

## Supporting the Development of Persistence: Strategies for Teachers of First Year Undergraduate Students

Helen Huntly  
Central Queensland University

Jenny Donovan  
University of Western Australia

The first year of university study has a major impact on later participation and performance. Transitioning to university from school or other contexts requires first year students to become self-directed learners, entering an environment with minimal constraints and expectations of self-motivation and individual effort. In 1991, Costa named the *habits of mind*, suggesting that demonstration of these habits will enhance the academic success of learners. This research project aimed to identify teaching and learning strategies with potential to assist first year university students to *persist at a task*. Persistence is one of Costa's (1991) habits, and it supports one of the *Seven Principles of Good Practice in Undergraduate Education*, recently adopted by Central Queensland University. This paper outlines data gathered from two participating tutors of first year teacher education students at a Queensland regional campus. Participant journals and individual interviews were the data sources. Analysis revealed that student persistence can be developed and enhanced through teaching and learning strategies focusing on reflection on learning, shared experiences, and positive feedback, even though different pedagogical approaches were adopted. Specifically, one tutor addressed the habit of persistence explicitly, the other did not, yet both groups of students showed evidence of having persisted at their tasks.

It is well documented that contemporary undergraduate students are under ever increasing pressure. The Department of Education, Science and Training (2005, p. v) report that in the years 1994 to 2004, the amount of time spent on campus by university students decreased significantly, both in terms of number of days and hours spent in class. A reasonable explanation for this decline in daily contact is that students are involved in increasing amounts of paid employment (DEST, 2005; Cushman, 2004; Wilson, 2003). Hillman's (2005) research suggests that more university students than ever have difficulty juggling work and study commitments. Horstmanshoft and Zimitat (2003) also suggest that the typical Australian university student is also likely to have family and parenting responsibilities: "No longer are our first year students young, single, financially unburdened and fresh-faced, but rather they are a diverse range of individuals bringing with them maturity and a multitude of life experiences" (Cushman, 2004, p. 1).

University offers a less structured program than school studies, and even those who move straight from school to University find it hard to adjust. A study conducted at Flinders University (2007) finds that many new students fail to understand the depth of preparation that is required for participation at the university level and are easily distracted from their studies. Research by Lahmers & Zulauf (2000) reveals that university students are reporting increasing levels of stress and anxiety as they attempt to complete an undergraduate degree. Therefore, it is no surprise that research also finds that the first year experience is a significant factor predicting further engagement and success in higher education (DEST, 2005). The first year is when the

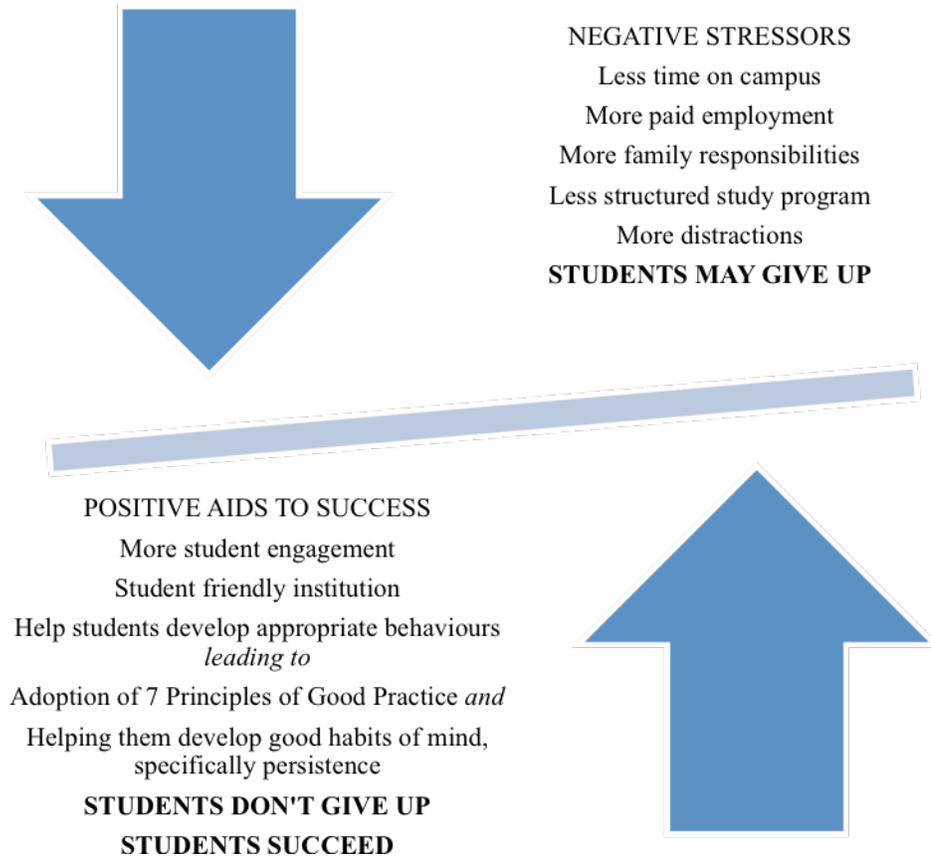
majority of student departures occur (Hillman, 2005; McInnis, 2001).

