll, 2001; Taylor, 2003).

Many commentators suggest that there should be greater focus on the process that students go through to produce the final assessment piece rather than on the final piece itself (e.g. Born, 2003; Hart & Friesner, 2004; Olt, 2002). This can be achieved by allocating marks for various stages of the process that need to be undertaken to complete the assessment task, requiring students to submit a log of their research process or evidence of various parts of it such as first drafts, lists of sources identified and the process used to

identity them, developed outlines, subsequent drafts and so on (Alam, 2004; Born, 2003; Darab, 2006; Hughes, 2009; Olt, 2002; Stefani & Carroll, 2001; Taylor 2003; Walker, 1998; Zobel & Hamilton, 2002).

The “how” of assessment encompasses innovative modes that are less prone to plagiarism as they are less likely to be able to be purchased, copied or faked. Examples include creative poster presentations, mind maps, gaming, annotated bibliographies, and the use of technology through Weblogs, Wikis, electronic portfolios and the like (e.g. Bassendowski & Salgado, 2005; Carroll, 2002; Hughes, 2009). In-class contributions, activities and tests might be used more often to undertake assessment (Alam, 2004; Born, 2003). Where more traditional assessment tasks are retained, they can be supplemented with oral assessments (Hughes, 2009; Stoney & McMahon, 2004).

The “when” relates to timing, although there is a lack of consensus regarding assessment frequency and plagiarism mitigation. For example, Born’s (2003) suggestion that assessment tasks should be set more frequently is consistent with Olt (2002) who recommends that a series of smaller sequential tasks be used. The underlying logic is that it may be more difficult for students to persuade others to assist them, or to be able to afford to purchase assistance, when the number of tasks is large and where they are interdependent. Conversely, Alam (2004) recommends that the amount of assessment be reduced to avoid plagiarism activity that stems from time pressure and poor time management.

The research questions

This paper is concerned particularly with aspects of innovative assessment design as a strategy to minimise plagiarism, within the context of the broader range of strategies that underpin a holistic approach to counteracting plagiarism. Reflecting the three operational arms of the four-part approach advocated by AUTC/CSHE (James, McInnis & Devlin, 2002), (educate and communicate expectations, visibly monitor and penalise plagiarism, and assessment design), the first three research questions are:

- RQ1: Which of a range of strategies aimed at educating students and making expectations clear are: used; considered effective; and are likely to be used in the future?
- RQ2: Which of a range of strategies aimed at visibly monitoring, detecting and responding to incidences of plagiarism are: used; considered effective; and are likely to be used in the future?
- RQ3: Which of a range of strategies aimed at designing assessment to minimise opportunities for plagiarism are: used; considered effective; and are likely to be used in the future?

Two further research questions address whether there are relationships between assessment strategies used and perceptions about the underlying causes of plagiarism, and between the use of strategy use and possible impediments to its adoption:

RQ4: Is the propensity to adopt a particular assessment strategy correlated with beliefs held as to why students plagiarise?

RQ5: Is the propensity to adopt a particular assessment strategy correlated with attitudes about potential factors that might impede attempts to redesign assessment to minimise opportunities for plagiarism?

Research Method

A questionnaire instrument was developed to be administered to academic teaching staff across the five faculties that make up UTAS. It commenced with the definition of plagiarism that is made available on the University's web site (University of Tasmania 2010), namely:

the stealing or passing off as one's own (the idea or words of another); use (a created production) without crediting the source; to commit literary theft; present as new and original an idea or product derived from an existing source (Webster's Third New International Dictionary of the English Language, Unabridged, p. 1728).

This was followed by six sets of questions. The first set pertained to the reasons students plagiarise. Drawing from Park (2003) and Hart and Friesner (2004) a list of eight potential reasons were provided to respondents who were asked to indicate the extent of their agreement as to whether the item was a likely reason for plagiarism. The specific items are:

- Easy access to material via the internet
- A desire to achieve a better mark
- Poor time management
- Students believe that the risk of detection is low
- A lack of understanding of what plagiarism actually is
- Students do not consider plagiarism to be a serious offence
- Students believe that the penalties for plagiarism are not very heavy so it is worth the risk
- Students believe that the University does not treat plagiarism as a serious offence

In all cases throughout the questionnaire where extent of agreement with a statement was sought, the following fully anchored scale was used:

1 = Strongly Disagree

2 = Disagree

3 = Neutral

4 = Agree

5 = Strongly Agree.

Sets two, three and four contained, respectively, plagiarism minimisation strategies that might be adopted to: educate and communicate expectations; visibly monitor detect and respond to plagiarism, and design assessment tasks to minimise opportunities for plagiarism. These items were drawn from CSHE's (2002) list of strategies to minimise plagiarism, a link to which is provided on the University of Tasmania's web page of staff resources regarding academic integrity. In each case respondents were asked whether or not they currently implement the strategy and also to indicate the extent of their agreement as to whether the strategy would be effective and whether they would be likely to use it in the future. The specific items are reported in Tables Two - Four.

Set five listed nine factors that might impede attempts to redesign assessment in order to minimise opportunities for plagiarism. These items drew on discussion by Devlin (2003), Stoney and McMahon (2004), Bretag (2005), and Hughes (2009) as well as on anecdotal observations of the researchers. The items are reported in Table Ten, and again, respondents were asked to indicate the extent to which they agreed that each was a barrier to assessment redesign. The final part of the questionnaire collected demographic data.

The questionnaire was pilot tested by three academic staff members from the Faculty of Business and minor ordering and wording refinements were made before mailing it in hard copy form to 774 academic staff members at UTAS. This number represented all staff identified as being in one of the five faculties at the University and who had teaching responsibilities as part of their role. Research institutes and research-only staff were not surveyed. The final instrument is available from the authors on request.

A one-sample t-test is used to assess significant differences between responses on the five point scale used in the questionnaire. Kendall's tau correlation is used to assess associations between attitudes and strategy uses as the data are treated as sets of paired observations from each individual respondent rather than pooled aggregate data. Kendall's tau is the appropriate measure of correlation in these circumstances.

Results and discussion

One hundred and seventy five usable responses were received, representing a response rate of 22.6 per cent. Respondents typically were experienced academics, with 65 per cent indicating that they had been employed in the tertiary sector for more than five years. Only 12 per cent reported that they had less than two years of experience. As shown in Table One, respondents covered the full range of academic levels and came from all faculties across the University.

Table 1: Academic level and discipline area of respondents

Academic Level	Proportion of respondents	Faculty	Proportion of respondents	Proportion of University
Professor	5.4	Arts	21.9	21.3
Associate Professor	7.7	Business	12.9	8.7
Senior Lecturer	20.2	Education	11.8	8.7
Lecturer	45.8	Health Science	22.9	28.1
Associate Lecturer	16.7	Law	1.8	3.2
Other	4.2	Science, Engineering and Technology	28.8	30.0
	100.0			100.0

Research Questions One, Two and Three related to whether or not respondents used a particular strategy to reduce plagiarism and to their beliefs about effectiveness and use in the future. As reported in Table Two, all of the strategies associated with educating and communicating expectations about plagiarism were used. However, only three of the six strategies were more likely to be used than not used. These strategies were: creating a climate of involvement and interest rather than one of detection and punishment; teaching skills of critical analysis and building an argument; and teaching skills of referencing and citation. Respondents were significantly less likely than more likely to warn students of the possibility of their work being stolen or copied if left on university computers.

Similarly, as indicated in Table Three, all strategies aimed at visibly monitoring, detecting and responding to incidences of plagiarism. However, only two of the seven strategies were more likely than not to be used: supporting the use of deterrence penalties and the use of coversheets. In the context of UTAS, these are relatively easy strategies to implement at the individual faculty member level. It is a University requirement that students use a standard-form signed coversheet, for which an electronic pro-forma is available, when submitting assignments. Similarly, deterrence penalties are the responsibility of the Head of School or a Disciplinary Committee, depending on the nature of the offence, and individual staff level involvement in determining penalties is minimal once the case of suspected plagiarism has been reported. Conversely, the two strategies that were significantly less likely to be used would require specific effort on the part in the individuals using them. These were: educate yourself about electronic options available and attractive to students in your discipline and use a search engine to help find the sites students are likely to find.

Table 2: Strategies aimed at educating and communicating expectations

Strategy	Per cent of respondents currently using	Average agreement score on effectiveness (/ 5)	Average agreement score on future use (/ 5)
Create a climate of involvement and interest rather than one of detection and punishment	70% [†]	3.65*	3.76*
Warn students of the possibility of their work/programs/files being stolen/copied if left on the hard disks of university computers	24% ^{††}	3.33*	3.18
Teach the skills of summarising and paraphrasing	54%	4.17**	3.78*
Teach skills of critical analysis and building an argument	75% [†]	4.29**	4.12*
Teach the skills of referencing and citation	81% [†]	4.35**	4.28**
Include mini-assignments that require students to demonstrate skills in summarising, paraphrasing, critical analysis, argumentation, referencing and/or citation	56%	4.11*	3.63*

[†] significantly greater than 50% (p < 0.05)

^{††} significantly less than 50% (p < 0.05)

*significantly above the neutral point of 3 (p < 0.05); **significantly above the agree point of 4 (p < 0.05)

Of the nine strategies concerned with designing assessment to minimise opportunities for plagiarism, five were more likely than less likely to be used. These were:

- Change the assessment tasks from year to year;
- Avoid assignments that ask students simply to collect, describe and present information;
- Use essay/assignment topics that integrate theory and examples or use personal experience;
- Assess work produced in class, (oral or written); and
- Ask students to make an oral presentation as part of the assessment of written assignments.

Conversely, three strategies were less likely to be used, namely:

- Require stages of the work to be submitted, such as first drafts, lists of sources; identified and the process used to identify them and allocate marks for the various stages;
- Minimise the number of assessment tasks; and

- Collect an annotated bibliography before the submission is due.

The strategy of using alternatives to the standard essay, such as case studies, poster presentations, Wikis or Weblogs, was equally likely to be used as not used.

Table 3: Strategies aimed at visibly monitoring, detecting and responding to incidences of plagiarism

Strategy	Per cent of respondents currently using	Average agreement score on effectiveness (/ 5)	Average agreement score on future use (/ 5)
Require all students to submit essays and assignments electronically, while making students aware of the plagiarism checking software that exists	44%	3.93*	3.66*
Support the use of deterrence penalties	66% [†]	3.99*	3.91*
Request that all work outside of examinations be submitted with a cover sheet defining plagiarism and requiring the student's signature	87% [†]	3.53*	4.14*
Publicise information about penalties imposed when plagiarism is found	43%	3.90*	3.96*
Educate yourself about electronic options available and attractive to students in your discipline	38% ^{††}	3.54*	3.77*
Use a search engine to help find the sites students are likely to find	37% ^{††}	3.39*	3.22*
Demonstrate to your students your awareness of electronic resources available to them	47%	3.69*	3.58*

[†] significantly greater than 50% (p < 0.05) ^{††} significantly less than 50% (p < 0.05)

*significantly above the neutral point of 3 (p < 0.05); **significantly above the agree point of 4 (p < 0.05)

The information in Tables Two, Three and Four indicates that with the exception of the last two strategies related to assessment, respondents felt that all strategies would be effective in counteracting plagiarism, with each receiving an average score significantly above the neutral point of three on the five point scale. In terms of effectiveness, the top five ranked strategies were:

1. Teach the skills of referencing and citation (4.35)
2. Teach skills of critical analysis and building an argument (4.29)
3. Use essay/assignment topics that integrate theory and examples or use personal experience (4.22)
4. Change the assessment tasks from year to year (4.21)

5. Include mini-assignments that require students to demonstrate skills in summarising, paraphrasing, critical analysis, argumentation, referencing and/or citation (4.11)

The first two items relate to education and communication and the next two to assessment, but there was no statistically significant difference in the scores assigned to these top four. The final item, although grouped with the items on education and communication, also has elements of assessment in that it relates to setting assignments specifically related to combating plagiarism. Thus, a tentative conclusion that might be drawn from the data is that respondents consider educational and communication strategies and assessment design approaches as equally effective counter-plagiarism strategies and that any holistic approach should include elements of both.

Not surprisingly, in every case there was significant positive correlation between use of a strategy and perceptions about its effectiveness, as indicated by Kendall's tau (not individually reported). The correlation ranged between 0.22 and 0.39 for use and effectiveness of education and communication strategies, between 0.19 and 0.47 for visibility strategies and between 0.40 and 0.64 for assessment strategies. Thus, there appears to be strongest translation of potentially effective strategies into actual strategies in the case of assessment choices in that the more effective a strategy was felt to be, the more likely it also was that it was enacted, and vice versa.

The data on likely future use indicate that all but four of the strategies were likely to be implemented. Respondents were neutral about warning students in the future about the potential theft of unprotected work and also about requiring stages of assessed work to be submitted with marks allocated to stages undergone in completing the required piece of assessment. Respondents were significantly less likely to implement two of the assessment strategies in the future, namely, minimising the number of assessment tasks and collecting an annotated bibliography before submission date. While correlations between effectiveness and assessment strategies were strongest overall, fewer strategies from this set are likely to be implemented in the future. This might suggest that inaction reflects a belief that implementation would not be effective, and not that there exist any specific impediments to action.

