CHAPTER FOUR

Seeking wisdom: learning through others

This chapter is the first of five that presents the results of the research analysis highlighting the experiences of both teachers in teaching and students in learning. The outcome space is presented as an integrative model emphasising the entwined experiences of both students and teachers. Table 4 sets out in detail the five major categories that constitute the core category 'Learning to Learn' or essence of the students' experiences, which is explained in the final section of the chapter. The categories that emerged from the data describe the experience of the enacted curriculum.

Table 4 The hierarchy of categories and the relational dimension

Teacher orientation	**'Tuning to the same wavelength' (Relational dimension)**			Student orientation
		Concepts of learning activities	*Outcome of activities and interactions*	
	***Chapter Four* (Structural categories)** **'Classroom encounters'**	*Chapter 6* *Writing notes* *Working in groups* *Discussing* *Fitting in* *Seeking support* *Seeking information* *Obstructing*	*Chapter 5* 'Changing concepts' (Facilitative)	
	'Establishing competence'	*Proving competence* *Seeking negotiated strategies* *Seeking feedback* *Doing things* *Facilitating*		
	'Motivating and learning'	*Encouraging discussion* *Turning stories into theory* *Expectations* *Wanting support* *Being available*	'Struggling to learn' (Obstructive)	

Chapter Four emphasises the relational perspective of phenomenographic analysis and aims to describe the key aspects of the variation of the three major categories that highlight phenomena experienced, perceived, apprehended, understood or conceptualised in teaching and learning (Marton 1981). Both variation and discernment in experiencing things are crucial for learning and these are translated into categories. While they are hierarchical,

they are logically related to one another. Bowden and Marton (1998) described the important role variation plays in learning as follows:

> To discern an aspect is to differentiate among the various aspects and focus on the one most relevant to the situation. Without variation there is no discernment. We do not think in a conscious way about breathing until we get a virus or walk into a smoke-filled room. Learning in terms of changes in or widening in our ways of seeing the world can be understood in terms of discernment, simultaneity and variation. Thanks to the variation, we experience and discern critical aspects of the situations or phenomena we have to handle and, to the extent that these critical aspects are focused on simultaneously, a pattern emerges. (p 7)

It is only by understanding variation in phenomena and the past approaches to learning that we can plan teaching and learning for the future. In section 4.1 of this chapter the three major categories are described and represent the approaches taken by teachers as they strive to teach in the classroom. In section 4.2 these categories correspond to the approaches to learning of students who seek understanding.

These first three structural categories are 'classroom encounters', 'trying to establish competence' and 'motivating and learning'. Figure 12 shows that the referential dimension, 'tuning to the same wavelength' is in essence related to the other three categories and filters or moderates the way in which these three phenomena are experienced. The sections represented in Figure 12 are the teaching and learning context (containing the classroom encounters, trying to establish competence and motivating and learning). These are affected by the perceptions and awareness of variation of experiences of both teachers and students as they interact with each other. After filtering through the student interface, the outcomes that students formed about their learning object are in the learning space.

The model depicts the reality of students having to undertake the difficult and at times complex activities of learning through others. These varied approaches to learning are structurally differentiated and dependent upon the student-teacher relationship and whether or not teachers and students can tune into the same wavelength. The interface section affects student learning as they either struggle or excel constructing concepts about their object of learning.

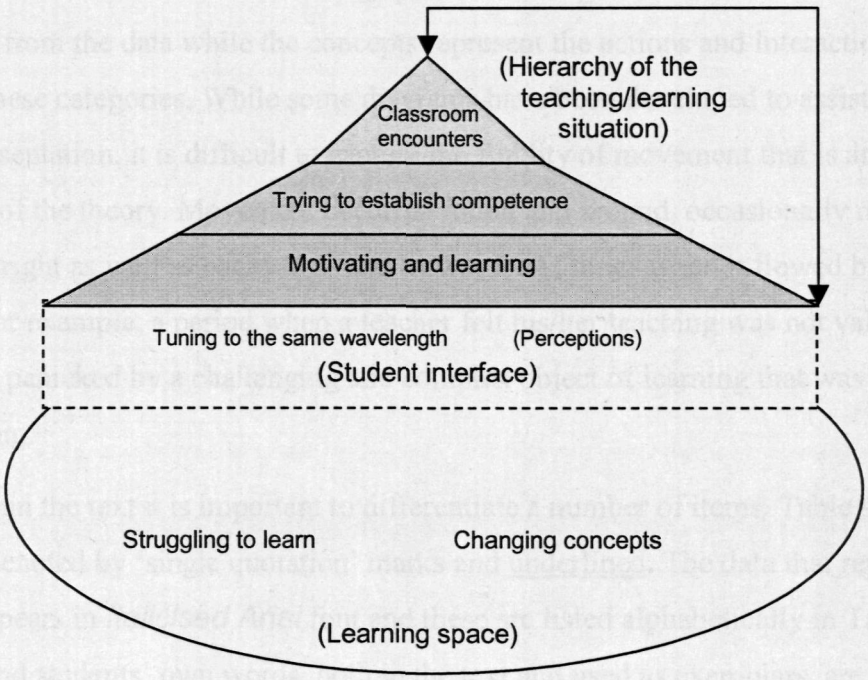

Figure 12 Learning through others

Chapter Five focuses in detail on the two categories: 'changing concepts' and 'struggling to learn', that represent the outcomes of teachers' and students' approaches to learning and their actions and interactions, along with their impact, and in relation to the mediating factor of the student-teacher relationship (Manke 1997; Davis 2003). While the students' prior learning experiences and the teachers' confidence as the instructor-facilitator for learning were identified as intervening perceptions (Strauss and Corbin 1990), it was the relationship shared with teachers, and the variation in the way students experience their object of learning (Reid 2001), that students described as making a significant difference to how they gained deep understanding.

This is followed, in Chapter Six, by the results of the discourse analysis of the teachers' and students' interview data and an analysis of the observed interactions between teachers and students in the classroom. The student data are woven into a discursive narrative in Chapter Seven while Chapter Eight draws the dissertation to a conclusion. These findings provide further validation of the students' perceptions and experiences of learning and the subsequent developed theory.

While the discussion takes place in a linear fashion, the reader must be reminded that the processes involved are complex and extremely dynamic. All the variations in

teaching and learning that make up the categories and concepts are structurally related and there are internal relations in the learning space. The categories identified are the major phenomena from the data while the concepts represent the actions and interactions that supported these categories. While some diagrams have been developed to assist in the visual representation, it is difficult to capture the fluidity of movement that is an essential component of the theory. Movement occurred round and around, occasionally moving from left to right as well as backwards and forwards. At times when it flowed backwards it indicated, for example, a period when a teacher felt his/her teaching was not valued or a student was panicked by a challenging and complex object of learning that was perceived as threatening.

Within the text it is important to differentiate a number of items. Table 4 shows the categories denoted by 'single quotation' marks and underlined. The data that represented concepts appears in *italicised Arial* font and these are listed alphabetically in Table 5. Teachers' and students' own words, both in the text and used as exemplars, are *italicised in Times New Roman* font and further distinguished by "double quotation marks". Observational field note data is boxed and will appear in `courier new` font.

Table 5 Concepts of learning and teaching activities

***Concepts* (*italicised Arial* font)**		
adapting	*feedback (asking for or providing)*	*prepared*
asking questions	*facilitating*	*passionate*
asking/inquiring	*feelings of inadequacy*	*proving competence*
assessing	*feeling disaffected*	*reflecting*
being available	*fitting in*	*requesting*
compensating	*inhibiting*	*role play*
competing	*getting the message across*	*rushing through material*
communicating	*juggling work and learning (making sacrifices)*	*seeking support*
directing (strategies)	*knowledge change*	*sharing*
discussing	*knowledge review*	*stimulating*
dismissing	*listening*	*stories*
doing homework (things)	*negotiating strategies*	*struggling*
earning a reputation	*observing*	*talking over*
encouraging (discussion)	*obstructing*	*turning stories into theory*
evaluating	*others in the cohort*	*technical jargon (the ability to use)*
expecting	*peer pressure*	*wanting support*
experiencing		*watching*
explaining		*working through problems*
		writing notes

4.1 Categories taking the teachers' perspective

Classroom encounters

Classroom encounters in this context are defined as the face-to-face time teachers spend with the students in the classroom delivering the curriculum and implementing or negotiating strategies.

This category that emerged from the teachers' data proved to be dominant in the hierarchy of the teaching/learning situation as shown in Figure 12.

> *"And [getting the students] to think and getting them to sit down and do a flow chart because it is hands on. And then you can say 'is there anything missing?' In that way you try to bring the problem of not having the experience into a classroom" (CT).*

The teachers obviously wanted to make the classroom an interesting and informative place of learning and, for this particular teacher, trying to help full time students with *stories* about the *experiences* of an internal auditor in the real world, provided an opportunity to expand the 'changing concepts' of the students. However, it was clear from the data that sometimes it was difficult, especially with a class of full time students for whom the complexities of the object of their learning were something very new.