In a milieu of funding difficulties, uncertain economic times, and the tension for students arising from the desire to obtain paid work versus the acquisition of school debt (James, 2008), universities need to find ways to continue to attract students and maximize their chances of success. It is critical that universities address the first year experience, making it as 'student-friendly' as possible and focusing on the development of appropriate behaviours that will help students succeed. With this in mind, Central Queensland University has adopted a revised Management Plan for Teaching and Learning that includes a focus on the following Seven Principles of Good Practice in Undergraduate Education (Chickering and Gamson, 1987):

1. Encourages contact between students and faculty;
2. Develops reciprocity and cooperation among students;
3. Uses active learning techniques;
4. Gives prompt feedback;
5. Emphasises time on task;
6. Communicates high expectations; and
7. Respects diverse talents and ways of learning.

There is much evidence to suggest that these principles have a positive effect on student learning across a range of disciplines. Bradford and Peck (1997) applied them to undergraduate accounting classes, Koeckeritz, Malkiewicz and Henderson (2002) to nursing education, and Page and Mukherjee (1999) to

Figure 1  
Theoretical framework for the study of strategies to develop persistence in first year undergraduate students.



both management science and business programs. More recently, they have been applied to online courses as well (Graham, Cagiltay, Lim, Craner, & Duffy, 2001; Batts, Colaric, & McFadden, 2006).

**Theoretical Framework**

From the literature, we derived the theoretical framework (Fig. 1) in which our research is situated. Our aim is to find ways of promoting the UP arrow, leading to greater student success. In order to study this methodically, we chose to narrow our focus in this project to just one of Chickering and Gamson’s (1987) principles, that of *time on task*. They define it and explain its importance thus:

Time plus energy equals learning. There is no substitute for time on task. Learning to use one’s time well is critical for students and professionals

alike. Students need help in learning effective time management. Allocating realistic amounts of time means effective learning for students and effective teaching for faculty.

Also, effective use of time mirrors the Costa and Kallick (2000) intellectual habit of *persistence*, thus providing a link between the principles and their actuation. The habits of mind are another research interest of the University, but as there are 16 of them, in the interests of clarity, we adopted a scientific approach of considering one variable at a time, in this case, persistence. Future study could focus on the others.

Anderson, Costa and Kallick (2008, p. 60) point out that to a primary student, persistence is seen as “sticking to it and not giving up.” However, as students develop, it is hoped that their ideas would deepen to define persistence as “keeping goals in mind, identifying obstacles toward achieving the goals, and finding effective ways around them” (Anderson, Costa

& Kallick, 2008, p.60). It is evidence of this deeper understanding of persistence that we were particularly looking for in our undergraduate students, as, according to our theoretical framework, therein lies greater likelihood of their successful completion of their studies.

Costa and Kallick (2000) contend that although some of the habits of mind may be evident in some learners, it is desirable for teachers to introduce and develop the habits in an explicit way to enhance the capabilities of each student. This view is shared by Marzano and Pickering (1997), who recommend that the habits themselves firstly need to be defined, explained, discussed, and rewarded to develop student understanding. Once such an understanding is achieved, teachers should then employ a range of strategies that “overtly and intentionally” (p. 264) assist students to develop the productive habits of mind that will enhance learning outcomes. Strategies recommended by these researchers include:

- Help students understand the habits of mind;
- Help students identify and develop strategies related to the habits of mind;
- Create a culture in the classroom and the school that encourages the development and use of the habits of mind; and
- Provide positive reinforcement to students who exhibit the habits of mind. (pp. 264–269)

Wiggins (2008) agrees on the importance of positive reinforcement, but places less emphasis on explicitly teaching about the habit and more on providing multiple opportunities to develop it:

You don't develop a habit by direct instruction or informing students of the value of the habit, and you don't develop a habit by having it merely demanded of you.... To talk of better habits is to talk about something becoming “second” nature. It depends upon incentives, reinforcement, modeling. It means that you have to recognize when the old habit is acting, when to try a new habit, and practice in using the new habit and seeing its value. That takes time, repetition, situations which reward the new habit; and it takes wise, savvy, tactful teaching. (p. 1)

Consequently, in this project two tutors were challenged with the task of developing a learning program within their discipline to support the development of persistence in their first year students. The following section explains the process of data collection.

## Methodology

We utilised the case study approach due to its ability to “gather an in-depth understanding of the situation and meaning for those involved” (Merriam, 1998, p. 19). A case study permits the examination of ‘bounded systems’ such as the teacher education program referred to in this study, as it is a methodology that is able to “fence in” (Merriam, 1998, p. 27) the particular case that is of interest. The case study is also “a particularly suitable design if you are interested in a process” (Merriam, 1998, p. 33) such as the process of teaching investigated here, as it provides immediate feedback on an implemented element of a program.

We looked at how two tutors attempted to incorporate the desired pedagogic practices into their teaching. In this context, the case study is a “focus for enquiry” (Golby, 1989, p. 168), and there is no intent to generalise the results to a population of teachers. However, a case study can serve as an exemplar of good practice, as Stenhouse (1985, p. 12) contends: “vigorous forms of case study inquiry have the potential to provide illuminating and fruitful insights into classroom based teaching and learning that offer teachers and other researchers a sound basis for making professional decisions and judgements.”