As with the relationship between effectiveness and current use, there was consistent positive correlation between perceptions about effectiveness and likelihood that a strategy would be used in the future. The correlation ranged between 0.54 and 0.72 for future use and effectiveness of education and communication strategies, between 0.50 and 0.85 for visibility strategies and between 0.49 and 0.75 for assessment strategies. The magnitude of the correlation between effectiveness and future use for each strategy was consistently higher than that of the correlation between current use and effectiveness, and in the case of the educate and communicate and visibility strategies, it was around double. This might reflect two things: that some respondents may have been unaware of some of the strategies that might be implemented and/or for those whose effectiveness is known, there exists some impediment to their current use. Tables Five, Six and Seven show the ranks for the three sets of strategies, respectively, on current use, effectiveness and likely future use. Whilst some ranks are relatively consistent, others are not, suggesting that

implementation decisions might be driven by ease of use factors and barriers to implementation, rather than views on effectiveness.

Table 4: Strategies to design assessment to minimise opportunities for plagiarism

Strategy	Per cent of respondents currently using	Average agreement score on effectiveness (/ 5)	Average agreement score on future use (/ 5)
Change the assessment tasks from year to year	79%†	4.21**	4.19*
Avoid assignments that ask students simply to collect, describe and present information	80%†	4.07*	4.07*
Use essay/assignment topics that integrate theory and examples or use personal experience	79%†	4.22**	4.18*
Use alternatives to the standard essay, such as case studies, poster presentations, Wikis or Weblogs	54%	3.63*	3.56*
Assess work produced in class, (oral or written)	59%†	3.94*	3.76*
Ask students to make an oral presentation as part of the assessment of written assignments	59%†	3.91*	3.74*
Require stages of the work to be submitted, such as first drafts, lists of sources identified and the process used to identify them and allocate marks for the various stages	26%††	3.37*	2.87
Minimise the number of assessment tasks	35%††	2.83	2.79***
Collect an annotated bibliography before the submission is due	8%††	2.82*	2.48***

† significantly greater than 50% ($p < 0.05$)

†† significantly less than 50% ($p < 0.05$)

*significantly above the neutral point of 3 ($p < 0.05$); **significantly above the agree point of 4 ($p < 0.05$)

*** significantly below the neutral point of 3 ($p < 0.05$)

Research Question Four regarded whether the propensity to adopt a particular assessment strategy correlated with beliefs held as to why students plagiarise. Respondents were asked to score eight possible reasons why students plagiarise. The items, ranked in order of the extent of agreement that the item was a cause, are presented in Table Eight. For all items, except for the belief that the University does not treat plagiarism as a serious offence, stated agreement with the reason is significantly above the neutral point of three on the five point agreement scale.

Table 5: Ranking of strategies aimed at educating and communicating expectations

Strategy	Ranks on Use	Rank on Effectiveness	Rank on future use
Create a climate of involvement and interest rather than one of detection and punishment	3	5	4
Warn students of the possibility of their work/programs/files being stolen/copied if left on the hard disks of university computers	6	6	6
Teach the skills of summarising and paraphrasing	4	3	3
Teach skills of critical analysis and building an argument	2	2	2
Teach the skills of referencing and citation	1	1	1
Include mini-assignments that require students to demonstrate skills in summarising, paraphrasing, critical analysis, argumentation, referencing and/or citation	5	4	5

Table 6: Ranking of strategies aimed at visibly monitoring, detecting and responding to incidences of plagiarism

Strategy	Ranks on Use	Rank on Effectiveness	Rank on future use
Require all students to submit essays and assignments electronically, while making students aware of the plagiarism checking software that exists	4	2	5
Support the use of deterrence penalties	2	1	3
Request that all work outside of examinations be submitted with a cover sheet defining plagiarism and requiring the student's signature	1	6	1
Publicise information about penalties imposed when plagiarism is found	5	3	2
Educate yourself about electronic options available and attractive to students in your discipline	6	5	4
Use a search engine to help find the sites students are likely to find	7	7	7
Demonstrate to your students your awareness of electronic resources available to them	3	4	6

There was significant positive correlation between the use of three assessment strategies and specific beliefs about why students plagiarise and two significant negative correlations; these correlations might reflect some logically intuitive underlying rationales, as shown in Table Nine. Interestingly, four of the five in the Table ranked in the bottom four on use and effectiveness and two ranked below the neutral point for effectiveness. This might suggest that, although their use may be in the minority and their effectiveness doubted by the majority, where they are used, it is because those implementing them are responding proactively to the beliefs about the underlying causes of plagiarism.

Conversely, the more popular strategies are implemented despite any clear correlation between their use and beliefs about the causes of plagiarism that were assessed here. This may mean that causes other than those popularly identified in the literature drive their use, or that particular strategies are undertaken as entrenched practices in the accepted culture, not necessarily guided by a cause-and-effect logic.

Table7: Ranking of strategies to design assessment to minimise opportunities for plagiarism

Strategy	Ranks on Use	Rank on Effectiveness	Rank on future use
Change the assessment tasks from year to year	=2	2	1
Avoid assignments that ask students simply to collect, describe and present information	1	3	3
Use essay/assignment topics that integrate theory and examples or use personal experience	=2	1	2
Use alternatives to the standard essay, such as case studies, poster presentations, Wikis or Weblogs	6	6	6
Assess work produced in class, (oral or written)	=4	4	4
Ask students to make an oral presentation as part of the assessment of written assignments	=4	5	5
Require stages of the work to be submitted, such as first drafts, lists of sources identified and the process used to identify them and allocate marks for the various stages	8	7	7
Minimise the number of assessment tasks	7	8	9
Collect an annotated bibliography before the submission is due	9	9	8

Table 8: Extent of agreement with reasons why students plagiarise

Reason for plagiarising	Agreement score (/ 5)
Easy access to material via the internet	4.39
A desire to achieve a better mark	3.99
Poor time management	3.90
Students believe that the risk of detection is low	3.87
A lack of understanding of what plagiarism actually is	3.78
Students do not consider plagiarism to be a serious offence	3.45
Students believe that the penalties for plagiarism are not very heavy so it is worth the risk	3.19
Students believe that the University does not treat plagiarism as a serious offence	3.10

The final research question asked whether the propensity to adopt a particular assessment strategy correlated with attitudes about potential factors that might impede attempts to redesign assessment to minimise opportunities for plagiarism. Respondents’ attitudes about impediments to action are documented in Table Ten, ranked in order of the degree to which each is perceived to be an impediment. As the table shows, of the list provided, only three potential impediments ranked significantly above the neutral point. These were insufficient time, insufficient resources and support, and inadequate training.

Five items scored significantly below the neutral point suggesting that respondents disagreed that these were impediments. These items were:

- Student Teaching and Learning Evaluations (SETLs) are likely to be negatively impacted
- Students will view the unit as less attractive
- The rigour of assessment will decline
- The quality of learning outcomes will be diminished
- External stakeholders expect traditional forms of assessment.

In only two cases was there a significant negative correlation between a perceived impediment and use of an assessment strategy. The first occurred between insufficient time, and asking students to make oral presentations; and the second between insufficient time, and avoiding assignments that ask students simply to collect, describe and present information. However, despite being below the neutral point, there were instances where impediments were associated with reduced use of a strategy. This occurred particularly with the strategy of using alternatives to the standard essay which was significantly negatively correlated with concerns that student evaluations are likely to be negatively impacted, and that external stakeholders expect traditional forms of assessment. Thus, the data provide some limited evidence that plagiarism reduction efforts may be inhibited by factors related to both resources and to the perceptions of others. Further, while not all significant impediments correlated with specific strategies, there is a general perception that lack of resources, support and training are impediments to implementing assessment strategies that might reduce the incidence of plagiarism.

Table 9: Assessment strategies that correlate with reasons why students plagiarise

Strategy use	Positively correlated with belief that students plagiarise due to:	Possible interpretation
Use alternatives to the standard essay, such as case studies, poster presentations, Wikis or Weblogs	A lack of understanding of what plagiarism actually is	Reflects a desire to assist students avoid unintentional plagiarism arising from misunderstanding by setting tasks where "accidental" plagiarism is far less likely to occur
Require stages of the work to be submitted, such as first drafts, lists of sources identified and the process used to identify them and allocate marks for the various stages	Poor time management	Identifying multiple stages of a tasks and having these stages submitted for assessment helps students manage time better and avoid last minute pressure that might induce plagiarism
Collect an annotated bibliography before the submission is due	Easy access to material via the internet	Whilst material might be easily available, requiring an annotated bibliography reduces its usefulness as students will need to read the sources they claim to have used
	Negatively correlated with belief that students plagiarise due to:	
Change the assessment tasks from year to year	Students do not consider plagiarism to be a serious offence	Unclear
Minimise the number of assessment tasks	A desire to achieve a better mark	Give more assessment - the more required the harder it might be to find others prepare to assist with plagiarism, particularly if this is costly

Table 10: Impediments to implementing plagiarism reduction strategies

Impediment	Agreement score (/ 5)
Insufficient time	3.93*
Insufficient resources and support	3.57*
Inadequate training	3.30*
Lack of interest from higher levels within the university	3.06
SETL evaluations are likely to be negatively impacted	2.72**
Students will view the unit as less attractive	2.62**
External stakeholders expect traditional forms of assessment	2.60**
The rigour of assessment will decline	2.19**
The quality of learning outcomes will be diminished	2.13**

*significantly above the neutral point of 3 ($p < 0.05$);

**significantly below the neutral point of 3 ($p < 0.05$)

Concluding comments

This survey research provides a census of contemporary practice and perceptions in one university that provide insights on which both individuals and institutions might reflect to develop more proactive and holistic plagiarism strategies. The results suggest that respondents see strategies aimed both at educating and communicating expectations and with designing assessment tasks to minimise opportunities for plagiarism as important elements of plagiarism reduction attempts. This is consistent with calls for a more holistic approach to the management of plagiarism. The data further reveal that some of the strategies recommend by CSHE (2002) are less likely to be implemented, particularly those that are perceived to be relatively less effective. However, there is a supporting literature that suggests that all of the strategies ought to be effective. Thus, if the literature is correct, educative approaches may be necessary to raise awareness of the potential that such strategies offer.

Further, there was often no clear alignment between views as to why students plagiarise and the plagiarism reduction strategies used. This may be indicative of perpetuating entrenched practices rather than a pro-active plagiarism reduction strategy that is underpinned by any clear cause and effect logic. Finally, a range of significant impediments to the implementation of assessment-driven strategies to reduce plagiarism were identified, some of which did appear to bear a direct relationship to the propensity

to implement a particular strategy. Institutions might benefit from a focus on these impediments, whether perceived or real, to foster a holistic, proactive approach to implementing effective measures to reduce instances of plagiarism.

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Authentic learning: A paradigm for increasing student motivation in an era of mass education

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Abstract: *If universities are to meet federal targets for mass participation in higher education, they must find new strategies for engaging both prospective and current students. Both prospective and current students need to see the relevance of their studies to a future career, and to understand how the knowledge and skills they gain at university will translate into future professional practice. Authentic learning describes an educational approach that is framed around providing "real life" contexts for learning. It provides a powerful paradigm within which to shape a new approach to the design of educational programs. Herrington and Herrington (2006) defined nine characteristics of authentic learning environments. Using these as a framework, we have designed two checklists that allow academics to evaluate the degree to which their units or teaching activities align with the principles of authentic learning. Through a faculty-wide teaching development project, we are encouraging academics across diverse disciplines to review and refine current practice, with the aim of increasing student motivation through provision of authentic learning opportunities. The project itself employs authentic learning strategies to motivate and engage the participating academics. In this paper, we report on implementation strategies, and present initial evaluation data. Outcomes of this project will include: an increased awareness of the principles of authentic learning across a large faculty; introduction of new learning activities; and a resource containing exemplars of an authentic learning approach to educational design.*

Keywords: *authentic learning, student engagement, motivation*

Introduction

The Bradley Report (Review of Australian Higher Education. Final Report, 2008) has been termed “a critical milestone in the recent history of the Australian higher education sector” in that it calls for a significant expansion in domestic undergraduate enrolment, including “a sharp increase in participation rates of under-represented groups” (Birrell & Edwards, 2009, p. 4). Two high-level recommendations of the Bradley Report (p.18) were:

Recommendation 2

That the Australian Government set a national target of at least 40 per cent of 25- to 34-year-olds having attained a qualification at bachelor level or above by 2020.

Recommendation 4

That the Australian Government set a national target that, by 2020, 20 per cent of higher education enrolments at undergraduate level are people from low socio-economic status backgrounds.

If universities are to meet these new federal targets for mass participation in higher education, they must find new strategies for engaging both prospective and current students. The Bradley Report discusses the factors contributing to students’ expectations about their higher education experience, and points out that these include: “an expectation of personal and vocational relevance and coherence in what is studied and assessed and the capacity to be appropriately employed on graduation” (p. 70). Indeed, the 2008 Report on the outcomes from the initial administration of the Australasian Survey of Student Engagement (AUSSE) demonstrated positive links between student engagement and integration of employment-focused work experiences into study (Scott, 2008), while Tricker (2003) notes growing expectations amongst university students for direct links between study and career. However, the 2009 AUSSE survey (AUSSE, 2009) indicated that the University of Tasmania scored below the national average on several relevant indicators of student engagement: *Industry placement or work experience; Practicum/internship; where to look for jobs; Made presentation; Worked with students outside class; How to present to potential employers; Kept resume up-to-date*. Thus, as university educators, we need to develop teaching approaches that enable students to see the relevance of their studies to a future career, and to understand how the knowledge and skills they gain at university will translate into future professional practice.