> *"I might from time to time read headings or direct them to specific page references which is what I am about to talk about and then I'll talk around it or give examples of it. But normally I am more concerned about how I am going to get the message across" (DT).*

So *getting the message across* in the classroom was one problem encountered and particularly evident with classes of full time students. The time that teachers spent face-to-face with their students was another contentious issue. Teachers have the opportunity in the classroom context to assist students by *explaining*, *encouraging* and developing a learning environment. In particular they are seeking negotiated strategies that will enhance the depth of learning. Most subjects in the accounting program have a specified number of hours that are allocated for classroom contact and the remainder for self-directed learning. The variation in face-to-face teaching hours was very wide. *"We have three hours once a week for 16 weeks" (CT).* This teacher's program of 48 hours was close to the 54 contact hours stipulated on the curriculum document. This contrasted with another College that offered a reduced program for this subject to the part time students. DT explained it this way:

> *"I don't have the time to spend a lot of time on the topic. If I was in a full time class over 18 or over 16 weeks I would have time to talk about it and get them to do some classroom discussions, sit around and discuss case studies that are in the book, make a short presentation on the contents and findings from their*

group [work] on that case study and discuss it. I don't have that time in eight weeks."

This teacher had 24 hours, just half the time, to cover the same amount from the same curriculum. I then came across another teacher who had even less time for classroom contact, and this was the comment:

> *"... this year I have only got the hour a week with the students all my little stories of [real world experiences] ... I'm not actually able to tell. It will happen over the hours but this year because it is a one hour flexible delivery class the first few weeks have mainly been administration, getting the students into the flexible delivery mode and making sure they have got resources" (FT).*

This teacher's experience meant that only 16 hours of face-to-face time had been allocated to them to deliver all the material on the topics in the curriculum. Even then, some of those hours were lost on administrative matters which made even less time for *directing strategies, reflecting* and *getting the message across.* The reduced classroom hours also had an impact on *adapting, watching* and *listening* and cut down the time that students could seek information and support. Despite the reduced contact time in these cases above, the teachers were enthusiastic about their subject which probably made up somewhat for the lack of hours. This same teacher went on to say:

> *"I think when they get new knowledge... you can sort of see it in their faces sometimes. And then...sometimes the fact that they will question you. I don't know whether that means they know they have got new knowledge but maybe* ***I*** *know they have got new knowledge when they start to question me" (FT).*

Discussion and links to the literature

All the teachers in the study experienced some difficulties face-to-face in 'classroom encounters'. The wide variation in time allocated for teaching at various Colleges tended to impact on *knowledge change* and *knowledge review* that are so necessary if students are to become competent with skills in designing, implementing and evaluating internal controls. The depth of learning can be magnified if the teacher oversees and implements a set of shared practices as suggested by Hofstede (personal communication 11 May 2005). In the classroom these strategies strengthen the signals and cues students receive, all of which foster a culture of learning that cannot be underestimated in its role of deepening *knowledge change*. However, teachers need adequate time for face-to-face teaching to carry out these intentions.

Trying to establish competence

Trying to establish competence is defined as the assessment tasks teachers set to gain feedback on the progress of their students and determine a final grade mark.

"If I can generalise about exams and talk about assessments generally, in the accounting course each module has what we call a grade code and the grade code identifies the sort of assessment activities that are undertaken" (HOP). The category D rating of the subject Internal Control Principles, which dictated the assessment strategies, was very prominent in both the teacher and the student interviews. The teachers' responses were mixed and the variation tended to be quite polarised—either they did or did not like the category D subject. The objectives of each may differ but nevertheless the perceptions that emerged from the data identified just how hard it was for both teachers and students when 'trying to establish competence'.

One of the first things that impacts on students at the start of term is how they are to be assessed: *"most of the students have a question on the assessment plan, like how you are going to assess, what about the marks, so we write it down" (JT).* All teachers gave their students some indication of the learning outcomes and the assessment strategies at the start of the semester, and stated that these handouts were mandatory. *"Yes, a summary of the learning outcomes and then the assessment, and they know exactly how they are going to be assessed and when they will be assessed" (ET).* Generally teachers appeared to support the proposition that a test *"has to be a balance, it can't be too easy and it can't be too hard" (AT).* The teachers all had something to say about the assessments and these comments painted a very varied picture of their experiences and perceptions. One teacher (ET) who supported a final externally set exam stated:

> *"They [the students] know then that they are sitting for an exam—something at a level, not just for that class but that the rest of the State is to sit for, and therefore the standard is going to be at a certain level."*

Another teacher commented: *"I think I would probably be a little bit worried that maybe I had not covered all the learning outcomes. I would have to make quite sure that those were covered if it was a category A or category B test" (AT).* One of the teachers (KT) felt that the final exam in the subject should be a category B: *"I mean do I think it should be a B category subject, yes I do."* She went on to explain her reasons: *"I would think that it could substitute as a B category subject in place of external audit".* One teacher expressed the view that it would make no difference at all to him if it was an externally set and marked exam. When asked if it would make him change the way he taught he replied: *"Absolutely not, I do not teach students to pass exams. I teach the principles of the subject*

and how they come up to an exam is up to them" (DT). Yet another teacher had very definite views and the conversation went like this:

> *HB: You set the exam because it is a category D. Would it make any difference to you if your subject was a category A?*
>
> *BT: I'd hate it.*
>
> *HB: Why?*
>
> *BT: You have got a lot less flexibility in category A exams. What I like about teaching internal control is I have a lot more flexibility in what I can do. I can use more creative teaching methods rather than just prime them for an external exam which category A exams tend to be.*

The teachers' guidance notes to this subject suggested an assessment program of a mid-term test and a project (or two short tests) to help in 'trying to establish competence'. The notes also suggested a final exam weighted 50% of the final mark. This was dictated by the category D given to the subject. It did state that these were not mandatory, rather to be used as a guideline. It suggested that there be a number of short formative assessments given during the course to help teachers in *providing feedback* and *working through problems* and the guidance notes supplied two fully worked examples for each learning outcome. HOP had commented: *"We've got an intranet site that's got a lot of assessment exemplars and teachers' guides on them ... the feedback I get is that most teachers use them and find them pretty satisfactory"*. However, not all the teachers knew about these extra resources. When one teacher (CT) was asked if there were any extra resources provided for this subject the reply was quick and to the point: *"No not really"*. All the teachers were asked this same question and another teacher, when asked if these resources were useful, replied: *"Well yes, there are questions there, but they don't have the answers" (JT).* When shown a copy of the full text of the teachers' guidance notes this teacher then realised that she had not seen the answers in *italics* set out under each question.

Most of the participating teachers seemed to concentrate on case studies, some just used multiple choice questions and all left it up to the students themselves to decide if they wanted to write notes. The comment from this next teacher suggests that a bit more might have been done to try to change the behaviour of those students who left class early. *"The better students will do lots of the questions and the not so good ones will leave early and just take the answers, but not do too much work" (GT).* Most students like to help their learning by doing things. A variety of activities always adds interest to the 'classroom encounters'. In vocational education students are assessed on competencies and it is the teacher who takes the role of *directing strategies.*

"In the way, hopefully, they [the students] therefore then are able to accept what you are trying to do as an adult, in an adult function. Which then leads us to share information to provide them with information they need to...basically become competent in whatever topic they are doing" (CT).

Clearly this teacher had the issue of competency well in mind and focused on sharing information with students so they would be capable of mastering the skills of each topic. Another teacher was cognisant of the need to monitor the cohort. His words were:

"I have a preference to set my own exams because I can more or less tailor-make them for the group that I have. If the group is particularly strong then I tend to make the exam harder and I tend to set a research assignment or the assignments at a different level" (HT).

One teacher used formative assessments to gain feedback on how the students were learning. He stated:

"Last semester was the first time that I put together a newer assessment, more of a case study, rather than just have a test. So first they [the students] had to understand the company structure and who did what and then they had to draw flow charts, and then from that they had to identify internal control weaknesses and strengths and they had to make recommendations. So within that process it helped to identify their knowledge as well" (CT).

Students need to be encouraged to find their own ways of learning and JT had the perception that:

"A good teacher should stimulate the students to think so that they can work on an assessment and fully understand it. I like to reinforce learning by repeating or revisiting the topics from the previous week. I like to vary my techniques in teaching."

I questioned AT on his perception of freedom to teach the subject and explore diverse areas. He replied: *"When you say different areas, I am staying on the topic but actually expanding more with practical examples and trying to make it a bit more fun for them".* Students who enjoy their class they are most likely well motivated to learn.