The tutors whose work is the focus of this study both teach within the first year Bachelor of Learning Management (BLM) program at a regional Central Queensland University campus. The induction to the project began with a briefing session, which outlined the research plan and specifically the part they would play. The session also covered the Seven Principles of Good Practice in Undergraduate Education and the Habits of Mind that underpin the project. They were provided with background information about the theoretical aspects and practical application of the *principles* and *habits* and exposed to teaching and learning strategies that specifically support the principle of ‘time on task’ and the habit of ‘persistence’.

They were advised that the research project would span the whole of Term 1 (from March – June 2007), and they were directed to design their tutorial activities to include a selection of teaching and learning strategies that might enhance the students’ capacity to persist at a given task or activity. As Lankshear and Knobel (2004, p. 250) recommend, we provided the tutors with a “participant journal” and asked them to make a note of the teaching and learning strategies utilised throughout the term and the effect, if any, of such strategies on student performance. We wanted their immediate thoughts and observations, so care was taken to stress to them that the journal should not be burdensome to compile and would be used primarily as a tool to record events for later reflection. The journal data would be complemented by an individual interview at the

conclusion of the term, where they could elaborate as desired.

Lankshear and Knobel (2004) recommend the individual interview as an effective means to gain an 'insider's perspective' of any given research situation. Based on this assumption, the study utilised a one-to-one interview as a secondary means of data collection. Other exponents of the interview are Ramsden and Dodds (1989), who believe that this method of data collection is very effective in an educational setting. They maintain that the interview context enables the researcher to fully explain the purpose of the research and to ask open-ended questions that seek rich, descriptive responses. The interview has the added advantage of allowing the researcher to continually check for understanding. Once this shared reference has been established, it may then be negotiated throughout the interview. This enables the maintenance of a common focus between the researcher and the research participant by engaging participants in a process of reflection on the specified research interest (Kvale, 1996; Gonzalez, 2001).

The interview conducted as part of this research project employed the semi-structured interview format where pre-prepared questions were used only as a guide to elicit the rich, descriptive data that is important in qualitative research. Heyl (2001) also recommends the semi-structured format to promote elaboration of emergent themes in the interview, rather than tying interviewer and interviewee to a fixed schedule that may limit opportunities to enrich spoken data and gain insights into how interviewees 'see' and understand the world.

The three pre-prepared questions were:

1. Can you please provide examples of the learning and teaching strategies that you utilised this term with first year undergraduate students?
2. Do you believe that these strategies assisted students in any way to enhance their time on task? That is, their ability to persist at a problem using a range of strategies to assist them to get to the end point or solve the problem.
3. What evidence do you have to support this belief?

During the interview, the tutors were encouraged to elaborate upon their responses to these questions so that a full 'picture' of the case could be established. To enhance the collection of valid and reliable data, we employed transparent and unambiguous questions and permitted the tutors to elaborate as desired. Trustworthiness was also sought through the use of two data gathering

techniques, thus maximising the chance that interviewee was 'saying what the researchers thought they were saying' (Merriam, 1998). The following section will explain the ensuing process of data analysis.

### Data Analysis

Merriam (1998, p. 193) argues that "conveying an understanding of the case is the paramount consideration in analysing the data." She maintains that this can only be achieved through an examination of first-hand, personal accounts of the ways in which humans experience the world. In the research presented here, data analysis was viewed as the "process of organising the pieces of information, systematically identifying their key features or relationships (themes, concepts, beliefs etc), and interpreting them" (Lankshear & Knobel, 2004, p. 266).

To begin the process, interview tapes were transcribed verbatim and the participant journals collected and reviewed. On the advice of Lankshear and Knobel (2004), categorical analysis involved the systematic organisation of the data into groupings that were alike, similar or homogeneous. This was achieved through the iterative process of reading and re-reading the transcripts and journals in order to identify potential relationships between data items, in this case teaching and learning strategies that might enhance a student's ability to persist at a task.

**The data.** For clarity, in this and the discussion sections, direct quotes from the tutors' participant journals or the interviews are indicated by use of *italic* font. Firstly we will highlight how the tutors approached the development of a teaching program that addressed the project's aims. Secondly, the data includes some specific student tasks and the responses made by the students to demonstrate some of the outcomes of the teaching programs. Finally, the key words used by the two tutors to describe their thinking, strategies and outcomes are presented.

**Tutor 1.** This tutor approached her participation in the study project in a systematic manner. She conveyed that she did not change her usual teaching methodology but was careful to enhance her pedagogical planning with a backdrop that considered the principles of good practice in undergraduate education with a focus on the development of student persistence. From her journal it was clear that she included explicit and focused attention to practices including, defining the habit of persistence; explaining it; discussing it by relating it to my own ability to do that, the personal anecdote; and rewarding it (persistence) by setting a high expectation for competency.

Each of these strategies is recommended by Marzano and Pickering (1997) to assist students to develop productive habits of mind. They encourage

the provision of “time to label, define and talk about each habit so that they (students) can associate the habits with specific behaviour” (p. 264). This tutor achieved this recommendation through an explicit in-class discussion about the habit of persistence, what it was and why it was important to the act of studying at any level of education. Students were made aware of the ability of persistent people to use a variety of strategies to solve a problem and to return to the problem with different strategies if initial attempts were unsuccessful.