Authentic learning describes an educational approach that is framed around providing "real life" contexts for learning. It provides a powerful paradigm within which to shape a new approach to the design of educational programs. Herrington, Oliver, and Reeves (2002) define nine characteristics of authentic activities, including: *Authentic activities have real world relevance, and Authentic activities can be integrated across different subject areas and lead beyond domain-specific outcomes*. Thus authenticity encompasses not only professionally orientated learning outcomes, but also allows a broader focus on developing core graduate attributes within a learner-centred environment (Herrington, Oliver, & Reeves, 2002).

We suggest that there is considerable scope to revitalize and realign our teaching programmes through the incorporation of authentic learning principles and practices. Contextualised, authentic learning activities represent a key strategy for re-engaging our students and enhancing their acquisition of lifelong learning skills (Herrington, Oliver, & Reeves, 2002). In addition, Dunworth (2006, p. 1) comments that authentic assessment “invites a criterion-based...approach to assessment” and calls for “criteria that adequately

and cogently describe those competencies and the requisite standard of assessment”. This resonates with two core expectations of students about their university experience: *clear assessment guidelines*; and *prompt and helpful feedback on their learning* (Scott, 2008). We therefore initiated a faculty-wide teaching development project which aims to disseminate the concepts of authentic learning across the teaching staff of the Faculty of Science, Engineering and Technology at the University of Tasmania; to stimulate development or refinement of authentic learning opportunities for our students; and to gather a collection of exemplars of authentic learning activities that would form a resource for academics after the end of the project. In this first paper, we report on implementation strategies, and present initial evaluation data.

Approach

Consistent with the theme of the project, our approach to project planning was influenced by the principles of authentic learning articulated by Herrington and Herrington (2006), with the project participants viewed as learners. In particular, we took account of the following key characteristics of an authentic learning environment: *provides an authentic context that reflects the way that knowledge will be used in real life; includes collaborative construction of knowledge; provides space for reflection and articulation of ideas* (Herrington & Herrington, 2006). In keeping with this approach, the project team considered themselves as facilitators of a learning process rather than as directive leaders. We therefore employed a ‘hub and spoke’ model of project management (as in Dermoudy, Jones, Osborn, Geraghty, & Dearden, 2005; Jones et al., 2005, 2007). In a hub and spoke model, the ‘weaver’ at the hub has “the vision, the energy, and the social skills to connect to diverse individuals” (Krebs & Holley, 2002, p. 7). For our purposes, then, the project team forms the hub, connected via the spokes to discipline participants who, in turn, connect with of a group of school-based colleagues. The project team (Jones, Dermoudy, Osborn, and Yates) was supported by a project manager (Casper), who undertook organisational and administrative functions as well as contributing to project design.

Our first priority was to engage a group of discipline-based participants from across the Faculty of Science, Engineering and Technology. This large faculty encompasses schools (departments) of the fundamental sciences, computing and information systems, psychology, engineering, and architecture and design. We sent emails to all Heads of School, setting out the scope and aims of the project, and inviting them to nominate School participant(s). This strategy also ensured that knowledge of the project was disseminated widely via the faculty leadership. The nominated participants were contacted by the project manager and invited to attend a workshop. They were sent two key references (Herrington & Herrington, 2006; McKenzie, Morgan, Cochrane, Watson & Roberts, 2002), and asked to come prepared to share an example of an activity or unit that they considered might meet the criteria for authentic learning.

All eleven Heads of School within the Faculty responded to the request to nominate a participant for the project. Seventeen discipline participants, representing ten of the eleven Schools of the Faculty, and both Hobart and Launceston campuses, have attended at least one workshop.

At Workshop 1 (held early in semester one, 2010), the project team presented an overview of the project, and explored the rationale for including authentic learning activities in

teaching. Discipline participants then shared examples of authentic learning activities that they were currently employing in their teaching. Participants next broke up into small groups and peer-assessed these examples against the principles of authentic learning using an authentic learning (AL) checklist developed by the project team. This AL checklist allows one to determine the extent to which a learning activity or unit meets nine critical characteristics of authentic learning (Herrington & Herrington, 2006). These criteria are: *provides an authentic context that reflects the way knowledge will be used in real life; authentic activities; access to expert performances and the modelling of processes; multiple roles and perspectives; collaborative construction of knowledge; reflection; articulation; coaching and scaffolding; and authentic assessment.* Participants gained feedback on their examples from their peers, and were then asked to suggest ways in which they might modify their teaching in order to better provide a more authentic learning experience to their students. Thus, the activity represented an authentic learning activity for the participants themselves as they engaged in *collaborative construction of knowledge, reflection; and articulation.*

In addition, the participants provide valuable feedback to the project team on the design of the AL checklist. In response to this feedback and further reflection by the project team (including re-visiting the source reference: Herrington & Herrington, 2006), the original AL checklist was refined and reconceptualised as two separate AL checklists, one for a unit and one for a learning activity. The checklists were re-designed to allow responses of *yes, partly, or no* to a series of statements drawn from Herrington and Herrington (2006)’s text in which they expand upon the meaning of each of their nine principles of authentic learning. The pattern of responses allows one to assess the degree to which a particular activity/unit fully conforms with the principles of authentic learning, and will also highlight where further development might be necessary.

Workshop 2 was held during the mid-semester study break of semester two, 2010. Participants were asked to complete a pre-workshop activity that involved:

1. Assessing a unit/activity for authentic learning attributes using the revised checklist.
2. Briefly describing the unit/activity.
3. Identifying aspects of this unit/activity that they would like to align more closely with authentic learning principles.
4. Proposing changes to achieve this.

During the workshop, participants had the opportunity discuss their examples and share ideas (through *articulation, multiple roles and perspectives*). At the end of the workshop, they were asked to indicate if and how their proposed changes had been modified by peer feedback (representing *coaching and scaffolding*). There was considerable discussion of issues around authentic learning, including: the difficulties of designing authentic learning activities for large classes; whether learning activities must be collaborative to meet the criteria of authenticity; how to maintain currency of scenarios or problems; students’ perceived lack of enthusiasm for “complex and ill-defined” tasks; and how to provide examples of “expert performances”. Some participants reflected that being involved in the project had turned around their way of thinking about what constitutes an effective teaching approach. One participant commented that: “what I thought was a good teaching approach was breaking things down” (i.e.: into small manageable ‘chunks’ of content presented in a clear sequential order). They now appreciated that this approach was at odds with the principles of authentic learning: that tasks are complex and ill-defined, and resist being divided into shorter, simpler, disconnected tasks (Herrington & Herrington, 2006).

A third and final Workshop is planned for the end of the 2010 teaching year. At this workshop, discipline participants will be asked to report on relevant initiatives introduced during 2010, or being planned for 2011, and to provide reflective feedback on the project as a whole. Suggestions for gaining relevant student feedback via targeted questions in the Student Evaluation of Teaching and Learning (SETL) have been provided to them by the project team.

In addition, we are collating exemplars of authentic learning activities or units for a web-based resource that will be made generally available via the faculty website. This part of the project was initiated via a bulk email to all staff in the faculty, asking them if they wished to contribute an exemplar to the resource: a proforma for describing the example was provided. Each exemplar will be supported by a completed AL checklist, and authors will be acknowledged on the website as contacts for further information. We anticipate that this will facilitate further sharing and dissemination of the concepts of authentic learning beyond the project participants.

Outcomes and future work

The project has provided a model of authentic learning in that it meets the following criteria of authentic learning: *provides an authentic context that reflects the way knowledge will be used in real life; authentic activities; access to expert performances and the modeling of processes; multiple roles and perspectives; collaborative construction of knowledge; reflection; articulation; and coaching and scaffolding.*

The two AL checklists (designed for a learning activity, and for a unit, respectively) are key outputs of this project. The AL checklists are user-friendly tools that allow academics to evaluate the degree to which their activity or unit meets the criteria for authentic learning, and where it does not. The AL checklists are, therefore, tools for reflection that support both the validation of a current approach as representing authentic learning and planning for future refinement. They will form part of the web-based resource of authentic learning exemplars that will be a final output of the project.

During the project, participants have used the AL checklists to evaluate six units and seven learning activities against the characteristics of authentic learning. These units or activities represent a range of examples of authentic learning experiences for first year students through to students enrolled in masters by coursework. These examples include: students preparing posters on a scientific topic and presenting them at a mock conference; students writing an authentic species entry for the Natural Values Atlas of Tasmania; capstone units in which students engage with industry to solve a real-world problem; students of physics working with authentic research data; and students writing an excursion report in the form of a journal paper. Exemplars (with associated AL checklists) are currently being collated for collection into a web-based resource. Ten exemplars have been evaluated using the appropriate AL checklist as representing examples of authentic learning activities or units. Exemplars have been offered by academics outside the core group of discipline participants, indicating a broad level of engagement with the fundamental ideas of this project across the Faculty. Project participants are acting as agents of dissemination within their own schools, thus acting as effective ‘nodes’ (*sensu* Krebs & Holley, 2002). One discipline participant commented: “I am hoping to use some of

it to influence other units within our school.” These indicators demonstrate a wide level of connection with the project across the Faculty via our hub-and-spoke model of project design (Krebs & Holley, 2002).

At this stage, it is too early to report on the impacts on student learning outcomes from new teaching and learning initiatives. However, participants will be encouraged to report back to the project team on the results of student feedback and formal evaluations (e.g. via SETL) of authentic learning initiatives that have been revised or developed through this project. Such data will be included in future publications.

Conclusions

This project has raised awareness across a large and diverse faculty that authentic learning is a powerful tool for engaging and motivating students, and for enhancing their learning in an environment that is “inherently multidisciplinary” (Lombardi, 2007, p. 2). In particular, the project has empowered practitioners to reflect upon their own teaching approach within what was, to many participants, a new paradigm. Although it was beyond the scope of this one year project to assess the impact of the initiative on student learning outcomes, there is substantial evidence that authentic learning activities provide powerful tools with which to encourage deeper learning and to improve learning outcomes (Newmann, Secada, & Wehlage, 1995). Newmann, Bryk, and Nagaoka (2001) note that “when teachers organize instruction around assignments that demand higher order thinking, in-depth understanding, elaborated communication and that make a connection to students’ lives beyond school, students produce more intellectually complex work” (p. 2).

Finally, the degree to which authentic learning opportunities are integrated into an organisation’s teaching portfolio has been recognised as a parameter for measuring teaching quality. In this era of increasing participation in tertiary education, a more overt emphasis on authentic learning will help to ensure that students are well-prepared for the complexity of a rapidly changing professional world (Lombardi, 2007). Oliver, Herrington, Stoney, and Millar (2006) discuss strategies for quality assurance of teaching and learning in their paper on authentic teaching and learning standards. They recommend that:

- *Learning experiences situate learning in contexts in which learning will be applied. Students learn, retain, and transfer learning when learning occurs in contexts that reflect tasks they will encounter in society and in their professional practice*” (p. 306).

They present a set of quality indicators that relate the provision of appropriate learning experiences for students. These include:

- *“Students are engaged in authentic learning activities”* (p. 306).
- *“Assessment tasks are authentic and integrated with instructional activities”* (p. 307).

As articulated by Reeves (2006): “The time for significant support for the development of more authentic learning environments throughout higher education is now” (p. viii). This project goes some way towards meeting that agenda.

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The Influence of Organisational Culture on Tertiary Education: Observations from the West Indies and North Africa

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***Abstract:** An objective of many students undertaking tertiary education in developing countries is to gain work experience or undertake research in a more developed society. They may perceive a different standard of living, or better education, or an idea of returning to their country of origin with knowledge that was otherwise unavailable. In some ways the grass typically appears greener on the other side. It did to me as an academic in the UK with ten years teaching experience when I moved firstly to the West Indies, and then to North Africa. I draw on these experiences of working within contrasting cultures to consider how students are prepared to face the challenge of work or study in the developed world. Within any society there are those who will excel no matter what the circumstances, but the typical student meeting requirements for post-graduate study or employment must be equipped with skills acquired through their first degree. The question of the necessary background is addressed, and whether this is being adequately met by academic institutions in the West Indies and in Egypt, where both are attempting to deliver a style of education equivalent to that on offer in the UK. It is argued that the modern culture of the West Indies is making students from this region highly successful, while the principles of operation in North Africa are underpinned by a heritage that could make it difficult for a student to undertake further study overseas without additional preparation.*

Keywords: culture, tertiary education, North Africa, West Indies

Introduction

Personal experience in lecturing at Universities internationally has provided an appreciation of different educational frameworks and a perspective on how these are influenced by the people involved. From working within the UK educational system throughout the 1990's, I spent the following eight years in the West Indies and then two and a half years in Egypt before landing in Australia. While some factors within the UK educational system have changed in the intervening years, the fundamentals and principles are similar to those in Australia. Students typically undertake the transition from school to University at much the same time of their life, and I have found the expectations, learning styles and assessment strategies within the institutions to follow similar principles.

There is a perception amongst students within the developing world that study in the developed countries, particularly English speaking states within Europe, North America and Australasia will provide enlightenment and prospects beyond those available at home. My advice to inquisitive students with financial constraints was to undertake their first degree locally with a view to further study overseas. Not only were there more funding opportunities available for post-graduate study, but the student would also benefit from maturity and from the contrasting experiences. While academic establishments in the developed world are eager to accept full-fee paying overseas students, those involved directly in the educational process have to deal with variations in background and culture within the student cohort.