Discussion and links to the literature

If the classroom is a pleasant place to be students will enjoy their learning and gain competence. Not only does the learning have the capacity to become deeper but the teachers also may be more satisfied. Research has shown that students tend to focus on those topics that are to be assessed and this may be at the expense of topics that are interesting to them (Elton and Laurillard 1979). This category is linked to both 'classroom encounters' and 'motivating and learning' and time to let students explore interesting issues will lead to the development of greater competence in designing, implementing and evaluating internal control procedures in organisations.

The teachers were clearly divided on the grading for this subject and not all teachers followed the suggested assessment pattern set out in the curriculum document. While it is clear that assessment plays an important part in the learning process and in the plans of both teachers and students (Entwistle and Ramsden 1983; Ramsden 1992; Prosser and Trigwell 1999; Kember 2001), research by Elton (2004) perhaps highlights the turmoil being created by current assessment methods in higher education:

> The difference between the two purposes of assessment – summative for judgement and formative for improvement – is that formative assessment should not confine itself to what will eventually be summatively assessed, but should rise above it. The problem with formative assessment has always been that it is essential for good learning, but that students may not take it seriously, as it does not 'count' (p 56).

Elton concluded that 'while there is much need to re-think assessment, the means for using it in order to motivate students to value learning for its own sake now exist' (p 56). This research found that not enough was done to expose TAFE teachers to research that may help students increase their critical thinking and analysing skills. Connor-Greene and Murdoch (1999) recommended that daily writing quizzes be an 'integral part of every class, from the beginning of the semester' (p 19) as this would significantly increase the learning skills of students.

Motivating and learning

The category 'motivating and learning' from the teachers' perspective is defined as the strategies and procedures implemented by the teacher in order to encourage deeper interest by students in the curriculum material.

It was evident in analysing the data from this research that teachers were cognisant of the importance of motivation and many of them made comments about their desire to help students expand their knowledge by actively engaging them *"and making them want to understand it, to learn" (CT).* Once again the impact of 'classroom encounters' on this category meant that the time teachers spent with their students impacted on the level of motivation they could generate. When time was restricted then teachers could not use real life examples and *stories* to inject enthusiasm into the class. This meant that at times teachers used *compensating* strategies and had less time for reflection.

One teacher commented *"you've got a lot who have lost their confidence, their self-esteem and I think one of the things I try to do is to give them back some self-esteem" (KT).* While teachers may need to ensure they have strategies in place for their students to learn, there was a sense in the responses that they also needed to motivate them. *"Well, it's to try to enlighten them to enliven the masses, the internal control class is advanced diploma level and there you expect a little bit more initiative from the students than you do at other levels" (HT).* This same teacher went on to say that: *"Other times you have a couple of strong characters in a group, strong personalities, and they seem to wake the group up and carry it with them, they motivate the whole group".*

The teachers also spoke of their passion with the subject and this is perhaps one of the greatest motivators. *"I love teaching and I do love teaching Internal Control"* (AT). The teacher must also feel motivated as DT explains: *"To me a good teacher is one whose teaching can encourage their students ....They want to be in the class and it heartens me when I hear in enrolment students say 'I'm in such and such a class, oh terrific'".* Motivation works both ways. *"Yes, [teaching is] a two way process, all the time for me. I love it. I encourage the students to come up with their own ideas then we discuss them in the class" (IT).* This teacher knew when students were motivated: *"They will start to give me good quality feedback" (DT).*

Discussion and links to the literature

Motivated students who have a deep approach to learning understand ideas more readily and show a keen interest in their various tasks. It is only possible to motivate students through skilful techniques that tap into the way students go about their learning.

Research has identified factors that might influence student performance and the characteristic of motivation was found to be a significant attribute that impacted on student learning (Laurillard 1979; Elton 1988; Prosser and Trigwell 1999) supporting the findings in this study. Just what motivates students—whether it is extrinsic, intrinsic, achievement or social desires (Entwistle 1981; Reid 1997)—teachers can certainly make a difference to their students' learning by being aware of the impact of their meta programs (Brown 2004). In his Neuro Linguistic Programming (NLP) study Brown explored the large number of constructs that make up students' meta programs and examined whether or not they had a negative or positive effect on assessment performance. He found that there was a strong association between the meta programs of students and performance in summative assessments. Interestingly enough, Brown found that the 'people'[1] meta program was actually 'negatively correlated for performance with accounting and finance students whilst it was positively correlated with performance with other business students' (p 3). While this procedure has not been used in this study it is possible that internal control students may exhibit these same tendencies and use *compensating* strategies in their approaches to summative assessments.

Overlaying all three categories discussed above is the fourth category of teaching on the right level, or being on the same wavelength as the students.

[1] Brown (p 18) describes 'people' as the measure of students' preference for spending time with and interacting with people (rather than, for example, 'things').

Tuning to the same wavelength

Tuning to the same wavelength is a dimension or interface through which the identified categories must filter into the learning space.

This category acted as a relational dimension filtering all the previous phenomena perceived, experienced, apprehended or understood in the teachers' approaches to teaching. If teachers were able to tune in to the same wavelength as their students then the outcomes for students were magnified. These next two quotes are typical of a positive outcome from 'classroom encounters'.

> *"Different groups have different reactions. Some groups are really quite good and some are a bit slow. Sometimes we have some very interesting discussions, even though they are students, some of them do take a keen interest very early in the piece. And then you have quite good sessions."*

HT identified that when a group of students can participate in a good discussion on the topic being studied they are on the same level, tuned to the same wavelength and the learning becomes deeper and more lasting. Another teacher knew that students:

> *"...want someone who is probably tuned into the way in which people learn, provides some different types of activities to aid that learning. Who is responsive, who allows discussions to take place, who keeps everyone pretty much on track, I suppose" (FT).*

The teacher has to be on the same level as the student for the best learning to take place and for critical thinking to be encouraged. Learning is a two-way process, not just a dump of information in the hope that some of it may be absorbed by the students. The comment from DT made a lot of sense:

> *"But at the same time it is all about good communications backwards between the teacher and student. And it is not a case of just standing pontificating...you know, a teacher has a mouth but he has also got to have a pair of ears as well and listen to what's being said and also understand how it's being said to him."*

ET realised that there were real benefits from bringing his practitioner experience to the students and being an integral part of their learning:

> *"In Internal Control [Principles] it is the stories and the things that happen in the world that makes the meaning to theory; for instance you are talking about accounts payable, well you can introduce a whole lot of things that have actually happened from experience and people [students] love stories."*

Discussion and links to the literature

Students and teachers can only be on the same wavelength if they are both interested in the curriculum material. Much has been written on the importance of connecting with students, or teaching on the student level rather than the teacher level and the research of Entwistle

(1981); Entwistle (1988); Gardner (1993b); Doolittle and Camp (1999); and Elton (2003) supports this finding. When students engage in activities that they feel are important and interesting they are more likely to be tuned in to their teacher's wavelength and exhibit sustained 'motivation and learning' as Davis (2003) suggested. It was also clear from the research that if the communications channels are clear and unambiguous, the students will more likely have an intrinsic interest in their approach to 'proving competence' and generally will face the challenge of their assessment task with eager expectations. Prosser and Trigwell (1999) supported this view in their research. On the same hand, students have to realise that they cannot acquire knowledge like they tan – lie passively soaking up information and all will be absorbed (Jaivin 2002).

Students and teachers will juggle their beliefs about an object of learning (Cobb and Yackel 1996) in the hope of solving the learning problems that are set in the social context. It has been stated that students struggle to function socially and educationally in the classroom and this may impact on the way they can tune in to their teacher's expectations. Artigue (1999) put forward a powerful argument stating that this very issue decides whether or not students exhibit positive or negative consequences to 'classroom encounters' similar to the finding in this study.

In the next section these same three major phenomena are analysed from the students' point of view, within the dimension of 'tuning to the same wavelength' and it is interesting that the focus, while varying in its direction, should be so closely aligned with the perceptions and experiences of the teachers.

Table 6 is a summary of the teachers' classroom contact hours, the curriculum topics not covered in class, the assessment strategies and whether or not the teacher used the extra exemplar resources written for the curriculum. Only five teachers knew about and/or used these extra resources and no teacher covered the six techniques for evaluating internal controls. This in part answered my initial query: how do teachers approach the teaching of this curriculum for Internal Control Principles?

Table 6 Syllabus 9434P with eight topics over 54 hours

Teacher	Class contact hours	Topics not covered	Assessment strategies	Exemplar resources used
AT - male	48	2*	Project and final exam	No
BT –male	48	2*	Two class tests	Yes
CT – male	48	2*	Class test and final exam	No
DT – male	24	2*	Project and final exam	No
ET – male	48	2*	Class test and final exam	Yes
FT – female	16	2*	Final exam only	Yes
GT – male	48	2*	Class test and final exam	No
HT – male	48	2*	Project and final exam	No
IT – male	48	2*	Class test and final exam	No
JT – female	48	2*	Group assessment and final exam	No
KT - female	48	2*	Project and final exam	Yes

**Part of Topic 2 that included the six techniques used to evaluate internal controls*

4.2 Categories taking the students' perspective

Classroom encounters

Classroom encounters are defined in the context of the students' time with the teacher in the classroom, experiencing the enacted curriculum.