The tutor was also very specific in her selection of the teaching strategies used to introduce, teach, consolidate, and assess the content of the course she taught during the term. Specifically, for adult learners she believes that quality teaching involves:

- Providing a clear evidence and practice-based rationale for the learning. So they understand there is a point to what they are learning and that is evidence-based;
- To make this learning relevant to their current and future lives;
- To have fun;
- To get to know each other and support each other in our learning;
- To provide accurate, prompt feedback. This course was good for that because any time they did any formal or informal assessment item, they actually got feedback no longer than a week later. They got formal feedback as well and the feedback also has to suggest ways to improve, not just what you did wrong;
- Use of a range of modes and methods of grouping; and,
- As many opportunities to practise using the concepts within the time allowed, and so on.

**Tutor 2.** This tutor had a very different approach. She didn’t engage in explicit talking about persistence, instead she demonstrated it in the context of her teaching and learning strategies, especially for the first few weeks of the term. She has a strong belief that undergraduates approach teaching the arts in the context of arts experiences they may have had at school, and while some of those strategies may be appropriate, others do not reflect the rationale of the current curriculum. So her initial emphasis was on debunking myths and demonstrating the teaching of the arts as a form of literacy. She focuses on the symbol systems of the arts, how they can be used to communicate and how to learn what has been communicated. In order to achieve this, she had her students:

- investigate the rationale of the syllabus;
- look at some specific outcomes;
- look at what learning in the KLA entailed; and
- participate in activities in all 5 strands, over and over again through all the tuts, that gave them hands-on experience from the learning point of view, as though they were kids in the classroom, how this would be used, how they would learn through it.

By modeling best practice in teaching the arts and by persisting in returning to the curriculum documents to have students reflect on what children would learn that was relevant to the rationale of those documents, she was also modeling the habit of persistence. She chose to link everything to critical reflection because of her belief that the “only way they could get rid of the misconceptions that they had and engage with the syllabus was to constantly stop and think, stop and think, how does this fit?”

### Comparing the Two Approaches

Tables 1 and 2 summarise some of the tasks the students were given with comments from the participant tutors about the student responses. Table 1 refers to tutor 1 and her students, Table 2 refers to tutor 2 and her students. As they had such different approaches, the layout and content of the two tables cannot be directly comparable. Following are some key comments from both tutors organised in the common themes that became apparent in terms of strategies that support the development of persistence.

### Common Themes Related to the Students

#### Reflection

I feel that the most important strategy for developing perseverance is reflection for teachers, for student teachers and for us (tutors). So I made sure that the students understood that throughout the term they will be reflecting on their learning.... So all the way through the discussions, I sort of concluded each of those by stressing that reflecting on one’s professional practice is a powerful demonstration of perseverance. (Tutor 1)

The only way that they were able to make those links was to stop, talk about it, reflect on what every part of it meant. I actually linked everything all the way through to critical reflection because I believe the only way they could get rid of the misconceptions that they had and engage with the syllabus was to constantly stop and think, how does this fit? (Tutor 2)

Table 1  
Key Student Tasks, Student Responses and Tutor 1's Comments

Task	How the students responded	What tutor 1 thought
1. To achieve high levels (80%+) of competency in written English.	30 students voluntarily attended one-hour small-group sessions with a tutor from the Communication and Learning Centre. Most weeks, about 10 students also sought private sessions with that tutor. Before the final assessment, double sessions were run and attended by the majority of students. Students were very positive about this tutor and this opportunity in support of their studies.	I was delighted (and surprised) that half of the students took up this opportunity. I felt it was evidence of their initial commitment to their study, the value of setting high expectations, and their development of the habit of persistence, as the numbers did not drop off through the term but increased towards the end.
2. Written reflection of the course and their learning.	Everybody submitted a reflection in his or her folio despite the fact that it wasn't worth a specific mark.	I was pleased that all had completed the reflection as I wanted to utilise this in class strategies to discuss persistence.
3. Read a half page excerpt from an article on persisting and discuss.	Students read this in class and then engaged in discussion of their written reflections of the course in terms of the habit of mind of persisting.	I found they were able to see evidence of their own persistence in the reflections they wrote about the course and their learning.
4. Contribute strategies they had used to persist and solve problems.	Students engaged in a brainstorm and enthusiastically listed a variety of strategies on large paper sheets that were shared as a class.	Comparing these strategies with 5 examples of behaviour used by effective people (Marzano and Pickering, 1997), I found they fitted perfectly. I believe my teaching has successfully encouraged the development of persistence in these students.