In addressing globalisation of education, Marginson (2002) identifies Australia as being the third largest provider of international education, and in considering the role of the national university system, it is argued that the educational framework be strengthened to meet the needs of the global market. The current focus is on the attraction of students from South East Asia, and formal links exist with Malaysia (Commonwealth of Australia, 2007). From the student perspective, an ability to perform at post-graduate level in a different environment requires skills beyond academic ability. Nisbett (2003) considers issues of culture within the thought process, as this plays a significant part of any post-graduate programme where students are expected to undertake guided study or research. Within this paper, contrasting examples are presented through personal experiences in Egypt and in the West Indies, which are supported through discussion of cultural dimensions of these societies. To place these in the familiar context, reference is also made to Malaysian, Chinese, US and Australian societies.

Towards Globalisation

Realising that there is a demand amongst students of the Caribbean and North Africa for post-graduate study in the more developed countries offers the potential hosts with an opportunity on which they can capitalise. Immigration statistics for temporary admission to Australia and to the US under student entry with residency from the English-speaking West Indies and from Egypt are provided in Table 1. Admissions from Malaysia and China under the same category are also provided for comparison.

Region of Origin	Country of Entry	
	Australia ¹	USA ²
English speaking West Indies	37	20556
North Africa	707	2857
Malaysia	29356	4675
China	107294	106044

Table 1. 2009 overseas admissions as students to Australia and to the USA.

Sources: 1. Australian government (2009), 2. Homeland Security (2010)

Data provided in table 1 suggest that students prefer to study closer to home, but while the USA is attracting 16% of the number coming to Australia from Malaysia, the number coming to Australia from the West Indies is insignificant. Many students studying overseas from North Africa are likely to be going to Europe, where detailed data on entry is less readily available, but Australia is attracting only 25% of the numbers going to the USA. These figures suggest that globalisation of education is not being fully realised by Australian universities.

In my personal experience of supporting graduates in their search for overseas study opportunities towards a higher degree, very few considered Australia as an option. In one instance a Caribbean student applied for an internal scholarship offered by an Australian university and was awarded the place. The offer was rejected, the student worked for a year locally, and then obtained funding to enter a UK university the following year. While numerous graduates from the Department of Surveying and Land Information at the University of the West Indies went on to study at post-graduate level in Europe, Canada and the USA, I am only aware of one going to Australia. My understanding from discussion with individuals is that the preference relates more to lack of appreciation for Australia rather than simply distance. If there is intent within Australia to broaden globalisation by attracting students from further afield then there are additional cultural issues that may need to be considered within the selection of applicants and within the educational processes.

Contrasting Culture and Society

The Egyptian culture has been developed over thousands of years, while that of the modern Caribbean is less than five hundred years old. Educational norms also differ between these two regions. In order to address the issues involved in accommodating students from overseas in academic programmes, we must first understand what they have come from and deal with development of study skills accordingly. These cases of Egypt and the West Indies provide an interesting insight into different requirements.

Development of West Indian Society

Development of infrastructure within the English-speaking West Indies has been on-going for the last one hundred and fifty years. From the middle of the nineteenth century, introduction of Indian and Chinese labour added further diversity to an already colourful culture made up of Amerindians, Africans and Europeans. Beckles and Shepherd (2006) detail historical developments throughout the region. School systems developed within the British colonies and until recently the General Certificate of Secondary Education (GCSE) was offered at Ordinary and Advanced levels. Educational systems and procedures were aligned with those in the UK, but the students had come from a different background. As West Indians they had been in place for just a few generations and considerable diversity in culture existed within the demography. Independence in the 1960s finally provided the people with identity. Holmes (2008) suggests that people throughout the region have undertaken innovation within the society and an economic assessment by Elu (2000) shows a diversification from agriculture to industry. The GDP of some states within the region

has increased in recent times, but there is still a lack of private investment and an inequality in income. While there is a financial divide, personal experience suggests that the social division does not restrict movement between brackets. The concept of wealth does not propagate to the beach, the bar or the cricket pitch. It does, however, influence living standards and education.

Development of Egyptian Society

In complete contrast, the Egyptian people have existed as a race for thousands of years, and Egypt has been invaded and ruled by numerous external forces. The Pharaohs led a very structured society of which the Persians took control, followed by Alexander. During the spread of Christianity the Roman Empire extended into a part of what is now Egypt. At the time of Napoleon’s visit the Mamluks of the Ottoman Empire were ruling the country, and almost a century later Egypt was under British occupation. A revolution in 1952 changed the country from a monarchy to a republic, and there have been a total of three presidents since. For the last 45 years the country has been in a state of emergency with extended police powers and censorship. Since the time of the Pharaohs, the people of Egypt have become accustomed to being ruled. The result is a people of mixed ethnic origins, and who are accustomed to a society that is heavily structured and separated by class.

Formalisation of Culture

Hofstede (2001) has developed a quantitative means of assessing survey data to evaluate differences in culture. Results for specific countries are available from the associated web site (Hofstede, 2010). Cultural dimensions are provided by five measures on a 100 point scale, three of which are considered here as being potentially relevant to education, and data extracted from the web site is given in Table 2. Australia and the USA show very similar characteristics. Within these two countries, the results for Individualism (IDV) are the highest in the world showing that self-interest is normal within the culture. Lower than average values for Power Distance Index (PDI) shows a greater acceptance and expectation for power to be shared equally within groups. In contrast, high values for both PDI and Uncertainty Avoidance Index (UAI) in the Arab World indicate a highly structured society with a strong emphasis on rules and regulations with a caste system that does not allow upward mobility of citizens. Jamaica is representative of the West Indies where there is an expected sharing of power, less order to the society that does not attempt to control outcomes and is more open to a variety of ideas, thoughts and beliefs. In both Arab and West Indian societies the IDV is below average, again emphasising the significance of groups with strong bonds. Differences in UAI and PDI indicate that the relationships and skills inherent within these groups are very different.

Country or Region	PDI	IDV	UAI
World Average	55	43	64
Jamaica	42	35	10
Arab World	80	38	68

Malaysia	95	20	30
China	76	11	36
USA	38	91	44
Australia	35	90	48

Table 2. Three of Hofstede cultural dimensions for countries of interest.

Having lived and worked with people from the West Indies and Egypt in their own society, the Hofstede dimensions formalise my experiences. Within the recently evolved culture of the West Indies, the people live in a society where new challenges are continually encountered. Small communities, remote from the world, have developed the skills required to tackle real-life problems that arise while maintaining standards that eventually align with international developments. Teachers and academics pass on these skills in their delivery, which reinforces elements of daily life within the Caribbean where young people are active in the society as a whole. All members of the Caribbean society are considered as equal, but some are afforded better opportunities. Recent discussion within one university has focused on means of providing access to applicants who have shown some aptitude despite their origins from an adverse learning environment, such as attendance at a school in a poorer part of the community. The Caribbean people are working as one to establish their society, giving due consideration to ensuring equality.

The majority of Egyptians undertake menial duties that are normally performed elsewhere by machine; they are kept busy. Data from Nationmaster (2010) indicates that 32% are employed in agriculture, while in the English-speaking West Indies the equivalent lies between 4% and 20%, depending on the state. Another labour intensive industry in Egypt is construction, where much of the work beyond excavation is done manually. In undertaking their duties the workers function as a team, collaborating to achieve the specific objective. Amer (2007) shows that those from a working class background who have obtained a degree are unlikely to progress within the societal structure. Strong family ties mean that those in positions of power are selective in appointing friends and family to take such positions. Within their regular work the Egyptians will know exactly what to do without any reference to or use of technology, but demonstrate low adaptability in unusual circumstances. There is little appreciation of why a duty is being performed, or understanding of the larger framework containing the task. Operations are typically based on an ability to memorise and recall, and it is these skills that are developed within the educational system.

Education in the West Indies

Throughout the English-speaking West Indies, schooling to age sixteen is free, but there is a difference in offerings by various high schools with entry to the better schools being highly competitive. Places at the local state Universities are competitive with typically 30% to 50% of applicants being admitted, depending on the Faculty. Many programmes offered by the University of the West Indies carry accreditation through international professional bodies from the UK, which is an indicator that standards are equivalent to

those of universities globally. From a personal perspective, my initial reaction on moving to the West Indies from the UK was astonishment. The students were a delight to teach. Given some initial support and guidance they would take problems and find solutions. Attendance rates were good, and academic standards were better than many universities in the UK. These students were mature; they enjoyed the West Indian lifestyle, but at the same time they worked hard. Working as groups, supporting each other, making the best use of the excellent facilities on offer within the University, they achieved the designated learning outcomes at the undergraduate level. Assessments were set at appropriate levels to challenge students such that the distribution of results for award of degrees was typical of expectations. Average overall marks were in the mid 50's, about 10% of the graduates obtained first class honours and a similar proportion would drop out along the way.

The Hofstede measures of culture accurately characterised the student body. Students preferred to work in groups, but without one individual taking the lead, and they could extend knowledge to situations that they had not previously encountered. Students were open, honest and reliable. They were involved in university life through engagement in wider academic and co-curricular activities. As Head of Department, I was continually requested to make resources available outside of working hours, and within my research, which involved extensive field campaigns, there was never any shortage of volunteers amongst the student body. However, as Hickling-Hudson (2000) indicates, not all potential students have the opportunity to attend university. Using current statistics from university web sites, a total of five state-run universities operating regionally maintain about 30,000 students. CIAT (2005) put the population through this same region at 6 million, so approximately 0.5% of the population are enrolled in higher education locally. A limited number of university places distributed throughout universities in some of the states means that those who are not in the right place have less chance of attending.

Education in Egypt

The divide that exists between classes within the Egyptian culture extends through to the educational system. A full report on the status of education within the country was produced by the World Bank (2007). While education to the age of sixteen is free, not all participate as children are sent to work on menial tasks in support of the family income. The more fortunate complete the Thanawiya Amma examinations in Arabic, and those coming from higher class homes receive education at one of a large number of private schools to take International GCSE or American Diploma examinations. Entry to university is gained by one of these three routes, and a degree takes typically four or five years to complete, depending on the discipline. There are a number of public universities where class sizes are often large, and can be up to 1000 students in the early years of a degree programme. Amer (2007) provides data showing that in 2006 there were 1.8 million students (just over 2% of the population) enrolled nationally. In recent times some twenty five private universities have opened their doors selling education to children from the more wealthy families, and in 2006 there were 37,000 students enrolled. Some of the private universities are associated with partners abroad, two or three award overseas as well as local degrees, and each is run as a business. All but one of the universities within Egypt are governed by the Supreme Council of Universities; a government body that grants each university an existence, approves the appointment of senior university

positions, such as President, and allows programmes to be offered. Like all systems in Egypt, education is heavily governed through bureaucracy.

Students within the private universities have come from the more powerful classes. In alignment with the Hofstede cultural characteristics, when assigned group activities or field work, the students expect to be led. If there was not a natural leader within the group then little would be achieved. A few dedicated students would make use of facilities, otherwise without constant supervision the remainder would achieve little. Through their behaviour, students demonstrate traits that suggest immaturity. Activity observed on the campus is what might be expected in a junior school playground with fights breaking out frequently and regular vandalism of amenities. Attendance at university is poor, and in lectures it is worse. In communication with staff and graduates from the Egyptian government universities, it would appear that the attitude towards study is very different. While disadvantaged through large classes, lack of resources and poor remuneration to academics, the students are keen to learn and view their study as a potential means of a change in status within society. Irrespective of class, the students do not like dealing with uncertainty through investigation or research, but gain comfort in following a given procedure.

Potential to Study for Higher Degrees Overseas

Beyond the theoretical background required to undertake a higher degree, a further set of criteria for candidates to do well might be defined as:

- Intellectual Engagement
- Insight
- Thinking and Problem Solving
- Social Competence
- English language

Personal observations suggest that the Hofstede scores given in Table 2 apply equally to education. Graduates from the Caribbean have strong social competencies in terms of their IDV score, the PDI shows that they are likely prepared to accept joint responsibility, and the UAI suggests that they will have the thinking and problem solving skills required. However, there is evidence to suggest that students remaining within the Caribbean educational system after their first degree have difficulty in progressing to research. An internal quality audit document (DSLII, 2001) for one small department operating since 1983 reported that no students had ever graduated with a PhD and two Masters of Philosophy had been awarded. Staff appointed at the level of Graduate Research Assistant to undertake research were not completing. However, of the 200 students graduating with a BSc between 1985 and 2000, six went on to obtain PhD's overseas, all completing within a four year time frame. All of the fifteen graduates travelling overseas to undertake an MSc completed within the time frame allocated, but those remaining in the West Indies to undertake their MSc would typically require an extension for the thesis.

Reason for success in research overseas in comparison with the performance locally is an issue that senior management within the University are aware of. As Head of a Department struggling with this issue I made an attempt to segregate post-graduate students from the undergraduates. Given a separate room that was closer to staff, but some distance from the

areas where undergraduates worked, fitted with new computers for each individual student with their own space and a dedicated server, I failed to retain them in that location. Within a matter of weeks the graduate students had migrated back to the undergraduate area, and I am suggesting that their low individuality (IDV) score indicating desire to be with a group is the cause. Graduates typically obtain a place to study overseas by securing a grant, and those who are unsuccessful but wish to undertake a higher degree, then register locally. Under the overseas scenario, when West Indian students are taken from their environment and placed into new surroundings with a group of peers they have the attributes necessary to undertake post-graduate study. However, when they are alone, or when they are amongst a group undertaking work at a lower level, they find difficulty with improvement. This particular example reflects the general pattern that was observed as students returned to a comfort zone where they would be with a large group working in familiar territory.