The analysis of the data from the students' transcripts highlighted the importance that they placed on face-to-face teaching. The stories revealed the strategies, *struggles* and effort that many of the students put into classroom learning. It also clearly indicated that classroom discussion plays a significant role in student learning. *"Lots of times it is the discussion that helps us learn better and just to confirm what you think you know is good to check, see if the others are thinking the same thing" (S13-GT).* The discussions help cement the relationships in the classroom community and when teacher and students are *negotiating* strategies, then mutual accountability (Wenger 1998) become part of the shared practices. Another student said:

> *"Yes, I liked having the discussions... but we had a good bunch and there were some people with different views to you so it was interesting...we could discuss the views and say what you thought and you did learn more that way" (S16-HT).*

Some students picked up on the lack of face-to-face hours and this comment was typical of the feelings of students in those classes where the classroom hours were limited. *"He gives us questions and case studies and after telling us his experiences he tries to see if we can pick the weaknesses in internal control. I just wish we had longer than only eight lessons though" (S20-DT).* Another student from a different teacher and class said: *"maybe it's just some subjects, too much is cut out...they don't have enough time" (S2-AT).* One student who enjoyed the classroom activities, and was in a class that ran three hours each week said: *"What we did in our class was things like presentations where each group researched a component of internal control, like a situation, then help[ed] research it and then present it to the class" (S8-JT).*

The experiences and perceptions gathered from the data also reinforced the notion that there exist common challenges for both teachers and students in the classroom environment. If the teacher doesn't have time in class to *direct strategies* and encourage *reflection* in action (Schon 1983) then it is more difficult to set up the situated learning community that can add to deeper understanding for students. This student commented: *"the hardest thing is trying to find time to do it. As far as I am concerned I find it easier to do my work in a controlled environment, like class" (S3-FT).* This showed that the student

wanted support and obviously benefited from the experiences and thoughts of *others in the cohort*. Another student liked the idea of *working through problems* and took quite some time to explain how important the classroom discussions were to his learning. He spoke of the first half of the lesson where the teacher maintained control in a lecture type setting and the students were just *listening*. Then his face lit up as he related how in a more enjoyable segment, *"all the discussion[s] that we found all interesting in the second half of the class were actually initiated by the students ourselves, you see" (S4-BT)*. The students were quite discerning with regard to their teachers' classroom management and practices. All expected to be *doing things* in class and were frustrated at times when this did not happen.

> *"It is a bit of an insult to your intelligence when a teacher sits there and reads the text book to you for hours. I keep thinking I could be doing something else in this time; that is the hardest thing" (S9-BT).*

The other main event in the classroom was the use of presentations or role plays by students. Some were obviously better than others, but this same student explains how valuable these strategies in the classroom can be to help *knowledge change* and *knowledge review*. The following comment was in response to being asked if they had any role plays or presentations in class as the teacher had said they did. The student said they did not, but:

> *"They did that for marketing, we said let's get right into this and we put a lot of work into the presentation, we all wore white shirts and black pants and we did learn a lot, we learnt a lot about the whole industry and putting stuff together. And I think learning has to be fun. We learn more if it's fun rather that just sitting there going over it [the text book]" (S9-BT).*

An example of the interaction in that same classroom is given through the following edited field notes taken while observing this teacher at work.

The class was small. Only about eight students turned up, and the class started five minutes late. There was no reinforcement of any learning objectives from the previous lesson. The teacher did not have a lesson plan.

The teacher started by giving an overview of the payroll system. He noted that the basic documentation is in the text book.

He told the students that they were going to complete an activity in class and that they were to plan their approach.

The teacher tended to look constantly at the main students who were answering most of the questions.

S9-BT: "Yes, it's always me. It's a bit embarrassing sometimes."

S10-BT: "I must say that I think the teacher has been listening to the same people in class all the time and he doesn't really ask anybody else any questions."

Teacher has a very quiet voice. About ten minutes has now passed in the lead-up to constructing this chart.

Teacher starts to build the model of the project on the board, trying to draw out answers from the students.

Teacher explains the methodology that might be used, all the time asking for answers from the students.

BUT the same three students received his attention!!

Teacher then diverted away from the current theme and the students seemed a little lost here.
**One student contributed a comment here.
**One student was texting on his phone.

(I made a note that it might have been quite good at this point to have an activity, to ask the students to attempt a flow chart themselves.)

Teacher then explained that internal controls became important in this process of the design of a system, particularly at the early stage where the integrity of the data needed to be ensured.

Teacher again asks students what is needed now to proceed with building the system. NO RESPONSE.

Teacher starts the flowchart himself on the board.

It was the week just after the TAFE mid-semester break and even though I had previously arranged with the teacher to visit the class, when I turned up he wanted to explain that they would not be doing much that day; rather it was to be a group workshop. Although this lesson seemed to get off to a poor start, and it was quite noticeable that only one or two students were interacting with the teacher, the lesson did eventually gain some momentum that seemed to stem from my position as an observer in the class. However, it was not a group workshop activity, and the majority of the students did not participate in the class discussion.

Students need to feel comfortable in the class and enjoy their learning if it is to be deep and lasting. This is a comment from one student in a class:

> *"I didn't mind our teacher for Internal Control, I think it was difficult for him because a lot of the class were not participating in the class which makes it hard and he did his best to try and make it interesting" (S16-HT).*

If there is active participation it is more likely that students' educational outcomes will be enhanced (Wenger 1998). One student had this to say about time in the classroom: *"So the teachers...the way the teacher helps you with the information and the length of time you are given in class to have that information is very important to you" (S1-AT).* The 'classroom encounters' are an important part of student learning and through positive alignment in these communities of practice students can direct their energies to the ways they learn best. As the students gained knowledge they became increasingly confident in their ability to detect weaknesses in internal control using the various case studies and scenarios. These comments by the students seem to verify the links and the 'match between knowing and learning, between the nature of competence and the process by which it is acquired, shared and extended' (Wenger p 102).

The resources that were handed out to students were limited. Most only received the topic outline, the learning outcomes and the assessment schedule. Nearly all the students reported that they valued the outline and five teachers used case study handouts regularly. The students studying in the class of FT that only had 16 contact hours in the semester did not receive any extra resources compared to students in other classes. This might indicate that relative to the classroom experience the learning resources were also limited. In the case of this class, however, it was the facilitative approach by the teacher in the one-hour sessions that seemed to make up for some contact shortfall.

Trying to establish competence

Trying to establish competence is defined as the strategies and procedures adopted by students in order to prove their competency of the elements of the subject.

The students' responses were alarmingly similar to some of the perceptions of the teachers regarding the category of subject. The word 'alarmingly' is used because of the impact that the grading category of the subject, Internal Control Procedures, has on the perceptions and priorities of students. This subject does not rate in the students' overall grade score which immediately sends a message that it is less important than other subjects. However, unlike the teachers, there was no polarisation of opinions, rather an acceptance that this subject was not of particular importance. This following dialogue was representative of nearly all students' views on the category of the exam.

> *HB: Does it make any difference what category the exam is?*
>
> *S10-BT: Yes, because of the stress. I probably do not spend as much time studying for exams that are like this one [category D] as the others [category A and B].*
>
> *HB: If Internal Control was a category A would you spend more time on it?*
>
> *S10-BT: Yes I would.*

Perhaps it could be argued that simply spending more time studying for an exam does not in itself necessarily equate with a deeper understanding of the material. It was clear, however, from the discourse that the students would concentrate on other subjects that counted in their final grade point average at the expense of ones like Internal Control that did not. One student who really liked the subject and felt she was quite competent after completing it, was asked if she went to the library to examine any other texts on internal controls. She stated: *"not specifically for Internal Control because it wasn't a major subject that we would be worrying about" (S16-HT).* When asked to expand on what she meant by not *worrying about it* she said: *"Probably because it's not Financial Accounting or something".* Financial Accounting results go towards the students' final grade and it is a category A subject for examination purposes. Another student said: *"I have not looked at any other control books especially as this is a category D subject and nobody gives much priority to that" (S18-KT).* There seemed to be a general attitude that 'proving competence' in this subject was not too difficult. It was nice to hear this following perception even though the student knew it did not rate high on her priority list: *"For me, it is a part of my learning, but sometimes if there are priorities then I have to set my priorities because I want to do well in those [other rating] subjects" (S18-KT).* This same theme was repeated in the majority of students' responses when discussing the type of

category. Many students stated that this was an interesting subject and one that they would need to fully understand if they were to take their place in the world of commerce and business. Many of them realised the impact of poor internal controls on the performance of businesses and linked the lack of knowledge of control processes to the current corporate failures and frauds reported in the media.