Table 2  
Teaching Strategies, Student Responses and Tutor 2's Comments

Strategy	How the students responded	What tutor 2 thought
Exposure to teaching arts in the context of literacy, i.e. different forms of communication	Some initially very reluctant, clung to ideas probably from their own experiences at school (craft focus and skits).	I asked them to reflect on the current curriculum documents to imbue them with an appropriate rationale for teaching the arts.
Gave them a first assessment task to plan a resource package	Most did quite well in their choices though found it hard to justify them. But about 25% of them still included inappropriate activities (skits and crafts).	I was disappointed, so persisted with more strategies to expose them to a wider range of more appropriate ideas and to help them evaluate activities and resources more effectively.
Used a wide range of strategies to challenge their thinking: <ul style="list-style-type: none"> <li>• vote with their feet</li> <li>• brainstorms</li> <li>• ideas-sharing</li> <li>• think aloud</li> <li>• joint construction of organisers/criteria</li> </ul>	They were initially hesitant to commit to a decision, or to discuss freely. Three young male students were particularly difficult to engage, and wanted others to make decisions for them. Over time they became more actively engaged.	I was expecting this, and so persisted with a range of strategies to encourage active participation. It was pleasing to see the lads getting more involved, moving from questions like "Am I in the right group?" to "Is this where the teacher would first be exposing students to these ideas/content?"
Asked them to do performances to cater for all learning styles	One lad gave an excellent response to a reflective question about the activity.	I realised that catering to different learning styles encourages persistence.
Had them engage in a drama process lesson as if they were the school students. Asked for connections between that lesson and the curriculum. Task to deconstruct that lesson to reveal the planning and aims.	They enjoyed the drama process lesson. Made some connections to the core content covered and some of the strategies used. They found deconstructing it to the plan and aims hard.	I realised I'd made the drama process lesson too complex by cramming in too many strategies and angles. They persisted, and with a scaffold from me, they could connect it to the curriculum. They also realised some but not all of the aims.
Set them the task of practising writing learning outcomes. Asked them to integrate the Arts with topics from other learning areas.	Found writing learning outcomes and lesson plans hard. The integration task was too challenging, as they didn't know much about other learning areas.	As expected at this early stage, they needed a lot of guidance to write learning outcomes and to integrate with other learning areas. Not yet exposed to "eduspeak".
Given the task of evaluating resources using shared criteria	Generally better at criticising poor resources than justifying the use of good ones.	Better the second time around, though a bad example is usually more obvious than a good one!
Students were sent out to classrooms to practise their learned techniques in a real setting.	Most did well out in the real classroom, and focused on using appropriate learned strategies and activities.	Very satisfying to see them using appropriate activities/strategies. They have persisted with the new ideas and I've been able to modify some of their attitudes and beliefs about teaching the arts.

### Shared Experiences

Everybody submitted it, then the next week in tuts, in small groups they swapped each other's written reflections and read them. They each read maybe 3 or 4 other students' reflections and then as a whole class we discussed the habits of mind in general. Then we focused on persisting and we talked about that...So this concerns the collaborative social nature of learning and they see it as really important. (Tutor 1)

In lots of ways, it was like jointly constructing how to do it as we did it together. Every time I used that I made them tell me or we jointly constructed what sort of question will we ask? So they all created the way they wanted to tell the story of Jabberwocky, they all did the presentation and also watched each other's presentations. (Tutor 2)

Both tutors clearly understand and value the collaborative nature of learning, especially as it may help students to persist if they don't feel alone and overwhelmed by the task at hand.

### Positive Feedback

I made the feedback deliberately positive. Even though there's a learning opportunity here for them, and I actually corrected grammatical problems, every time I did, I did a little comment beside in a positive tone. The reason I made all that feedback positive was that I wanted to affirm to them the immediate benefits of reflecting. (Tutor 1)

The good thing was that they were able to see what the prior learning must have been and what outcome it related to. I did up an outline of planning the lesson and they had to try and match where the core content was evident. They did that bit really, really well, I was really pleased with that. (Tutor 2)

Tutor 1 was more explicit in her motivations for giving positive feedback, but it was clear from their journals that both tutors had repeatedly used positive feedback with their students.

### Evidence of Persistence

They give 5 examples of behaviours that effective people use, people who persevere well. They've actually categorised all their strategies according to the examples, and they all fit under the 5 examples. All of these strategies the students talk about in

order to help them solve these problems ... I was pleased with the level of response, though had to tease out the responses a bit. Just re-doing the same thing isn't necessarily going to lead to any more success. Finding alternative ways to accomplish the task isn't a strong point for these students. I thought it was telling that there were only 3 responses for the last example, I think that says something about the pressure, they actually don't see that they have time to step away, or they don't realise this is an important strategy for persisting, to take some time. (Tutor 1)

What was notable was the change in the type of questions he asked as the activity progressed ... I had given it to them as an independent task. They struggled with it so then we went back and talked it through ... we made a brainstorm list on the whiteboard ... I had failed a number of first years (previously) in assessment task 1 and I was concerned. That guided what I needed to teach them, but also what I was looking for in this (their plans for their classes at the end of the term) and the standard is just so much higher. The other students that I was concerned about were about 10-12 young ones, their lessons were good. They were very professional, they made the links, they came with fabulous resources. (Tutor 2)

Both tutors are looking for evidence of a deeper understanding of persistence than simply "sticking to it and not giving up". Both observed signs of change, of a willingness to struggle with a task and then find another way, and evidence of learning from their struggles.