Private Universities in Egypt are staffed by Egyptians who have been overseas to study and returned. They are normally from the upper class of society and can have a better lifestyle in Egypt than would be available from similar positions overseas. In paying fees, the students and their parents consider that the award is guaranteed and the University management are keen to ensure that cash flow is not a problem. Academic staff are hired on short term contracts, which can be terminated if their performance is not up to expectations. In a system where quality is confused with quantity, success rates are important and this principle starts within the private school systems. Observing the behaviour of students in preparing for examinations at private university suggests that they have been accustomed to support. In reviewing examination papers set in one subject at a state university, the questions were repeated regularly, thereby testing memory rather than understanding of material.

Experience in teaching international students on an intensive post-graduate programme offered in the UK suggested that many from the Middle East and North Africa expected to pass. A few were able to acclimatise in a short time frame, but others could not discern the differences in society. Students from this region would typically come from the upper class and were the most difficult to deal with. Only in retrospect, having worked in a society where the class structure plays such a significant role, has the reason become apparent. Within their culture, they are dependent on a well-defined structure of rules, and as a consequence have developed skills in memorisation rather than those of problem solving and insight. In delivering field work where students operated as groups, a group would do well if there was a strong leader involved; otherwise the group would have no direction and little would be achieved. The student body is used to being directed by somebody who asserts authority rather than thinking for themselves, and this removes the requirement for most individuals to be concerned with uncertainty in outcome. A small proportion had the ability to appreciate the requirements of the set task and to lead.

Conclusions

It is suggested that educational standards and practices adopted internationally have strong agreement with the properties of the culture as defined by Hofstede's (2010) dimensions. In examining these two extreme cases from the perspective of personal experiences, it is found that the people of the West Indies are as fresh and vibrant as their identity. They

function as one, and opportunity is available to all. Within the ancient class driven society of Egypt, wealth is used as a means to obtain what is considered a right. Wealth provides entitlement, and it is in the interests of the wealthy to ensure that they remain in the minority. While their education is being bought, they must also ensure that offerings to the remainder of society are sub-standard. Through control they ensure that the status quo is maintained. The characteristics of the society would make it difficult for many graduates to undertake study towards a higher degree beyond the bounds of their familiar cultural environment.

In considering selection of applicants from overseas, there is a need to consider their ability beyond the language proficiency. In the case of a student from the West Indies, they are almost certain to acclimatise to the new society and to succeed. In particular, the West Indies provides a source of people from a culture suited to study at higher degree level that is apparently untapped. A student coming from Egypt will have more difficulty in adaptation to a different culture. From the perspective of Australian universities considering globalisation, there is a need to accommodate diversity. A system of a preparatory year that operated in one private Egyptian university offered little benefit due to the cultural environment that it operated in. However, a slow migration to a different learning process might be more successful within the new study environment, but at the cost of extending the duration.

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Cultural contrasts in the classroom: Preparing international pre-service teachers for professional experience

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Abstract: *International pre-service teachers often encounter a range of difficulties in their Professional Experience that differentiate them from the majority of the pre-service teacher cohort. The linguistic and communicative requirements placed upon these international pre-service teachers are significant, as is the cultural adjustment that is necessary in order for them to operate effectively in the classroom. As a result, they often struggle with the dissonance they feel when they begin their Professional Experience placements. The study reported on in this paper describes an intervention program that was undertaken with a group of international pre-service teachers studying a teaching degree at the University of Tasmania (UTAS). International pre-service and colleague teacher perspectives both indicate that this group needs and benefits from additional support that addresses both linguistic and cultural differences. It was also evident that the preparation of pre-service teachers needs to be a partnership with the education faculty which extends beyond the university environment into the classroom.*

Keywords: international pre-service teachers, professional experience

Introduction

Increasing numbers of international students are choosing to undertake their tertiary studies in English-speaking country universities, such as UTAS. This requires them to face multiple challenges including adapting to a foreign culture, understanding the expectations of their courses, and adjusting to language, communication and cultural differences (Spooner-Lane, Tangen & Campbell, 2009). Australian universities provide support to international students, but there is increasing concern about the adequacy of the level and type of this support and the quality of the student experience (Jones, 2010). This concern is not only expressed within the university sector, but also at the federal and state government levels, in part because of the large contribution that international students make to the Australian economy.

Tertiary level study for an international student brings with it a number of academic, linguistic, cultural and social challenges as issues of isolation, cultural adjustment and transition accompany pressure to perform academically (Harrison & Peacock, 2010; Leask, 2010; Mills, 1997; Samuelowicz, 1987). According to Ransom, Larcombe and Baik (2006), the challenges faced by international students can be categorised as issues related to teaching and learning, coping culturally or in relation to English language proficiency. It is recognised that these issues are complex and that each individual student responds to the situation in a unique way. The complexity of the international student experience also means that there are no "quick fixes" to ensure that each student gains the maximum benefit from their experience as a tertiary student in Australia. Other studies have shown (e.g., Spooner-Lane et al., 2009) that greater support needs to be provided by universities in order to assist these students to manage the intricacies of teaching in a foreign classroom context.

This paper outlines a pilot program implemented in Semester 1, 2010, in which international pre-service teachers were provided with additional support designed to scaffold their Professional Experience. The project involved gathering data from the participants via an online survey, a series of preparation workshops and two group visits to a primary school to observe "real life" classroom teaching and learning in a Tasmanian context. The purpose of this paper is to describe how the content of the workshops was designed, based upon the results of the on-line survey, and to report on the perceived effectiveness of these workshops in terms of preparing this group of international pre-service teachers for their Professional Experience placements.

Professional Experience

An important component of a pre-service teacher's preparation for classroom teaching is their Professional Experience (also referred to in the literature as practicum or field experience). This experience ideally provides pre-service teachers with a chance to put into practice the theory that is explored, discussed and evaluated in lectures and tutorials. At UTAS, pre-service teachers are required to complete between 70-85 days of Professional Experience, depending upon their degree. Each Professional Experience placement is assessed according to the criteria for the Graduate

Standards, and ratified by the Tasmanian Teachers’ Registration Board. Specifically, pre-service teachers studying at UTAS are required to:

- Demonstrate current professional knowledge and understanding in teacher practice
- Understand the importance of, and demonstrate a capacity to develop effective relationships within the school and pre-service communities
- Assess, plan and teach for the learning needs of a range of students
- Demonstrate the ability to plan for, and maintain a safe, inclusive and supportive learning environment (UTAS, 2010, p. 1).

Professional Experience placements are seen as providing essential links between theory and practice, but for many international pre-service teachers, these links are not obvious. Unfortunately, cultural background and language differences may act as barriers to the successful completion of Professional Experience, and international pre-service teachers often feel disconnected from their supervising teacher, the students in the classroom and the whole schooling experience (Campbell, O’Gorman, Tangen, Spooner-Lane & Alford, 2008). International pre-service teachers often have greater proficiency in written English than spoken English and as a result find engaging in conversations with others demanding (Robertson, Line, Jones & Thomas, 2000). The cognitive and linguistic demands involved in communicating is increased when pre-service teachers are required to use spoken English to communicate with their students in a diverse range of ways such as giving instructions, giving encouragement, talking with parents and other teachers, planning with their colleague teacher and managing behaviour. As with the international pre-service teachers in Spooner et al.’s (2009) study, these pre-service teachers had learned English, but had not had sufficient opportunities to practise their English to a level of competency for teaching in a classroom.

It is evident therefore, from the literature and from the investigators’ own experiences, that universities recognise the need to support students from abroad and provide services for them, yet these services are often inadequate when it comes to meeting the needs of international pre-service teachers. The project discussed in this paper acknowledges this, and was designed to address both the linguistic and communication needs of these students, along with the specific challenges associated with classroom teaching.

The project

The project aimed to provide a model of support for international pre-service teachers in the Faculty of Education. International pre-service teachers on the Launceston campus were invited to participate in a series of workshops, facilitated by skilled mentors, designed to provide the participants with the communicative, pedagogical and cultural understandings necessary for the undertaking of a successful Professional Experience. The content of the workshops varied, but there was a strong focus throughout on developing participants’ expressive communication skills. Site visits to schools and classrooms also occurred in order to further understandings of teaching practices, curriculum and classroom processes in Tasmanian schools.

Participants

Participation in the workshops varied, but typically there were between 5-8 students at each session, with some participants being very regular attendees. At the time of enrolment into the Faculty of Education courses, the English language requirement was an IELTS score of 6 overall and most students who participated had entered with this

score or better. Most participants were from Asian countries and had not been into an Australian school. Pre-service teachers from all year levels were welcomed, but most participants were in either their first or second year of the degree.

Instruments

A pre-survey was designed and administered to the international pre-service teachers using Qualtrics software. The survey was completed on-line and contained demographic questions, 16 open-ended response questions and 70 Likert scale items. Evaluation or feedback proformas were distributed at the end of each workshop session. These typically contained a variety of open-ended questions and Likert scale items. Field notes were also kept documenting the workshop sessions and the school visits. Some interviews were conducted with the colleague teachers and the pre-service teachers following their Professional Experience placements, and it is expected that further interviews will occur later in the year.

Results and Discussion

Survey results

A comprehensive survey was administered to the pre-service teachers to firstly gain an understanding of their perceptions and beliefs about classroom teaching, and secondly to guide the content of the workshops offered. The main aim of the survey was to assess which areas of Professional Experience pre-service teachers were most concerned about in order for workshops to be tailored to meet these needs. In addition it was designed to provide information about participants’ backgrounds, including their nationality, academic qualifications in the field of education and teaching or other school-based experience, including whether they had been into an Australian classroom.

Information was gathered regarding the pre-service teachers’ own school experiences. This allowed the pre-service teachers to not only reflect on their experience, but also to consider how their experience may be different to that of students in Australian schools. Pre-service teachers were invited to provide detailed responses to open questions regarding teachers, discipline and a comparison to Australian schools. Their responses showed that they were already beginning to consider the differences between schools they had attended and schools in Australia, with one participant writing about a “teacher centred learning environment”, explaining that “students didn’t have their say” in their country of origin, were subjected to “physical and mental punishments” and that in Australian school students “are having too much freedom”. The following comments are illustrative of the responses received to the question, “What differences do you think there are between the schools you attended and schools in Australia?”

Children have freedom in Australian schools. In fact they are having too much freedom! Children learn much simpler stuff here! No stress, no pressure from anywhere.

Teaching is based on the hands-on activities in Australia, while in Uganda teaching lacks the practical aspects. In Uganda, teaching is aimed at achievement of final product while in Australia it is knowledge based.

Possible differences between schools in pre-service teachers’ home countries and Australian schools were explored in greater depth with a list of statements concerning different aspects of schools. Participants were asked to select whether statements were true for schools in Australia, their country or both. A high number of ‘true’ responses for their home countries, in contrast to ‘not true’ received for Australia, occurred for the following statements:

- Students sit in rows facing the front
- Students do all their work in notebooks
- Students have textbooks for each subject
- Students usually work in silence in the classroom.

In contrast, pre-service teachers indicated that the following statements were true of Australian classrooms, but less so for their home countries:

- Parents may enter classrooms in the morning
- Students can choose what work to do sometimes
- Students with special needs (e.g., a student who is blind) usually attend the same schools and are in the same classrooms as children without special needs
- Students regularly use computers in the classroom.

The above information highlights the areas in which the international pre-service teachers have little or no experience from their own schooling and may therefore require additional support (such as talking to parents, using computers in the classroom and working with students with special needs).

The last set of Likert scale items required the participants to indicate their level of confidence with using English in a variety of situations. Not surprisingly, the areas in which the international pre-service teachers had little experience, such as talking to parents and using computers in the classroom, were those where students identified themselves as not being confident. Overall, students seem to be most confident when dealing with students in small groups, less confident with larger groups, and least confident when dealing with teachers. The results were similar to those found in Spooner et al.’s (2009) study, where participants indicated that their major concerns were related to their perceived lack of English language fluency and lack of understanding of Australian school culture.

The workshops

An analysis of the survey results assisted in the design of the workshops. To date, a total of five workshops, of approximately one hour duration each, have been held. Table 1 provides an overview of the dates, focus and description of the workshops and school visits.