As with most students their focus at the start of the subject was on how they would be assessed. There was a range of responses by the students to questions regarding their competence with understanding the material. One response that stood out was about home assignments. When asked about homework, this student replied: *"If you are in a test and you can't answer the question then you just move on. But with a home assignment you can get all the resources that you want and find out things" (S13-GT).* Doing homework was an important part of learning and complemented the classroom strategies. It encouraged the students to search for extra meanings in forming or 'changing concepts' and quite a number found that homework helped their competence. *"I think what helped is homework. Every week we had some questions like multiple choice or some cases, and yeah, if I do my homework, I know then I should be OK in the end" (S15-ET).*

There were different assessments used by various teachers to ensure students were competent. In describing one particular internal control topic this student remarked that *"you had to comment on it and do research and give examples. He actually did expect a university level essay, so it was good" (S16-HT).* This was obviously a challenging assignment and the student benefited from the expectation set by the teacher that the work should be of a high standard. These were the types of responses that indicated how essential it is to motivate the students, to engage these learners so that the active process of learning is enhanced (Laurillard 1993).

In this section where the voices of the students' experiences and perceptions at proving competence are heard, this particular category was very prominent and there were strong perceptions from the students about the value of assessments. They were, without exception, sharply focused on how and when they were to be assessed.

Motivating and learning

The definition of motivating and learning in the student context is the extent of comfort felt by the student in coping with the curriculum material.

In this particular category there were vast differences in students' experiences of motivation and learning. Sadly one student commented that her teacher *"just keeps saying 'you'll never get it, you'll never get it, you'll never get it' and if he spent less time saying that you'll never get it and more time explaining things then maybe we would get it" (S10-BT).* This was clearly very de-motivating for the student and she found herself *struggling* to understand. She exhibited *feelings of inadequacy* that were manifested in other responses that cited problems such as *peer pressure* in class and *using technical jargon.* Scattered throughout her transcript was evidence of the difficulties she experienced in *juggling work and learning* and *adapting.* When asked about her assignment she stated that the mark given by the teacher was terrible and she was tired of *asking for feedback.* Her comment speaks volumes: *"If you have a really hard marker I just think, why bother and why put effort in when they are going to squash it".* If her work warranted a low mark then perhaps this was an indication she was *wanting support.* Another of her classmates commented: *"As time goes by we felt the class to be a little monotonous" (S4-BT).*

Many students found great motivation through group work or group study. This response was to a question about the way group work was perceived. *"Because there is more encouragement and more motivation, I have a perfect study but when you sit at home you get frustrated. Studying with your friends helps" (S11-IT).* Some of the younger students told of their delight in studying in groups, either for assignments or for exams. One student said he became really *"pumped to study because you knew that everything was going in* [meaning into his head] *and sort of felt right" (S7-JT).* He was motivated by *working through problems* with his friends in the group and the feeling of competence in answering any questions he would be given. This next student noted that motivation came from the teacher's ability to explain.

> *"We have had some teachers who don't explain things very well, who just think you will know it but some people [students] don't understand it and they [the teacher] will just move on, but she [his teacher] explains it so you can understand it" (S17-KT).*

The deep understanding comes from good explanations and sharing with students the real life experiences and things currently happening in the real world. This is supported by the research of Zhou, Smith and Spinelli (1999) who found that one of the best motivators for students was the prospect of securing a good job after studying. These real life stories were

a catalyst for motivation and spurred the student on to find out more about their subject. *"I never did [read the papers] but I am doing economics as well so that's got me thinking that I have to start read[ing] the papers as well" (S1-AT).* This next student was convinced that real life experiences are essential to deep learning. *"Discussing real life things in class, that really is another way we learn, sometimes telling our own stories of what we have done before" (S13-GT).* Most of the participants spoke of the benefits they receive from the real life stories that either the teacher or fellow students brought to the class discussions. These seemed to motivate the students and the general feeling was that *knowledge change* comes from the way the experience *"brings up different real life cases that have just happened and helps us understand more" (S17-KT).*

One student when asked how the materials that he was given at the beginning and the handouts in class had helped the depth of learning replied that *"in Internal Control it has, because as I said, I wasn't really sure how in-depth it would be ... [it is] a lot deeper than what I thought it would be".* I then asked if he had enjoyed the subject? *"I really have" (S8-J10).* When referring to one of his other teachers, this student said: *"he actually motivated our minds" (S4-BT).* Perhaps the classic comment came from a student in response to a question about whether the curriculum could include more resources to help student learning. *"If the teacher doesn't seem to enjoy the subject then it makes it so difficult for us to learn" (S9-BT).*

In Chapter Two the literature review identified researchers such as Laurillard (1979), Elton (1988) and Reid and Petocz (2003) who have put forward the argument that students often expect their teachers to motivate them and provide the enthusiasm for their studies. It would seem that the discussions of real life experiences go a long way towards motivating students.

Tuning to the same wavelength

"Tuning to the same wavelength" are the words taken from a student's transcript and define the strategies and procedures students employed when picking up cues from their teacher.

Students were just as keen to get onto the teacher's wavelength as the teachers were to *get their message across* to the students. This was the relational dimension through which the hierarchy of categories had to filter before entering the learning space. It was seen as an important part of their understanding and as one student said: *"He talks to us on our level and everybody feels that they can ask questions" (S13-GT).* Another comment related to the delivery mode of the teacher: *"The teacher's style suits me. I like teachers who I can understand, not ones you feel think you are a nuisance if you ask them questions" (S5-FT).* Whatever happened in the first three categories was affected by this dimension and the interactions and the student-teacher relationship played a big part on the outcomes—either the student was 'struggling to learn' or found the experiences were 'changing concepts'.

Seeking cues from the teacher also showed the importance of getting the message. One student (S6-DT) responded with the following comment when asked what she does in class to help her learning. *"I listen intently and just give the teacher all my attention."* When asked to elaborate on the process she replied:

> *"It starts off and builds up and at the beginning it all seems a little hard because you haven't got the grasp and that's the secret of the whole thing, to get the drift of what the teacher's trying to put across in anything."*

Getting to know what the teacher requires is important for student learning and, although there may be some *struggling* at first in coming to grips with new and foreign material, the classroom shared practices will help set a framework for more positive learning experiences. Actively *listening* so that the student can interact with the teacher and ask questions helps strengthen links with the teacher. *"He is really interesting and he doesn't let it go if he thinks you do not understand something" (S20-DT).* This student obviously practised *adapting, requesting* explanations and drawing out as much as possible from the *stories* told by the teacher. Many of the comments from the students about how the teacher helps their learning were typical of the findings by Gardner (1993a) who spoke of the difficulties teachers face with accommodating a range of intelligences in their classroom.

Students were also sensitive to this phenomenon as this response shows: *"We have all got different levels of learning ourselves, so the teacher does well at actually accommodating all that and bringing it all together in a way that we can understand it" (S8-JT).* If students are tuned into the practices of the teacher their relationship is enhanced.

Being on the same wavelength as the teacher seems vital to student learning and in some cases dictates what electives a student will choose. This student was quite clear on how her subjects were chosen: *"I'll look at the subjects and I'll pick my timetable to suit the teachers that are teaching the subjects" (S1-AT).* She obviously felt that if she had any chance at all to enhance her learning, then she wanted to have teachers with whom she felt some rapport. The students are also concerned about fitting in and know only too well that deep understanding comes from being in a class where the teacher competently *directs strategies* that support *knowledge change* and *knowledge review*. Students need to be challenged but they also need to *work through problems* and be *supported*.

One mature aged student found it difficult to know just what the teacher wanted in assessments. *"I find this particular teacher if you don't hit on key words that he likes to use he generally just doesn't give you the marks and I find that this puts me under a little bit of a pressure" (S9-BT).* In this situation, the student was *struggling* to know what the teacher wanted and felt her learning was restricted by the lack of communication and her failure to tune in to her teacher. She had to use *compensating* strategies and in a subsequent take-home test stated that she was surprised to receive a reasonable mark, saying it *"was kind of a relief so I must have finally learnt how to write for him"*. This next student said how much the detailed real life *stories* helped learning, and she was quite emphatic by ending her comment: *"That's how he helps me. Look[s] behind things" (S6-DT).*

The classroom communities are a mix of participation and non-participation and will shape 'what we attempt to know and understand and what we ignore' (Wenger 1998 p 167). So for students who are learning to learn, they will want to tune in to their teacher, picking up cues and feeling comfortable in their classroom. *"Yes, there is no point in me sitting pouring out gallons of figures or anything else to you if I don't really know what he needs" (S6-DT). "I mean then you feel comfortable that you've done [well] at it when she tells you it was fantastic" (S7-JT).* The quality of the learning outcome space, shown previously in Figure 12, will depend to a large extent on how the perceptions of the students are affected by the signals darting backwards and forwards between the students

and their teachers. *"The difference is knowing something and actually being able to understand it" (S13-GT).*

4.3 The outcomes: a brief overview

The categories described in the previous sections dealt with the students' approaches to learning and the interactions inside and outside the classroom. The two categories identified as being the outcomes of these were 'changing concepts' and 'struggling to learn'. If the actions taken by students and the interactions they engaged in were successful they spoke of being able to *"think about it and discuss it"* and how it *"makes us think and find out about it"*. The students also referred to the way real life *stories* helped their *knowledge change* when the teacher *"actually explained about how it happened in real life and he then made that into theory"*. These comments on the *changes* in the students' *conception* of internal controls and the way they moved to a deeper understanding of the material highlighted the factors that promote an environment within which the students can learn. The positive responses were indicative of an enjoyable learning outcome space where the student benefited from strong signals that tended to push them towards excelling.