### Common Themes Related to the Tutors

#### Modeling Appropriate Strategies

I think if we actually focus on using the sort of things they like, the range of teaching methods and strategies, attitudes and so on ... I think if we do ask them to reflect, let's do it with a particular focus in mind. I found it was really effective having them look back at this reflection in terms of one habit of mind. It really generated a lot of good strategies from this. (Tutor 1)

I tried to vary the sorts of strategies that I used so that I could look at it from a whole lot of angles as to which ones were most effective ... They couldn't do it independently, so I used a think aloud strategy and talked them through what I would have done and how I would have written it up ... I didn't want to give them the questions because I was aiming at

persistence and critical reflection. And realistically thinking that, if you've got to persist, there's no point in persisting in the same way, so everything that I did with the students was another way of looking at it. (Tutor 2)

Both tutors used a range of strategies with their students, and when students had difficulties, the tutors demonstrated how to find a way around the problem or how to narrow the focus. These were models for the students and the tutors were explicit about why they changed tack.

### **Using the Concept of Persistence as a Backdrop to their Own Planning**

Any time I planned anything, I used this idea of persisting as a backdrop to the decision-making. So when I was planning face to face sessions, selecting activities, organising resources, explaining things, I did so in terms of supporting their ability to maximise their own time and increase their understanding of the content. (Tutor 1)

So once I started specifically looking at persistence as a habit of mind, that was what underpinned everything I did with them. So it confirmed to me that if you are looking at persistence it has got a lot to do with catering for a range of learning styles, and I felt that kinaesthetic learning is ... if you can find any way in there to bring those sorts of experiences back in for persistence, that is really important. (Tutor 2)

Both tutors clearly did this, with tutor 2 being explicit that it encouraged her more to cater for different learning styles, particularly kinaesthetic learners, clearly relevant to the arts.

### **Reflecting on their Own Teaching Practice**

I also think focusing on my own teaching practices and modeling this to students, models the importance of being reflective and hopefully that should enhance their own learning ... And then reflecting on it again in terms of your own teaching, even doing that with them. (Would you have done this before?) No, it would have remained implicit in my mind. And you know what else, I wouldn't have included the written reflection in their folio. That was something that wasn't a part of folios across campuses. That was something I asked our students to do and I felt it was a really powerful thing. (Tutor 1)

So that was a dismal failure at that stage, I ended up leading them through. I take responsibility for this, because the lesson was very, very complex and I'd used it for a whole heap of things, one of which was ramming into it as many models of drama teaching strategies as I could in the lesson. (Tutor 2)

Tutor 1 writes more metacognitively here about the value of reflecting on her own practice, but it is clear from her notes that she did so regularly and exposed the students to her reflections. Tutor 2 here reflects on a lesson that didn't work well and why this was the case. Her notes indicate that she openly took responsibility for the problem with her students also.

## **Common Themes Related to the Researchers**

### **The Value of Focusing on Persistence in this Research**

I think you're right as a team to focus on this habit of mind of persevering ... because it's so important for first year students. It's the first thing to go when they're stressed out. When you're short of time, the first thing to go is persisting, you don't want to spend any longer on it, and so it's probably the hardest habit of mind to develop and demonstrate. (Tutor 1)

I hoped that by using the strategies that I had, although I didn't address it specifically, I wanted them to have persisted enough to take with them an understanding of how valuable it could be as a methodology, as a teaching strategy, as a way to create learner-centred curriculum. (Tutor 2)

## **Discussion**

As can be seen, despite the different approaches, there was a great deal of commonality in what the tutors recorded in their journals and spoke of in their interviews. They both extolled the virtues of having students reflect on their learning and engage in various shared experiences. Tutor 1 says:

I actually believe that first year university students can be helped to develop the characteristics of self-directed learners, which is one aspect of reflecting.

Now if you keep thinking about the idea I had in mind about reflection being the key way to demonstrate perseverance, these folios had 8 items in them that the students had to submit, so it was a 9-week documentation of their learning. One of the tasks in it was a written reflection.

Tutor 1 used these written reflections in class as a shared experience and then as an opportunity to explicitly talk about the habit of persisting.

Tutor 2 particularly speaks often about “jointly constructing” concepts, organisers, and meanings and also making the students pause and reflect. These are obviously seen by her as key strategies for students to develop an appropriate ethos for the teaching of the arts. For example:

We jointly constructed an advance organiser of a series of questions that led to them finally being able to decide and justify whether that met a particular outcome.

I planned little activities, and we focused on one of the strands at a time.... So we did those things all the way through and consistently through it they had to stop and think what kids would be learning that reflected the rationale.

Tutor 2 was also looking for the students to develop a broader interpretation of the arts, and to think more deeply and critically about various learning experiences. To achieve these aims required persistence from both the tutor and the students.

A lot of them linked it specifically to the lesson, but some of them took a much broader approach and were able to give a statement that reflected the rationale, which is what I was after.

This opportunity to see and experience learning in action before engaging in professional and critical reflection resulted in some thoughtful responses willingly shared.

Both tutors concurred on the value of positive feedback to the students. Tutor 1 specifically gave them positive feedback and reward for the habit of reflection as it pertains to persistence: “The reason I made all that feedback positive was that I wanted to affirm to them the immediate benefits of reflecting.”

Both tutors also turned the critical eye on themselves and their own practice, ensuring that they modeled appropriate strategies in their own teaching. They also modeled the value of being reflective practitioners and overtly showed the students how they reflected on their own teaching. Both realised that from their engagement in this project, aspects of their planning which had previously been implicit were now explicit to them, and they saw this as a benefit and positive outcome for themselves. While they endeavoured during the project to make persistence a backdrop for their planning, now that the benefit of doing so is more explicit, they are likely to continue with this in the future.