Table 1. Overview of workshops

Date	Focus	Description
27/5/10	Reading aloud School visit 1 (24/5/10)	Facilitator modelled reading of picture book ('Belinda', by Pamela Allen) Discussion occurred around reasons for reading aloud, keeping children engaged, use of expression In pairs, students chose picture book and read to each other Classroom observation of literacy practices (Prep and Grade 3/4)
8/6/10	Sharing picture books Phonic resources	Participants shared picture books that they had been practising to read; group shared feedback. Discussion occurred around choice of book, pronouncing different words, 'nonsense' words Phonic resources shared (picture cards with words and actions)
24/6/10	Why do we read? Reading unfamiliar words	Discussed reasons for reading (e.g., enjoyment, information, moral, humour) Discussion of reading strategies (e.g., chunking, sounds, picture clues)
14/7/10	How do we teach reading?	Discussed sight words, word attack skills, syllabification
30/7/10	School visit 2	Classroom observation of teacher modelling strategies to engage learners (prep/1 and Grade 3)
5/8/10	Planning for positive behaviour	Modelling of story reading and

		responding to interrupting behaviour Viewing of teaching video clips and discussion around behaviour management strategies
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As Table 1 shows, the focus for the first few workshops was on reading. This focus served several purposes: (1) reading aloud is a particularly common practice in early childhood and primary classrooms, and therefore likely to be something that the pre-service teachers would be called upon to undertake as part of their Professional Experience; (2) feedback from the survey indicated that pre-service teachers were concerned about their accents and expression and reading aloud would provide opportunities to address these aspects of their oral language; (3) observations of international students in classes revealed that they often experienced difficulties in the areas of pronunciation, grammar and functional language (e.g., problems with pronouncing individual sounds, word stress, sentence stress, intonation and pausing impacted upon their ability to communicate with others, reading aloud and modelling of language to school students); and (4) motivation: the project leaders were also confident that selection of picture books that were entertaining and often humorous would help students to feel at ease and therefore more prepared to participate.

Following each workshop session, participants were asked to complete a short evaluation form that typically contained a combination of rating scale items and short answer responses. Feedback received indicated that while most participants were either ‘somewhat confident’ or ‘confident’ with many aspects of reading aloud (e.g., varying tone of voice, using lots of expression), there was still general apprehension around correct word pronunciation. The pre-service teachers indicated that the workshops were helpful in providing them with strategies to prepare for reading aloud in the classroom. One participant, for example, planned to incorporate the following before reading aloud to a class:

Read it several times at home; look up the unfamiliar words; read it to a friend first

(Workshop 1)

In terms of usefulness, participants indicated that they found the following aspects particularly valuable:

The focus on pronunciation and the skills of reading to a group (Workshop 1)

Reviewing what’s important when reading aloud; practising reading aloud (Workshop 1)

Strategies for pronouncing difficult words – fly, really (Workshop 1)

Feedback from other sessions indicated that in addition to finding the content of the workshops valuable, the international pre-service teachers also appreciated the opportunity to contribute and practice their oral language skills in front of a group. For example, one participant wrote:

Although I still have a lot to learn and improve, I find reading aloud is enjoyable for both audience and reader as both engage and share the story. I would like to improve more so that I can be confident in front of students ... I am sorry for taking up a lot of time myself, but the session was very useful and helpful and I thank you for giving these opportunities to us.

(Workshop 2)

As the workshops progressed, students began to make some important discoveries about the reading aloud process and the emphasis shifted from individual pronunciation of words, to reading words in context. For example, one student wrote:

I think we should learn the intonation of sentences. We can read individual words, but for the whole sentence it is hard to pronounce.

(Workshop 2)

Similarly, students found that in addition to ‘sounding out’ there were many strategies that could be used to read unfamiliar words:

Look at the pictures, sounding out and discuss the cover

(Workshop 3)

Chunk the words, re-read the sentence and guess from the context

(Workshop 3)

The fifth workshop focused on ‘Planning for Positive Behaviour’ as many students had expressed a concern, both in the survey and verbally, about their ability to manage children’s behavior; again, this was a common concern expressed by the participants in Spooner et al.’s (2009) study. Past experience had also shown the researchers that similar concerns had been raised by supervising colleague teachers. In particular, colleague teachers identified that the pre-service teachers lacked ‘presence’ in the classroom and were often reluctant to engage in conversations with students and teaching staff. While recognising the limitations of an hour-long workshop in terms of addressing these issues, this workshop focused on observing some behaviour management strategies that could be used by the pre-service teachers on Professional Experience. It also provided the opportunity to discuss the perceived behavioural differences between classrooms in other countries. Feedback from this session indicated that many participants were ‘not confident’ with ‘managing whole class behaviour’ or ‘managing the behaviour of older students’.

In summary, it is not possible within the confines of this paper to provide a detailed description of the content of the workshops or an in-depth analysis of the perceived benefits; it is hoped, however, that the preceding overview has provided the reader with at least a limited understanding of how the workshops were used to prepare the students for their Professional Experience placements. The next section presents the findings from a colleague teacher’s perspective, followed by the results of an interview conducted with an international pre-service teacher following a Professional Experience placement.

The colleague teachers’ perspective

All pre-service teachers undertaking their Professional Experience placements are supervised by a classroom teacher (termed colleague teacher). The colleague teacher is responsible for modelling best practice in planning, teaching and assessment, for providing pre-service teachers with regular constructive oral and written feedback, and ultimately formally assessing the pre-service teacher against a particular set of criteria. The voices of colleague teachers provide a viewpoint that is worthy of consideration and provides a further insight into issues surrounding international pre-service teachers on their Professional Experience. Other researchers (e.g., Dlamini & Martinovic, 2007 as cited in Spooner et al., 2009) have found that colleague teachers have their own concerns about having international pre-service teachers in their classrooms, including the possibility of having to re-teach each lesson taught due to a lack of English language proficiency. Data were collected from colleague teachers via pre-service teacher reports, personal communications between colleague teachers and university staff.

Personal communication from colleague teachers indicated that these international pre-service teachers responded very well to suggestions and had a genuine interest in the classroom. They were keen to do well and acted on advice, and completed planning components as required.

Conversely, colleague teachers suggested that shyness and reticence to become involved in ‘the life of the school’ was a major issue. This was exhibited by an inability to initiate conversations with other staff members and parents. The following comment was received from a colleague teacher who supervised a pre-service teacher in her third year:

...showed a genuine interest in the cooperative learning culture and her thorough observations of teaching practices were evident in her planning and delivery of lessons ... [but] it took a long while for Louisa to feel confident to speak to other teachers and staff...

There were also genuine concerns expressed by colleague teachers in relation to the effectiveness of oral communication, behaviour management skills and understanding of the educational context. Additional support was provided by the university in terms of visits to the classrooms by a mentor, yet it was still evident that many of the international pre-service teachers struggled to engage with contextual pedagogy, classroom practices and learner expectations. One colleague teacher summed this up by stating the following:

...lack of experience within the Tasmanian education system has impacted on her understanding of how children learn and how we teach.

Sienna’s Perspective: The Student Voice

In designing an intervention for students whose “difference” is a key identifier, there is a risk that, as educators, we have made assumptions about the experiences and needs of international students in our Faculty, especially as we refer to them as a seemingly homogenous group by designating them the title of “international students”. It is important, then, to attempt to include the perspectives of the students into our evaluation of the program.

The perspective of one of the students involved in this study, Sienna, was captured via a semi-structured interview with one of the investigators. Sienna’s perspective highlights some of the issues in assuming to understand how a cultural, educational or linguistic situation might be “different” for a student. The insights and understandings that Sienna contributes, demonstrates the ways in which the learning that occurs on Professional Experience is similar, as well as different, to the experiences of local pre-service teachers.

Sienna is a second year Bachelor of Education student who has completed two Professional Experience placements in primary schools. Prior to her second year Professional Experience, Sienna was involved in the support program for international students in the Faculty of Education. Her perspectives on the process of becoming a teacher highlight some of the tensions inherent in the merging of cultural understandings of what is important in the teaching and learning process.

A major focus of the support program was to provide international pre-service teachers with opportunities to experience and develop understandings about a different cultural approach to teaching and learning. When asked about how she viewed the teaching and learning differences between her home culture and the Tasmanian context Sienna mentioned that there were both similarities and differences.

It’s not simple, but I think there are similarities and differences between Australian teaching and learning and in my country. And also there’s a different point of view because I saw teaching and learning when I was a student so it’s kind of a bit different now...I didn’t notice some things when I was a student but now I’m getting to know how it is for teachers and it’s not very clear cut.

Sienna’s response indicates that the process of making cultural comparisons between teaching and learning in her home culture and in the Tasmanian context is a more complex one than simply contrasting one approach to education with another. Her response suggests that the transition from her identity as a student to that of a teacher also plays a role as she reveals that as a pre-service teacher, she is more aware of the elements of the teaching and learning process:

When I was a student I used to think that teaching is just lecturing or explaining things but when I came here and started to study about teaching and learning it changed and also I remembered different strategies that my teachers used when I was as student and now I notice that how important it is to have small group activities. I remembered later that it’s a

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part of teaching and that it's not always explaining... it's a mixture of a lot of things that I know.

Sienna describes how her own views on her educational experiences at home have changed as a result of her development as a pre-service teacher. In doing so, she challenges the assumption that the education provision in her home country is narrowly traditional and teacher- directed:

I think that lots of people think that teaching in my home country is very traditional ...I myself used to think that it was very traditional but actually we make a group and there was different types of learning. Even when we had traditional desks, we had whole group discussions. But I didn't notice until I really studied teaching and learning...it was interesting to think about how it changed.

Sienna did, however, recall instances where differences in cultural practices caused her some personal discomfort. It is common at UTAS (and in other Australian tertiary institutions) to call lecturers and tutors by their first name, rather than use formal terms of address. Similarly, whilst on Professional Experience, pre-service teachers when speaking privately to their colleague teacher commonly use first names in conversation. Despite her belief that culture may not play a significant role in her Professional Experience, this cultural difference, however, was discomfoting for Sienna:

I don't think it's culture or language and one thing is better than another – if you're able to observe, then you do notice what is good about a culture...going over what it means, you are constantly comparing a way of doing . I don't always evaluate. I might notice differences, but then this is something that I am missing then this is something that I have to learn. For example, my colleague teacher told me to call her by her first name, rather than Mr or Mrs, but for me, coming from a country where we don't call teachers or older people by their first name, for me this is scary and I don't want to be rude, but in Australia it is kind of strange to call someone Mr or Mrs if you want to be friendly. I have to adjust. Sometimes it's hard for me and I feel bad if I have to call a teacher by their first name.

Sienna's recollections of her Professional Experience were positive and she could identify easily the ways in which she thought she had developed as a pre-service teacher. Sienna's experience encapsulates the process of “becoming” a teacher as she seeks to understand the complex ways in which teachers provide an opportunity for learning against the backdrop of her own personal prior experience. When asked what she thought good teaching looked like, Sienna highlighted the link between teaching and learning:

I have lots of good teachers in my head, I think...for both practicums they were very good teachers. They help learning, that's the main thing. Good teachers help learning and they know how to help and improve learning and they value teaching and learning and they value their students. And they love their job.

Conclusions

Clearly there are issues that international students experience in undertaking programs in Australian universities. Foremost among these are general cultural, language and academic issues which centrally-provided university international student support programs recognise and are designed to address.

However, international students undertaking pre-service teacher education programs face special, and quite specific, issues. Many of these relate to the Professional Experience component of the program, where there is a particular emphasis on English oral communication skills and a highly detailed understanding of the local school and classroom culture. In many instances, international students have not had any personal experience in Australian schools; in fact they may have had quite contrasting and sometimes contradictory previous school experience, and these are often inappropriate to import into teaching in Tasmanian classrooms. This situation places international students in a position of some vulnerability when they embark on Professional Experience, a situation corroborated by both performance and colleague teacher feedback.

The Professional Experience support program was designed to address this situation by providing general insights and awareness of Australian school culture, explicit instruction in some standard aspects of early childhood/primary school teaching (e.g., picture book reading; teaching reading), oral language skill development (e.g., English pronunciation), and guided observations of experienced teachers teaching. The program was delivered in anticipation of a Professional Experience period and in a group context with active involvement and oral contributions encouraged. Feedback was positive and the international pre-service teachers reported greater awareness and understanding of teaching and learning in Tasmanian schools.

Preliminary results from this project indicate that while international pre-service teachers are diverse in terms of their home educational experiences, they face similar challenges in adapting to teaching in a Tasmanian classroom. The support program provided the opportunity for discussion of some of these challenges, along with the provision of practical strategies to implement in the classroom. It is anticipated that further evaluation of this program will occur through the administration of a post-survey and follow-up interviews, but initial recommendations would include the need to continue to offer additional support for pre-service teachers with culturally and linguistically diverse backgrounds.

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More than just grammar: A collaborative project assessing, addressing and tracking the transition needs of culturally and linguistically diverse students at UTAS

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Abstract: *Domestic CALD (culturally and linguistically diverse) students straddle ‘Internationalisation’ and Bradley-related reforms and face significant challenges in their transition to higher education. This two year study at the University of Tasmania (UTAS), incorporating student interviews and testing and tracking the results of CALD students, while supporting the necessity for pre-entry English language testing for this group and suggesting a level of English proficiency that can be determined pre-entry and below which students are set up to fail, also contests the reduction of these challenges to ‘language’ issues. It reveals a more complex process of transition that faces the CALD cohort in their adaption to a new cultural, social and linguistic environment. Excerpts from transcripts of CALD student interviews are used to give a strong student perspective on this transition. The narrow notion of a language proficiency deficit suggests something that can be discretely tested for and supported outside the classroom; in contrast, the more complex process of cultural adjustment revealed in this study clearly requires a broader institutional response, incorporating curricular and co-curricular elements. A number of cultural elements have an influence on the acquisition of academic literacies that form a significant, though often hidden, part of the curriculum. From this understanding, recommendations will be made in relation to approaches to supporting the successful transition of this cohort and the paper will argue that project findings have implications for the effective and sustainable support of both International and ‘participation’ (Bradley and related reforms) cohorts.*

Keywords: CALD cohort, transition, English language testing

Introduction

Domestic CALD (culturally and linguistically diverse) students uniquely straddle ‘Internationalisation’ and Bradley related reforms. It is often thought that *the* key factor in the success or failure of CALD and International students is proficiency in grammar and spelling. This offers only a partial picture of a complex process of transition to a new cultural, social and linguistic environment. This is important, as a focus on the purely linguistic lends itself to a discourse in which the skills deficit can be discretely tested and supported outside the classroom. Viewed as a more complex process of adjustment, the situation requires an institution-wide response to supporting students through this process of cultural transition. For, in addition to the cultural adjustment to the physical and social space of the university (centrally supportable), there are a number of academic literacies that form a significant, though often hidden, part of the curriculum. This is of clear import to participation agendas under which it can no longer be assumed that students (diverse in fluency in other cultural domains) are prepared specifically for a university environment.