However, when a student made comments about the approaches and interactions such as *"there are some teachers who do not help"* the classroom became a place where the student struggled to cope with learning. In this alternative situation a student commented that *"you ask yourself why am I here—I could be teaching myself this"*. When discussions became *technical* and a student did not *"know what they are talking about half the time"* then the struggle to learn was intensified and perpetuated the feelings of distress and *inadequacy*.

Mediating signals

It is appropriate at this point to briefly discuss the approaches that either constrained or facilitated how teachers and students moved through their teaching and learning experience. It was Strauss (1987) who labelled these as intervening conditions and described them as broad and general influences that include time, space, culture, history, career and individual biography. His writings were aimed at assisting researchers to fully analyse the data and draw deeply from its richness. These can also be described as signals which impacted either positively or negatively on the students' experiences in learning:

a. Teachers' attitude and mode of delivery emerged as having a significant influence on how the student coped with the material and how they understood the curriculum. Prosser, Trigwell and Taylor (1994) described two approaches that a teacher may take: an Information Transfer/Teacher Focus (ITTF) approach, shown in Table 7 as conception A, which these authors state is limiting when compared with the Conceptual Change/Student Focus (CCSF) approach, shown as conception F. Using these conceptions of teaching, where the 'what' of teaching is the object and the 'how' of teaching is the method or approach adopted, some of the teachers' data can be analysed in this context. Recent published updates on the Approaches to Teaching Inventory (Trigwell, Prosser and Ginns 2005) have positively reinforced the earlier work shown in the next chapter in Table 7.

Table 7 The conceptions of teaching

Conception	Definition
A	*Teaching as transmitting concepts of the syllabus*
B	*Teaching as transmitting the teacher's knowledge*
C	*Teaching as helping students acquire concepts of the syllabus*
D	*Teaching as helping students acquire teacher's knowledge*
E	*Teaching as helping students develop conceptions*
F	*Teaching as helping students change conceptions*

Source: Adapted from Prosser, Trigwell and Taylor (1994)

'The dominant educational paradigm still focuses on *what* students know, rather than *how* they use that knowledge' (Seltzer and Bentley 1999, p 9). One teacher said: *"it's all about good communications backwards between the teacher and student"* and *"listening to what's being said and also understanding how it's being said"*. The teacher was aware of the importance of tuning in to the students and helping develop and change their conceptions. In this classroom there was an opportunity for students to expand their concepts and for them to have a deeper understanding of the meaning and application of internal controls. Another teacher stated that *"in internal control it is the stories and the things that happen in the world that makes the meaning to theory"*. This concentration of linking the theory to events happening in commerce meant that students enjoyed the benefits of scholarly research application that also transmitted concepts of the curriculum.

While the majority of teachers' approaches and interactions assisted a deeper understanding of theory for the students, there were incidents that hindered the formation of knowledge. The main problem centred on the lack of time for some classes. One teacher commented that *"this year because it is a one hour flexible delivery class"* there was not enough time to have any classroom activities such as discussions, role plays or presentations that may have helped students in changing and developing conceptions. This constraint severely affected many aspects of the students' learning as well as contributing

to the frustrations of this teacher. This was evidenced by the comment: *"I'm not really teaching. I'm just managing a flexible learning environment".*

b. Students' confidence in themselves has been the subject of research that shows learning is enhanced when supported by dialogue (Laurillard 1993) and the data from this study showed that classroom discussion played a very important part in the students' ability to prove competence. *"Lots of times it is the discussion that helps us learn better" (S13-GT).* Another student, when asked if it was good to have discussions, replied: *"Yes, I liked having the discussions" (S16-HT).* I then enquired if it helped cement the views about internal control. *"Yes, definitely we had a good bunch and there were some people with different views to you so it was interesting...we could discuss the views and say what you thought and you did learn more that way."* The students' learning pathway went up and down as they progressed, but as their confidence increased their learning became smoother. This student commented: *"I think sometimes by doing little cases in class or when we have a test and when it could apply to this situation, this event, I said then I know what it is about" (S15-ET).*

The more varied the activities in the classroom the more confident the students appeared to be. When asked if there had been any activities such as role plays in his class this student replied: *"Yes, we had one like that last semester and some people did like the process of goods coming in and going through the store and things like that. They actually had showed the boxes and yes, that was good" (S12-IT).* Even the students who did not take part in such activities benefited from watching their peers. This rather reserved response nevertheless hinted that a role play might be good. *"I think it would help the learning but I would be too nervous to do that. I would dread doing it but after I had done it I would probably find that I was glad I had done it" (S10-BT).* After hearing so many students say that Internal Control was not really an important subject it was good to hear this response about the role play in class. *"We've got a lot of assignments this semester and this is the one that we took really, really seriously and we did a role play with it" (S7-JT).*

c. The nature of the student-teacher relationship seemed to have a significant influence on the students' experience of ***knowledge change***. Within the interactions there were factors that either constrained or facilitated the learning. The degree of success that the students felt they achieved was in a large part dependent upon the learning environment in the classroom community that had been fostered by the teacher.

The data identified two opposing teaching characteristics that can be called facilitative or inhibitive teaching actions. Each seemed to produce different responses and perceptions in the students. The facilitative approaches and interactions led to a more positive student-teacher relationship and assisted the depth of understanding of curriculum material. These positive responses indicated that the teacher and students were on the same level, seeking negotiated strategies to enhance the students' skills and abilities to deepen their ***knowledge change***. This is typical of the findings of Prosser and Trigwell (1999) who found that the learning situation can be greatly enhanced by the way teachers and students understand their learning patterns. This following dialogue, after a short discussion about teachers' methods of delivery, is typical of how students check out the style of their teachers:

HB: So is the style of teacher very important to your learning?

S2-AT: Yes, definitely.

HB: So what style of teacher do you like best?

S2-AT: I would like someone who is not...reluctant for the student to ask questions.

Students need to gain ***feedback*** and are constantly ***asking questions***. They are ***seeking information*** and want to feel that their teacher is willing to assist their learning. This student commented: *"She is really good and we can ask her anything really. We only have her for an hour and that is not long. But she is always helpful" (S5-FT)*. Considering these classroom hours in this case were so restricted, it was the facilitative approaches of the teacher that helped this student's learning. This comment came from a mature aged student who was very sure what style she liked in her teachers. *"He's got a different style than the first law teacher. He was board man, a this man, a black and white man, and I go for that, I like that. This current man's more an entrepreneur" (S6-DT)*. Although this student felt a little uneasy with the entrepreneurial teacher, she gradually tuned in to his wavelength and her teacher helped her *'lift the veil'* on the complex theory of internal controls. Students are very quick to identify what style the teacher exhibits and whether or not it fits with their own learning style. Older students particularly tend to be more vocal about their teacher's technique.

Although this particular student liked the *"black and white man"* she went on to say she did learn from her teacher because of the way he related *stories* and *"by relating his experiences"*.

However, not all teachers were so helpful. When these approaches and interactions happened they inhibited the learning process.

> *"It is a bit of an insult to your intelligence when a teacher sits there and reads the text book to you for hours. I keep thinking I could be doing something else in this time, that is the hardest thing" (S9-BT).*

Such actions were the cause of stress and created situations where the students felt constrained in their learning and very frustrated. This comment was made with almost an apology from the student: *"He may be a very good internal control auditor, but he may not be so good [as a] teacher" (S4-BT).* To be experienced in a profession does not automatically qualify a person as a good teacher.

Conclusions

The strength of the categories that emerged from the data showed that the teaching and learning situation made up of the three hierarchical categories, 'classroom encounters', 'trying to establish competence' and 'motivating and learning' had to filter through the dimension described as 'tuning to the same wavelength' before learning can take place in the outcome space. This appears to support the propositions by James and Woodsmall (1988) that both teaching and learning practices are affected by many things, but two characteristics are behaviour and language. These are the innate programs or filters that are used to unconsciously decide what to listen to and what to ignore and they play a key role in the type and strength of signals that get through to the students. The teachers' interviews revealed the complex actions and strategies that needed to be undertaken to achieve the goal of *getting the message across* and impacting on these categories that emerged from the data were concepts such as seeking *negotiated strategies*, *providing feedback*, *encouraging* and *explaining*.