Finally, both were able to see evidence of having fostered persistence in their students, and while both realise this will need to be further developed, they were satisfied with the results. In hindsight, we wish we had obtained ethics permission to survey the students directly for their perceptions of what they had learned about persistence. However, the tutors’ observations engendered positive feelings about the project and their involvement with it, so the extra load of having kept the journal appeared to not have been a burden at all. As tutor 1 explained when thanked for the extra hard work she had done: “No, I just did what I usually do but focused in a different way!”

The only major difference between the two tutors is in terms of explicit teacher talk about the habits of mind and persistence.

As a whole class we discussed the habits of mind in general. Then we focused on persisting and we talked about that. (Tutor 1)

I didn’t mention specific habits of mind or anything like that. (Tutor 2)

The first approach is aligned with the recommendations of Marzano and Pickering (1997) that the habits themselves firstly need to be defined, explained, discussed and rewarded to develop student understanding. Then teachers should employ a range of strategies that “overtly and intentionally” (p. 264) assist students to develop the productive habits of mind that will enhance learning outcomes. Tutor 1 also actively encouraged her students to follow the same path with their own students. In answer to a question about how to teach school students about persistence, she replied “Explicitly! Defining them (habits) for a start, explaining what they mean, discussing how people use them in real life, and also I said, by using some examples from children’s literature.”

Despite having had the same introductory briefing, tutor 2 chose not to follow that path, but instead chose to concentrate on modeling the habit of persistence in such a way that the students would follow her lead. This approach is more in line with Wiggins (2008, p. 1) in that “It depends upon incentives, reinforcement, modeling.” As she explained, “I’ve never mentioned persistence, I just mentioned all the time ‘Make sure you understand; Do you know how to do this here? How can we approach it?’ I always waited for them to feed to me this is what we do. A lot of it relates to using thinking aloud strategies with them.”

This appears to have been successful with this group, but it may be a moot point as to whether it would be equally so with all groups of students. The main disadvantage noted by the research team is that by failing to make the habit of mind explicit, tutor 2

has robbed her students of that explicit knowledge to apply to their own teaching. If it has not been made clear that her strategies were aiming to develop persistence, her students will not actively use that to underpin their own planning and will not look for the development of persistence in their own students in the future.

### Conclusion

This case study demonstrates that it is possible to plan and execute different learning and teaching plans in which the habit of mind of persistence is the backdrop, with the result of actively fostering this habit in the students. This was unexpected, as although the two tutors are operating within the paradigms of different disciplines, given that they shared the same briefing for the task, we expected them to go about it in more overtly similar ways. However, underneath the surface there was a great deal of commonality in the thinking of the two tutors. In particular, the value of reflection; shared experiences; positive feedback; modeling appropriate strategies; openly reflecting on your own teaching practice; and looking for evidence of persistence were common to both. This embedded commonality supports and does not conflict with what is already known about learning and teaching. While we were initially surprised at the obvious differences in their approaches, in retrospect, their independent choices to do things their own way has added value to this research.

While undeniably (and deliberately) limited in scope, this research indicates the potential value of focusing on strategies for developing time on task and persistence with students. Both tutors felt students gained from these strategies. Tutor 1 was able to observe this directly with the chart her students produced concerning strategies for persistence. She was able to ascertain the level of sophistication of their definition of persistence and noted that the area in which further improvement was required was in finding alternative ways when faced with an obstacle. Tutor 2 observed this indirectly in the improved results obtained by her students and in particular in their change towards choosing appropriate strategies for teaching the arts in their practice teaching. She was able to see how persistence with returning to the curriculum documents and modeling good practice brought about changes to their ideas and choices during the course. While undoubtedly this can be put down to “good teaching,” both tutors were convinced that it was their explicitly adopting the idea of persistence as a backdrop to their planning that enabled them to produce such “good teaching.” This preliminary research indicates such strategies are worth pursuing on a wider basis. In the future, it would be helpful to speak with the students themselves in relation to their perceptions of

the benefits of emphasising time on task and persistence. Further research on the impact of focusing on other habits of mind would also be worthwhile.

However, in terms of the two different approaches in this case study, we are cautious about the apparent equivalence of the results. While it is important that knowledge is embedded in a context, if it is too deeply embedded and not made explicit as well, there is a real danger that the knowledge will not be transferred nor applied in a different context. Therefore, while acknowledging that in this case study both approaches shared a great deal and were successful, we would lean towards making the understandings of the habits of mind explicit with students, especially when those students will, in turn, teach others.