The focus of this paper is a study in the testing and support of CALD students at UTAS. We firstly outline the features of the cohort in comparison to International students. We then present the results of English proficiency testing, showing academic results tracked for 50 students over two to three semesters and unpack the elements of the testing process that are not purely ‘language’ based, relating to cultural norms of Australian universities and wider settlement pressures. We then demonstrate, using literature and student interviews, that these ‘cultural’ skills may not have been acquired by CALD students during previous education. The interview excerpts allow the student voice, so often missing in these discussions, to emerge strongly. Our argument is that language proficiency is *a* key factor in determining capacity for academic success, that it can be measured centrally, within limitations, and that admitting unprepared students is unethical as they are set up to fail. However, transition issues for this cohort are broader, and it is only by making these culturally specific skills visible, through conscious curriculum design and teaching strategies in conjunction with closer ties to central support services, that we will adequately support not just this, but many ‘non-traditional’ cohorts.

Who are CALD students and how do they enter university?

The CALD cohort comprises two main groups: voluntary migrants and humanitarian entrants. The nominal cut-off period for both groups for UTAS CALD service purposes is 10 years post entry. The two groups have areas of overlap, but also considerable differences. Language issues, differences between previous and Australian education systems (and therefore skill sets and expectations), broader settlement pressures, and family pressure towards higher education are common to the two groups – though the ways in which these manifest are not identical between the two groups, or sometimes even subgroups within them.

Humanitarian entrants, due to the fact that resettlement has been forced upon them rather than planned and prepared for, often feel settlement pressures more keenly and for a longer duration, stemming from the past torture and trauma events and broken nature of schooling that often accompany the refugee journey (Kaplan, 1998). The humanitarian entrant cohort combine this broken, ‘non-traditional’ educational preparation with strong aspirations towards higher education. Unlike first in family or low Socio Economic Status (SES) students, whose peer, parental and broader community attitudes temper and may undermine aspirations towards higher education, humanitarian entrant communities are firmly focused on making use of the opportunity for higher education that resettlement makes possible, though their previous education and short time of

adjustment to Australia often leaves this aspiration divorced from a realistic understanding of how to enact it (Hingston & Sweeney, 2007). This creates a climate in which higher education is aimed for and entry sought as soon as possible, often without the requisite preparation, a situation the visa entitlements of a permanent humanitarian visa allow (both Commonwealth Supported Places [CSP] and the Higher Education Contribution Scheme [HECS]/ FEE HELP loan is available on entry, rather than the four year wait for the HECS/HELP component for other visa classes). This creates an ‘enforced’ settlement period for most permanent entrants in which broader settlement issues can be worked through, language developed and adjustments made to ‘western education’ through college or university preparation programs. While the lack of waiting time is of significant benefit to those students in a position to successfully undertake higher education shortly after arrival, when combined with the discrepancy between aspiration and preparedness, it creates an unintended risk to gradual and realistic pathways to degree level studies.

National legislation shaping entrance policy at Australian universities provides one of the most important elements necessitating the CALD support program. By federal law university entry for international students (those on student visas) is dependent on previous studies and IELTS (International English Language Testing System) scores. Minimum benchmarks are set nationally, with requirements for individual courses set at or above those limits by individual faculties (a fact often not understood by many teaching staff perturbed by the language levels exhibited in the international students). By contrast, permanent visa classes are not distinguished on a national or state level for university entrance purposes. As such, this group is assessed by the general and course specific entrance requirements of all domestic applicants – a process that takes neither English language development nor other settlement pressures into account. These issues are only taken into account indirectly, through Tertiary Entrance Rank (TER), Technical and Further Education (TAFE) success or tertiary equivalents assessed through the National Office of Overseas Skills Recognition database. Due to this and the complex of factors outlined above, humanitarian entrants constitute one of the highest groups at risk of failure and attrition at UTAS (Rienks & Taylor, 2009).

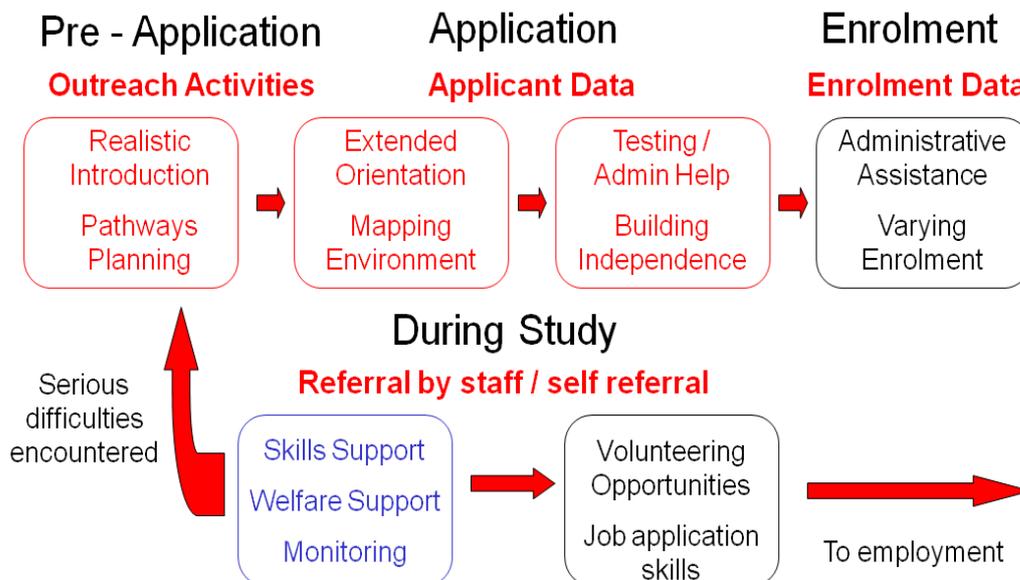
UTAS Response – the CALD program

The testing project which is the main focus of this paper forms part of the CALD support program (see figure 1, below). The scope of the program offers pre-admission to post-graduation support - significantly wider than most ‘transition’ programs. The aim of its accent on early identification of clients is a comprehensive ‘transition assessment’; a voluntary series of meetings, of which written testing forms a part, and which simultaneously serve to assess the readiness of potential students while orienting them to the tertiary environment. The extent to which the above factors will impinge on studies is assessed, worked through and used in conjunction with the written test results as points of diagnosis and leverage to guide an individual towards a sustainable pathway. Due to the cohort’s potential low levels of preparation coupled with strong aspirations towards higher education, the voluntary, non-binding nature of this advice, finite resources and the necessity for trust to be built up if advice contrary to a desire to begin tertiary study immediately is to be followed, this process is imperfect and does not capture all incoming students (distance, late enrolling and mainland applicant students are of particular difficulty).

UTAS now has one of the largest cohorts of humanitarian entrant students in the country, due to high per-capita settlement in Tasmania, currently around 600 students, roughly half of whom are humanitarian entrants (University of Tasmania, 2010). While the service proactively seeks clients before and during application, due to imperfections in the data, we remain reliant on self and faculty referral to identify clients who have not correctly indicated their country of birth and first language on their application forms. We currently meet around half of the total CALD cohort - a

large percentage of these clients representing the higher risk, recently-arrived humanitarian entrant group. Despite the challenges and limitations, this process has met with increasing success with a growing number of students following advice and performing better in their studies overall (Hingston & Sweeney, 2009).

The CALD Programme & the Student Lifecycle



Testing and advice window 1 (pre-entry) Window 2 (usually after poor results in a given semester)

Figure 1 – The CALD model

The EnglishAssist English proficiency test for CALD students

Rationale

For CALD students who are identified early (see figure 1) an optional English proficiency test is available. Although we dispute the view that English language proficiency is the *only* factor in the academic success of CALD students, it is undoubtedly the case that where English is the medium of instruction and assessment, proficiency is of central importance. This is acknowledged in the first of the Australian Universities Quality Agency (AUQA) Good Practice Principles for English language proficiency (GPP) which states that it is the responsibility of universities to ensure that students are ‘sufficiently competent in the English language to participate effectively in their studies’ (DEEWR, 2009). While the GPP document was developed with international students in mind, it cannot be assumed that all students from the other non-traditional cohorts described above will be ‘sufficiently competent’ in English. Nationally, early identification of students whose language proficiency is inadequate is seen as crucial, and is achieved either through early low-stakes assessment tasks, and/or through tests or ‘tools’ made available to students as early as possible in their courses (Dunworth, 2009).

The aim of our test is to assess English proficiency in an academic context. Students whose proficiency is at an appropriate standard are offered extra environmental orientation and skills support within their degree (available options include UniStart, Peer Assisted Study Sessions [PASS], Centre for the Advancement of Learning and Teaching [CALT] learning skills sessions and individual consultations and workshops with *EnglishAssist*). Those whose English proficiency is borderline, or who are unfamiliar with key academic skills such as how to structure and argument or use sources to support claims, are advised to enroll in the University Preparation Program (UPP); and those whose English proficiency is at a level not yet appropriate for UPP are advised to undertake further English study before entering university.

Design of the assessment

We understand language proficiency in the broad sense supported by the AQUA GPP document, which defines proficiency as:

the ability of students to use the English language to make and communicate meaning in spoken and written contexts while completing their university studies ... This view of English language as the ability to organise language to carry out a variety of communication tasks distinguishes the use of English language proficiency from a narrow focus on language as a formal system concerned only with correct use of grammar and sentence structure. (DEEWR, 2009, p. 1)

To be proficient in a language means to be able to use it to communicate appropriately in particular contexts; it involves, but extends beyond, having knowledge of grammar and sentence structures. Thus the design of our test reflects the kind of communication tasks commonly encountered within degree programs. Students read a short academic-style text on a topic of general interest, and then write an essay in response to a question based on the topic of the text. The essays are assessed using a criterion referenced assessment (CRA) sheet. The assessment criteria include: aspects of proficiency with the discourse structures of academic writing (task focus, essay structure, cohesion); lexico-grammatical competence (vocabulary range, vocabulary accuracy, grammar range, grammar accuracy); strategic competence (communicative competence); and sociolinguistic competence with particularly academic functions (academic register, incorporation of source material, and referencing). A score from A+ to E is possible for each criterion, and descriptors for each level are provided in the CRA. Students scoring below C are regarded as not ready for the language requirements of university study, while students scoring C are strongly advised to undertake UPP units in Written Communication before entering degree programs.

Results and evaluation of the test

The test has now been run for four cohorts of students (entry Semesters 1 & 2, 2008 and 1 & 2, 2009). In total, 47 students have been tested, and 44 of these enrolled. In order to evaluate the success of the test, students' results for all units were collated and correlated with test scores. There is a strong correlation between level of English proficiency identified by the test and academic success as shown in figure 2 below. Thus it is of concern that 14 students below the cut-off score (C) enrolled in 2008/9. Some surprising successes by students scoring E were reviewed. One had scored 'E' because there was not enough original writing to assess and another student failed a unit with an essay-writing component, but did well in language units which do not require essay writing. Overall, however, the test supports the view that a gate-keeping test for all non-English speaking background students is advisable. In the interests of equity and transparency, an

independent and internationally recognised test such as IELTS is the most appropriate in the long term.

Total number of enrolling tested students = 44		LEVEL OF ACADEMIC SUCCESS			
		Pass or above in all units	Failing 1 unit /year	Failing 2 + units/year	Withdrawn from all units
RESULT ON TEST	A (Total number of enrolments = 1)	1 (100%)	0	0	0
	B (Total number of enrolments = 11)	7 (63%)	2 (18%)	2 (18%)	0
	C (Total number of enrolments = 18)	9 (50%)	2 (11%)	4 (22%)	3 (16%)
	D (Total number of enrolments = 11)	0 (0%)	3 (27%)	5 (45%)	3 (27%)
	E (Total number of enrolments = 3)	1 (33%)	1 (33%)	1 (33%)	0

Figure 2: Comparison of academic success and EnglishAssist test result

Other transition factors

Limitations: discipline specific

One of the limitations of our test, and of centrally delivered language and academic skills support, is that it is very difficult to encompass the diversity of discipline-specific approaches to knowledge, argument and communication. Thus a model of academic literacy, in addition to English proficiency, has been developed. Murray (2010) gives the University of Western Australia’s definition of academic literacy: “the capacity to undertake study and research, and to communicate findings and knowledge, in a manner appropriate to the particular disciplinary conventions and scholarly standards expected at university level” (p. 58). This model covers not only the specific linguistic skills required for the production of texts, but also the thinking and research processes that lie behind them. Successful academic writing requires critical thinking, research, reading and note-taking, planning, ordering, drafting and revising skills (Davis & McKay, 1996, p. 1) – as well as understanding of specialist vocabulary and concepts and of styles of constructing and contesting argument. These skills are tied to the kinds of thinking, research and communication practices valued by particular disciplines, and thus are often referred to as academic literacies. (Rex & McEachen, cited in Murray, 2010, p. 59). The corollary of this is a growing body of research suggesting that such skills are core academic business, and are most effectively taught when they are made explicit and taught within the content of courses and units (e.g., AALL, 2009; Kift, 2008).