If the students could be tuned in to the same wavelength as the teacher, and felt that they were on the same level, then learning became enjoyable and the students' confidence increased and they progressed more quickly in understanding the material. In this way the students hoped to maintain collaborative relationships with their teachers and this increased the opportunities for positive interactions and quality learning outcomes. The students were able to complete assessments based on deep knowledge in a learning environment that provided *support* and *feedback*.

When asked what they did inside and outside the classroom to help their learning, students spoke at length of their approaches to learning and the interactions that took place between themselves and their teachers and how these either facilitated or hindered their learning. This depended on how teachers approached their teaching and delivered the curriculum material, and how they responded to their students' questions. It was these approaches that ultimately shaped the perceptions the students had of their classroom experiences. The significance and impact of the interactions taking place between the students and teachers gave rise to both positive and negative outcomes. It is around these categories, 'changing concepts' and 'struggling to learn', that the next discussion takes place, highlighting the teaching approaches described as either constraining or facilitating deep learning. These are the focus of the analysis in Chapter Five.

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CHAPTER FIVE

Exploring student-teacher interactions

This chapter brings to the surface those interactions between students and teachers, describing the teaching approaches and interactions that students perceived to be instrumental in either 'changing concepts' or leaving them 'struggling to learn'.

Table 8 The outcomes of facilitative or obstructive teaching approaches

Teacher orientation	'Tuning to the same wavelength' (Relational dimension)			Student orientation
		Concepts of learning activities	***Outcome of activities and interactions***	
	Chapter Four (Structural categories) 'Classroom encounters'	*Chapter 6* *Writing notes* *Working in groups* *Discussing* *Fitting in* *Seeking support* *Seeking information* *Obstructing*	***Chapter 5*** **'Changing concepts'** **(Facilitative)**	
	'Establishing competence'	*Proving competence* *Seeking negotiated strategies* *Seeking feedback* *Doing things* *Facilitating*		
	'Motivating and learning'	*Encouraging discussion* *Turning stories into theory* *Expectations* *Wanting support* *Being available*	**'Struggling to learn'** **(Obstructive)**	

The first of these is the category that is sustained by the concepts of *encouraging discussions, making stories into theory* and *doing things*. Students identified these as important in their learning experiences, all of which helped in *knowledge change*. This chapter looks more closely at one of the research questions: What things assist or prevent teachers from unlocking the mysteries of how students experience their learning?

While the students' dialogue differed as they related their experiences and perceptions of learning, there nevertheless emerged a distinct pattern when they described the teaching approaches that facilitated deep learning and *knowledge change*. All the actions and interactions identified did at times overlap and were also intertwined. They

represent the varied experiences and perceptions of the students as they approached their studies in Internal Control Procedures. This has been described as the second order relational perspectives which form the key aspects of phenomenographic research (Prosser 1993; Reid 1997; Reid 2001). The prominent approach to teaching that facilitated deep learning was *encouraging discussions*, which was supported by *making real life stories into theory* and *doing things*.

5.1 Facilitative teaching approaches and interactions

Encouraging discussions

Discussions played a very important role in facilitating deep learning. Almost without exception the students indicated how much they appreciated knowledge of what happens in the real world, and how it helped them understand the strategies and practices that changed their concepts.

> *"I guess you just sort of ...thinking about it and discussing it and then going away from the class and maybe re-reading over the articles of whatever topics we had discussed in class. Thinking about it mainly after the class, sort of thinking about the situations that [were] brought up in the class. ... Yes, it was just words on paper you were looking at...and it didn't have any meaning really. ... In particular for Internal Control it definitely is discussion and getting into a good group that you can talk to and you have to be able to network and make friends and discuss things and topics" (S16-HT).*

The perceptions of the students about reading the text or notes and participating in class discussions were clear from their comments. To fully understand what the theory is all about, class discussions were perceived to be a necessary way of bringing the words to life.

An interesting scenario occurred during the following classroom visit. As the field notes will show, the students had a lecture in the first part of the class that dealt with ethics and moral responsibilities for accountants. The following field notes pick up part of this lecture.

Observation of a class with 18 students.

Overhead: Ethics and morals - what is the difference?
The class was generally fairly quiet. On a number of occasions there were three boys who audibly talked.

However, quite a number of the students asked questions at various times. One boy asked a question about whether or not religion contributed to the standards set in ethics and a very animated discussion ensued.

One student commented on the TV interview about religion between Kevin Rudd and Tony Abbott. One boy at this stage intervened and made some useful comments adding to the debate. The three girls in the centre row were silent the whole time.

Overhead: Ethics standards
There was an excellent discussion about how ethics standards are formed. Nearly all the students, except a group of three girls in the centre, made a contribution to this debate.

At the break in the lesson, the teacher referred to the three girls sitting in the middle row in the classroom. She had great difficulty in getting them to join a discussion in class as English was not their first language. As I sat there observing I wondered if the lack of English made it too challenging for these girls to join in or if the rather vocal boys in the class tended to deter the girls from responding. We discussed the possibility that after the role play in the next session the teacher might generate a class discussion to help review the issues that surfaced.

The role play

The students were quite willing (in most cases) to take a part in the role play. They had read through their scripts during the break and there was also a panel of three students who had to ask questions after the role play finished.

1. It was an ethical dilemma and after the readings the discussion was led by the teacher.

(I made a note that the students may have benefited if they had more time to read their parts and think about the questions. Perhaps the next week would have been soon enough.)

The play did begin to generate quite good questions and general discussion. Nearly all students in the class gave an opinion on something, even two of the three quiet students who sat in the middle of the room.

2. The second play was about 'No Control', a play where the manager says the internal auditor overstepped his brief because he reported concerns about the inventory levels.

Once again there was good discussion and this time the students all participated with quite relevant responses from the three quiet girls in the centre. In fact they had very firm ideas about who was in the right and who was wrong! The interaction was stimulating and the students seemed to learn quite a bit from this class activity and discussion.

The teacher commented to me afterwards that she was very surprised at the level of interaction by the three quiet girls.

This was a classroom where the teacher enthusiastically engaged the students and facilitated a meaningful interactive debate. Even the shy girls cast their shyness aside to offer their views on the merits of the issues in the role play. In this visit I felt very much like the invisible observer, enjoying watching the actions and interactions and knowing that my presence was in no way detracting from the learning objectives. It was very different from the classroom observation set out in Chapter Four.

In the classroom observation of one of the teachers (DT) he used questions to encourage discussion among the students. The following notes were from that observation.

There were about 14 students in the class.
Topic being discussed: Fraud
Class started at 6pm pretty much on time.
Handouts were given to students, these being quite detailed.
Teacher then asked some questions about the last lesson. Quite good responses.

Teacher explained the topic for this evening.
The teacher integrated this topic with issues from last lesson.
Went into some detail about fraud and how this occurs. Used the board to write up notes.

Many students took notes from the board.
Asked questions of the students. There was quite a good response.
One student related his experiences from work in a bank. These seemed to be interesting as others in the class listened intently.

More issues were put on the board.
Students continued to write notes.
Couple of women were a little bit talkative.

Class discussion took place about the reasons why fraud occurs. This was a very animated discussion and nearly all the class took part.

(I made a note about S6-DT who was a bit quiet in the class. She seemed a little loath to take an active part in the discussion. I remembered she had said this teacher was a bit of an entrepreneur and that she rather liked her Law teacher who was a 'board man'.)

Break
During the break I discussed the lesson with the teacher and he seemed happy with the way it had developed. In particular we briefly mentioned the student who had been interviewed. He suggested that although she seemed a bit shy, she was mostly coping with the material. The students' assignments were due shortly, so he expected some questions about that. It was as per his lesson plan and his only comment was that the two women who chatted a little bit, needed to be targeted to get them to contribute more to the discussions.

When S6-DT was asked about what she did in class if she did not understand something she replied: *"I'll say excuse me – and I know he will say or he'll tell you if he thinks you're hogging the floor or whatever ... but...he'll say well you've had a monopoly on it for a couple minutes"*. The student perceived her teacher as trying to allow all students to enter the discussion. However, the question then arises; does this obstruct the learning of this student when she particularly wanted an explanation for some issue? Maybe that is one of the reasons she was so quiet in the classroom on the evening of the observation.

Making real life stories into theory

The comment from one of the students interviewed from the class to which the above field notes refer reinforced how powerful the real life stories can be.