### References

- Anderson, J., Costa, A. L., & Kallick, B. (2008). Habits of mind: A journey of continuous growth. In A. L. Costa & B. Kallick (Eds.), *Learning and leading with habits of mind: 16 essential characteristics for success* (p. 60). Alexandria, VA: Association for Supervision and Curriculum Development.
- Batts, D., Colaric, S. M., & McFadden, C. (2006). Online courses demonstrate use of seven principles. *International Journal of Instructional Technology & Distance Learning*, 3(12). Retrieved from [http://www.itdl.org/Journal/Dec\\_06/article02.htm](http://www.itdl.org/Journal/Dec_06/article02.htm).
- Bradford, B. M., & Peck, M. W. (1997). Achieving AECC outcomes through the seven principles for good practice in undergraduate education. *Journal of Education for Business*, 72(6), 364.
- Chickering, A. W., & Gamson, Z. F. (1987). *Seven Principles for Good Practice in Undergraduate Education*. Washington, DC: AAHE Bulletin.
- Costa, A. L. (Ed.). (1991). *Developing minds: A resource book for teaching thinking*. (Rev.ed., Vol.1). Alexandria, VA: Association for Supervision and Curriculum Development.
- Costa, A. L., & Kallick, B. (2000). *Habits of Mind: A developmental series*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Cushman, P. (2004). *Where does all the time go? Implementing a time allocation research project with year one tertiary education students*. Paper presented at first Year in Higher Education Conference. Brisbane. Retrieved from <http://www.fyhe.qut.edu.au/past-papers/papers04.html>
- Flinders University. (2007). *The New Millennial University Student*. Retrieved from <http://www.flinders.edu.au/teach/t41/teaching/first/newstudent.php>

- Golby, M. (1989). Teachers and their research. In W. Carr (Ed.), *Quality in Teaching: Arguments for a Reflective Profession* (pp. 163-173). Boston, MA: Falmer.
- Gonzalez, P. (2001). Inquiry as a process of learning about the other and the self. *International Journal of Qualitative Studies in Education*, 14(4), 543-562.
- Graham, C., Cagiltay K., Lim B., Craner, J., & Duffy, T. (2001). Seven principles for effective teaching: A practical lens for evaluating online courses. *The Technology Source*. Retrieved from [http://technologysource.org/article/seven\\_principles\\_of\\_effective\\_teaching/](http://technologysource.org/article/seven_principles_of_effective_teaching/)
- Heyl, B. (2001). Ethnographic Interview. In P. Atkinson, A. Coffey, S. Delamont, & L. Lofland (Eds.), *Handbook of Ethnography* (pp. 369-383). London, UK: Sage.
- Hillman, K. (2005). The First Year Experience: The transition from secondary school to university and TAFE in Australia. LSAY Research Report 40.
- Horstmanshoft, L., & Zimitat, C. (2003). *Time for persistence*. Paper presented at first Year in Higher Education Conference. Brisbane. Retrieved from <http://www.fyhe.qut.edu.au/past-papers/papers03.html>
- James, R. (2008). *The first year experience in a new higher education landscape: What are the factors influencing the quality of the student experience? What are the priority areas for change and innovation?* Keynote address at First Year in Higher Education Conference. Hobart. Retrieved from [http://www.fyhe.qut.edu.au/past\\_papers/papers08/FYHE2008/content/html/keynotes.html](http://www.fyhe.qut.edu.au/past_papers/papers08/FYHE2008/content/html/keynotes.html)
- Koeckeritz, J., Malkiewicz, J., & Henderson, A. (2002). The seven principles of good practice: Applications for online education in nursing. *Nurse Educator*, 27(6), 283-287.
- Kvale, S. (1996). *Interviews. An introduction to qualitative research interviewing*. London: Sage Publications.
- Lahmers, A., & Zulauf, C. (2000). Factors associated with academic time use and academic performance of college students: A recursive approach. *Journal of College Student Development*, 41(5), 544-556.
- Lankshear, C., & Knobel, M. (2004). *A handbook for teacher research*. Glasgow: Open University Press.
- Marzano, R. J., & Pickering, D. J. (1997). *Dimensions of learning*. Alexandria, VA: Association for Supervision and Curriculum Development.
- McInnis, C. (2001). Researching the first year experience: Where to from here? *Higher Education Research & Development*, 20(2), 105-114.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass.
- Page, D., & Mukherjee, A. (1999). Improving undergraduate student involvement in management science and business writing courses using the seven principles in action. *Education*, 119(4), 747.
- Ramsden, P., & Dodds, A. (1989). *Improving teaching and courses*. Melbourne, AU: University of Melbourne Press.
- Stenhouse, L. (1985). The case study tradition and how case studies apply to practice. In J. Riddick & D. Hopkins (Eds.), *Research as a Basis for Teaching: Readings from the work of Lawrence Stenhouse*, London, UK: Heinemann.
- The First Year Experience in Australian Universities: Findings from a decade of national studies. (2005, updated 2008). DEST. Retrieved from <http://www.dest.gov.au/NR/rdonlyres/>
- Wiggins, G. (2008). *A conversation with Grant Wiggins: Habits of mind*. Retrieved from <http://www.authenticeducation.org/bigideas/article.lasso?artId=48>
- Wilson, G. V. H. (2003). *The First Year Initiative: A vice chancellor's perspective*. Paper presented at first Year in Higher Education Conference. Brisbane. Retrieved from <http://www.fyhe.qut.edu.au/past-papers/papers03.html>

---

HELEN HUNTLY is currently the Head of School of Learning & Innovation at Central Queensland University, Australia. Her research interests include teacher competence, beginning teachers, and the first year undergraduate experience and how it may be enhanced.

JENNY DONOVAN currently is a PhD student at University of Western Australia investigating the possible impact of media on students' understandings of genes and DNA. From a long involvement with secondary and tertiary teaching, she is also interested in factors that promote student success.