Limitations: cultural modes of learning

It may be the case that some CALD students are skilled in approaches to thinking and communication which are very different from those expected of students in Australian universities. There is a considerable body of research (e.g. Kutieleh & Egege, 2004; Nisbett & Norenzayan, 2002), into the influence of cultural background on learning style and patterns of thinking and communication. The role of culture can be simplified and overemphasised, producing either an essentialist view that ignores other influences that will cause differences within a cultural group (e.g., age, gender, previous education level, literacy in other languages, existing content knowledge) – or a somewhat colonialist view that regards non-Western cultures as deficient in skills such as critical thinking that are assumed to be universally relevant and valuable. Nevertheless, formative experiences in cultures which may give quite different values to oral versus written communication, which may feature different rhetorical structures and approaches to persuasive argument, which may conceptualise the respective roles of the teacher and student quite differently, and which emphasise group, rather than individual, responsibility for learning, may produce sets of skills, approaches and expectations at odds with the prevailing culture of Australian academia.

The aim of this paper is not to add to this debate in a theoretical way, but rather to let two UTAS CALD students give their perspectives on the cultural aspects of transition. The two students we interviewed for this paper are both African humanitarian entrants. Both students regularly access various support services, and are doing well in the first year of their degrees. Australian cultural content in courses, reading, critical thinking, task analysis, attitudes towards experts and teachers, and expectations about the role of the student emerged as strong themes in both interviews. Both were at pains to point out that there are considerable differences among the cohort of African students with respect to country of origin, languages spoken, age (both on entry to university and on arrival in Australia), and previous education experiences, and that all of these things have a bearing on transition experiences.

The use of specifically Australian content and examples in lectures, tutorials and assignments will cause difficulty for students who have only been in the country for a short time. Our two interviewees differed in their approach to this. Student A, being mature-age and a fluent oral communicator, felt confident to contrast his own experiences with specifically Australian ones when this was relevant to the content of the tutorial. However Student B, a younger student, felt excluded when Australian examples about which he had no knowledge were being discussed, and preferred not to participate: "If material is orientated to the Australian culture you just feel like no, I don't know much about it and I don't want to say stupid things." He understood that these familiar examples are very helpful to local students, but commented that it placed an extra burden on non-local students who had to acquire the information. This is particularly problematic where assignment tasks require knowledge of a local example or situation that has not been covered in classes.

There is a difference in the relative importance of written and oral communication within cultures. Some students from some African backgrounds may be very fluent and confident oral communicators, but be very unfamiliar with the experience of reading intensively. Student A painted an evocative picture of this:

Where I came from, we do not have much pleasure in academic activities like reading intensively. [However], when you go to Childcare here, a one-year old child will be taught how to read, and by the time they grow up with that in them it is a part of them, from a very [early] level to their university level it's almost in their blood. [But] when I was growing up, my grandfather used to put us in a circle, and tell us ancient stories and how things used to happen, and we listened to it. But I never grew up with reading.

The difficulty is compounded when private, individual activities like reading are viewed negatively:

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I would rather listen to people, and share with them what I know than sit down privately and concentrate [on a book]... in Africa people are so interconnected, but here people are so individualistic.

This can mean that keeping up with reading loads is a heavy burden for some students, and suggests approaches to reading effectively and critically cannot be assumed. In contrast, Student B, who has a less disrupted prior education than Student A, had already acquired these skills before arriving in Australia. Although stressing the extra time that reading and writing in an additional language take, he was using appropriate reading strategies and was prepared to tolerate some ambiguity – reading the first time for overall meaning, and then going back to the important details.

The expectation that important information will be conveyed orally in person, rather than through a written document, had implications for the way unit outlines were viewed. Both our interviewees had become adept at using unit outlines to plan ahead, but said that other students in their cohort did not view this kind of written information as important and were likely to wait for verbal instructions from the lecturer before starting assignments. Student A: “If I didn’t understand how the culture works, I would just keep [the unit outline], thinking that when the time comes they will tell us to read it.”

The view that while reasoning may be universal, the types of critical thinking and writing required at Australian universities are culturally specific (e.g., Kutieleh & Egege, 2004) was one supported by our interviewees. Both students said that it takes them considerable time working out what an essay question is asking them to do. New vocabulary and concepts were factors in this, but training in Western critical thinking was also regarded as necessary in order to approach assignment questions. Student B:

Australian questions have two parts: do you agree or not, and show me why. In Africa it was much more – this is the way it is. You don’t have to ask yourself is it true or false, am I against or for this argument. This is a big difference... Expressing your ideas through writing was not as big a part, it was much more get the lecturer’s information and summarise it.

The process of analysing assignment tasks was also complicated by expectations about the role of the teacher. Student A:

When I came [to UTAS], I was a big problem to [the lecturers], because I always asked them “This is what you say we should do, how do you want me to do it?” Because I had the focus and the belief that they are the only prophet that will tell me the truth... and this is a cultural thing, and to deviate or move away from that view as a student, to take things into my own hands is a challenge. ... We are not used to critically thinking by ourselves as students. And here in this culture as university students it is really good to have an independent way of doing things, but if you are not brought up with it it’s just very difficult.

This respect for the teacher meant that he expected that all the information necessary for assignments would be given in lectures, and was not at first aware of the need for independent research:

Because of the culture I grew up in, many of us will put more trust in the lecture notes, we believe that the lecture notes have got all the material that we need to learn, because we grew up with the cultural belief that the lecturer will give us everything... whereas what I have started now to observe is the lecture notes is just a pathway for students.

Such respect for authorities can also lead to a situation where students are reluctant to paraphrase or critique information from lectures or from other sources. Plagiarism is regarded in Western academic culture as showing a lack of respect for the work of others. For students from some cultural backgrounds however, it is changing or criticising the words of an expert that is regarded negatively, and this can lead to an over-reliance on quotes or extensive summary.

I grew up with that belief that the lecturer has everything... if I go beyond what he says I will be penalised. Sometimes I think “No, he said it, it should be like that”. In my essays you see long quotations and it’s actually a problem. I do try to avoid using them but I tell myself “It should be like that. If I change it they will penalise me.” All this is due to cultural differences.

Thus while some difficulties with paraphrasing are due to the linguistic complexities of the task, there is also a cultural transition factor involved. When students have a long training in the role of the student being to absorb and transmit information passed to them by experts, adapting to Western cultural practices requires firstly that these practices are made explicit, and secondly that training in the necessary skills is provided.

Limitations: settlement factors outside study

Of course, written testing has limits and many of the factors impinging on the ability of CALD students to transition successfully to university must be otherwise assessed. Family and community obligations; the impact of ongoing physical and mental health issues; learning to self-manage finances; securing adequate housing; ongoing anxieties and financial demands from family members still in want (and sometimes danger) in their countries of origin; and the ability to self-manage compliance with government agency (e.g., Centrelink) regulations are some of the factors that can exert significant pressure on studies. In a situation in which the extra workload required for successful transition places all but the most prepared students in a precarious position between coping and being overwhelmed, these external pressures have to be identified in advance and carefully managed.

Conclusion and Recommendations

We have shown that not only a complex range of linguistic skills, but also other factors such as the settlement process, and different expectations and approaches resulting from culture and previous educational experiences all play a role in successful transition by CALD students. It is common for academic and central support staff to feel overwhelmed at the diversity of students attending a contemporary Australian university. International, CALD, low SES, first in family, mature aged, and disability cohorts all present unique prior contexts to the university environment and seemingly unique and disparate needs that must be met. Perhaps one of the most exciting learnings arising from this study and from the several years working with CALD clients as part of a broader team of central support staff, are the similarities between cohorts. It is evident that many students struggle with issues that arise from differences between university and other ethnic and learning cultures and the broader culture outside tertiary environments in Australia. Therefore, many of the strategies we suggest below should not be entirely new and feature prominently in the literature of First Year transition that focuses on low SES groups (Kift, 2009) and the UTAS First Year Framework. Figure 3 collates common issues arising across the whole range of central support services at UTAS, and graphically illustrates the overlap that exists within complexity. Those issues that relate to administrative or welfare issues have been left in standard text, while those relating to teaching and learning have been italicised.

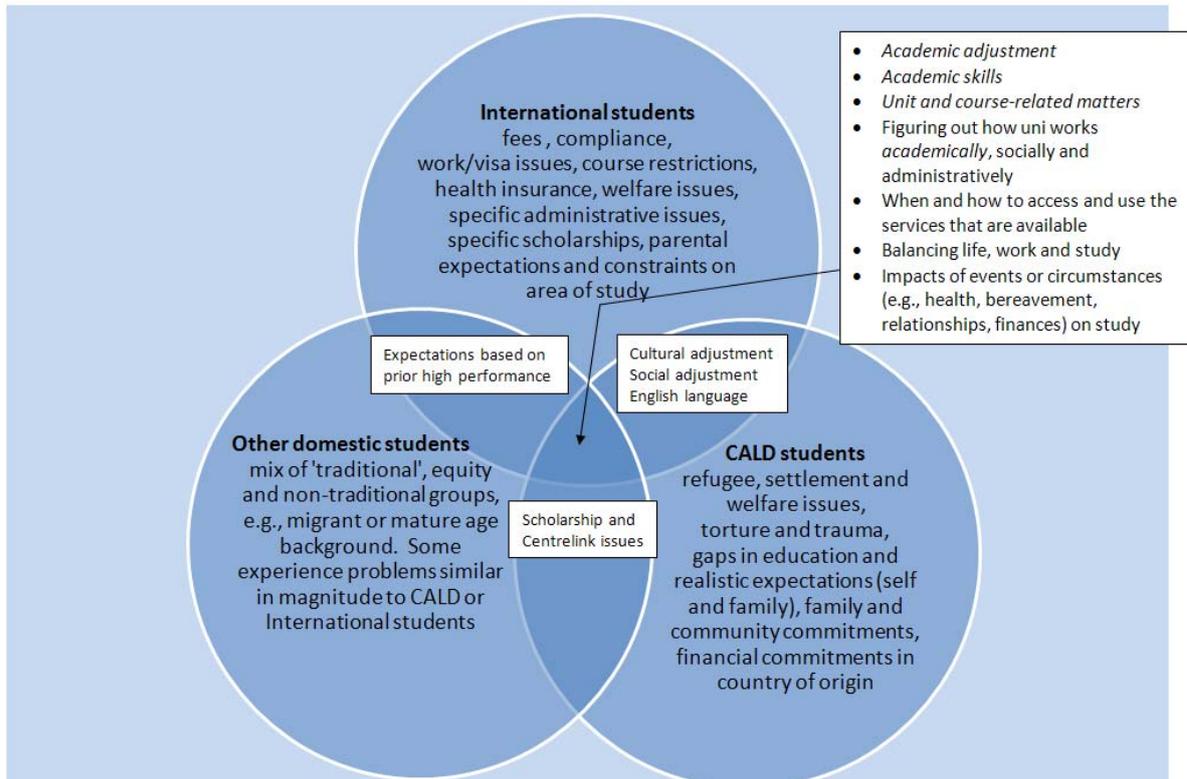


Figure 3 : Overlap in transition issues between cohorts

In the continued absence of a compulsory and binding pre-admissions English proficiency test, and in the light of the other factors in academic transition, early low-stakes assessment before the census date can identify students who are likely to struggle, and be used to direct them to appropriate supports or pathways. The key to this timely intervention is a close working relationship between learning, transition support and academic staff.

Within units, the provision of models of good practice in thinking and writing is of great value to students (indeed, it is often more helpful than lengthy written explanations of task requirements). These are particularly valuable when coupled with tutorial or MyLO (My Learning Online – the UTAS online learning system) activities where the features of the model are analysed, and the processes by which the texts have been constructed are scaffolded. Non-traditional cohorts also benefit from explanation of the ‘rules of engagement’ within the university – the responsibilities of teacher and student, and how and when to approach lecturers for advice, and these explanations are most likely to be successful when written information is supported by verbal explanation. It is helpful for CALD and International students in particular if lecturers are aware of their use of highly idiomatic language and local cultural references. Activities that encourage knowledge-sharing before a task can help ensure that everyone is ‘on the same page’, make use of the perspectives CALD and International students can bring to a classroom and promote engagement between local and other students. The full integration of students from a diverse range of culture, language and experiential backgrounds allows all at UTAS the opportunity to view our own cultural assumptions from a different viewpoint, and adds to the richness of university life for both students and teachers.

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While we must remain cognisant of the complexities and need for tailored responses to the diversity of the modern Australian university, we also believe that this strongly suggests a model in which, in tandem with the necessity for greater awareness of and closer links to specialist support services, there is a fertile middle ground in which academic staff can deploy some of the teaching and learning strategies mentioned above to the benefit of a broad cross section of ‘International’ and ‘equity’ cohorts – diversity that if treated wholly in isolation, threaten to overwhelm teaching staff with contrary demands.

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