> *"Yes exactly, like the teacher gave us an example of the David Jones guy [employee] who had the name 'David Jones' and whenever there was a cheque for David Jones he would [fraudulently] cash this cheque into his account because his name was David Jones, as well just stuff like that you would never have thought that they could do that" (S17-KT).*

Teachers can transmit concepts from the syllabus and from their own knowledge but only when they help students develop and change conceptions (Prosser *et al.* 1994) does a *knowledge change* occur. *"The difference is knowing something and actually being able to understand it. The real life stories help us a lot" (S13-GT).* Analysis of the students' data highlighted how much they enjoyed the teacher describing how the theory is applied in the real world. Those who were part time students often added valuable insights to the discussions. *"My work experience has helped me because I work at Coles and they have lots and lots of controls. I now know how to use them and I know what they are for" (S18-KT).*

Another student when asked about the stories said: *"Yes, I love that sort of stuff that is really helpful, because I often say, could you please give me an example and I need real life examples" (S10-BT).*

The challenge for internal control teaching is to engage the students in a way that helps them pick the weaknesses in control systems and to see how various controls work in practice. *"He gives us examples based on his life and on articles that he has read and picks up some points and makes it easier to understand because some things are difficult to comprehend by yourself" (S11-IT).* To make the theory come alive the teacher needs to weave into the discussions his or her own experiences and facilitate an environment in the class where other students can also add to the real world tales.

> *"Well he explains more in detail than what is written in the book. He gives us examples of real life situations and I find this helpful because you can then understand what he explains about the sections in the text book" (S12-IT).*

Many of the students commented on the benefits they received from real life stories. *"Discussing real life things in class, that really is another way we learn, sometimes telling our own stories of what we have done before" (S13-GT). "Yes, he actually explained about how it happened in real life and he then made that into theory" (S14-ET).*

While the real life stories helped deepen student understanding, it was also important that the teacher had the expertise to weave these into the theory topics. One student was asked if the stories the teacher related helped her learning. She replied: *"Yes, if you feel that they know what they are talking about and they are knowledgeable then you are more inclined to listen to them" (S10-BT).* Students are discerning and can quickly pick up on a teacher's inability to help students acquire the teachers' knowledge, described by Prosser *et al.* (1994) as D in Table 7, the conceptions of teaching. One of the best motivators is the teacher's enthusiasm to relate their own knowledge and *experiences* and share them with the students. This can only happen if the teacher has a deep understanding of the subject material and it is backed with accounting industry experience. The real life stories assist both motivation and learning and this increases the competence of the students in designing and implementing internal control procedures.

Another comment from a mature age student reinforced the benefits of stories in this response to a question of how the teacher helped her learning. *"I was also trying to apply this in my mind to my previous work. I was comparing what happens here to what happens in my country and what are the differences and what is similar and using my logic" (S15-ET).* The key approach here was that the teacher was good at explaining difficult concepts. Although there will be variation in the way students learn, if a teacher

uses a conceptual change/student-focused (CCSF) approach (Prosser and Trigwell 1997) it helps students develop and change conceptions. This next quote from a student explains how he perceived the assistance given by the teacher. *"She answers questions and she understands the concepts very clearly and what it means and if you have any questions she answers them" (S18-KT).* This approach clearly helped the students' *knowledge change* and also promoted the depth of understanding of internal control procedures. When another student was asked how the teacher helped them learn they replied: *"Like giving us examples, sometimes real life ones, using his own words to simplify it getting the class involved" (S19-CT).* In this case, not only did the real life stories help but the benefits of discussions were also apparent.

Doing things

The positive effect created by teachers as they engaged their students in learning was enhanced by *doing things* in class. The teacher, who automatically engenders feelings of inclusiveness and partnership and adopts a CCFS approach, *providing feedback* and *explaining*, will encourage students to react positively, thus deepening their knowledge. A very interesting point to emerge from the data was the fact that quite some months before the classroom visit I had interviewed the teacher KT. The role play documented above was the one that took place in this same teacher's classroom. At the interview I asked that teacher if there were any activities in class. *"Well I am not much on the role plays. I don't really see how they work, except in subjects like business communication and a few of those where role plays have got a place. But I think there is a lot of learning that comes from group work."* In the intervening time, this teacher had continued with postgraduate educational studies. The role play had generated discussion about the material delivered in the first part of the lecture. Activities or *doing things* in class helped reinforce the theory.

One question asked students to comment on what they do in lectures to help their learning. This next student was asked to explain further a comment about doing a variety of different things in the classroom. *"We learn more if it's fun rather than just sitting there going over it [the text book]" (S9-BT).* There was quite a variation in the perceptions of students regarding doing things in class. Some liked writing notes while others enjoyed just listening and participating in the discussions. This next student, who had said how much he enjoyed the real life stories, was asked what things he did in class to help his learning. *"You don't really need to take the notes on the real life cases because that is just a way of understanding, but I write them down anyway because it is interesting to know about it" (S17-KT).*

He was then asked if writing the notes helped him. *"Yes, I really like to know that I have got them there in case I want to use them and look back on what I have written about."* Documenting the real life stories helped him remember issues that were talked about in class and by *doings these things* he was able to later reflect on them. Another student from that same class commented: *"We have to take notes with the video, because we are asked questions on it. We take notes on all those things that we might not understand, [such as] tax liability" (S18-KT).* This student felt that it was expected of them to take notes but he obviously perceived there were benefits from doing so. *"Like I write it down and I can ask her later after the video. Just like the materiality issue, we asked her about that too."*

Another student (S19-CT) was asked what they did with the notes taken in class. *"I then file them in index order in my file."* I then asked if they were useful. *"Absolutely, when I am getting close to the exams, yes."* This next student also found use in *writing notes* and drawing pictures and used this practice to help understanding. *"Yes, I transfer things that might be very complicated into my simple terms that I can understand.... I can draw pictures, yes, simplify words."* When asked to tell more about this activity the reply was as follows:

> *"I review them. Check what they...if we start a chapter I write the pages that we started from, pages that we ended on, on the day, then my notes, then I go through that chapter again and see if they all match up together" (S1-AT).*

It was fairly clear from the data that doing things obviously helped the students both in understanding at the moment of instruction and upon reflection. This student commented on the perceived assistance to learning by *writing notes.*

> *"Yes, I like to write notes. They are just scribbles really and when I go home I rewrite them neatly and insert the page number of the text book that corresponds with the notes so I can cross reference that later" (S20-DT).*

Some interesting responses were made by quite a number of the students to the suggestion that they might have activities in class to help their learning. One student was a bit taken aback by this thought that there could possibly be a 'game' in class. *"I don't know. I have never been in any classes where they have taught things like that, so I don't really know. Some students might think we are here to learn and we should take it seriously, I don't know" (S19-CT).* This student obviously perceived Internal Control Principles as a serious matter and was not at all sure 'games' had a place in learning.

The classroom community depends to a large extent on the way the teacher can engage the students. One comment showed that students perceive the class environment in a variety of ways. *"I mean the class was very reserved and they didn't want to get involved" (S16-HT).* When asked if there were any activities in class this teacher replied: *"No, what I do, I ...every week I ask them to talk about something they have read or bring in that article and we discuss it in class for the first, say, 15 or 20 minutes" (HT).* At the start of new classes it is the teacher who *negotiates strategies* and very often sets the scene for the shared practices. One teacher commented on the fact that *"you've got a lot who have lost their confidence, their self-esteem and I think one of the things I try to do is to give them back some self-esteem" (KT).* This is motivating for the students and also helping the learning process.

The more relevant personal characteristics affecting perception are attitudes, motives, interests, past *experiences*, and *expectations* (Robbins 2001). Some teachers will expect their Internal Control classes to be very serious affairs, similar to the role of the internal or external auditor. But not all teachers take this serious point of view. *"I think a good teacher is one who can make his classes interesting and dare I say it, entertaining" (DT).* This teacher was described by one of his students as: *"This current man's more an entrepreneur" (S6-DT).* The student did perceive a more flamboyant style with this teacher. He (the teacher) came across as less like an auditor and more like an entrepreneur. Whatever approaches the teacher takes it is important that *encouragement* is offered and reassurance given so that the focus is on learning. As S6-DT stated: *"I listen intently and just give the teacher all my attention"* so the teacher's ability to *explain*, and *share information* in a supportive way helps the student form those mental concepts. Students have to build their own pattern of learning which comes from past experiences being integrated with the present. *"Look, my first pattern of learning wasn't a pattern I think it was sheer terror and nervousness. And my approach to it was a little bit all over the place" (S6-DT).* But given time and support students will begin to learn how to learn.

The next section examines the concepts and strategies related to the teaching approaches and interactions between teachers and students that students perceived as inhibitive or obstructive to their learning. The outcomes of these are described under the concepts of *obstructing, expectations* and *wanting support* and sustained by a variety of others such as *feelings of inadequacy*, *rushing through material*, *asking for feedback*, *earning a reputation*, *recriminations*, *feeling disaffected* and *peer pressure*, all of which represent poor or non-existent student-teacher relationships.

Together these form the category 'struggling to learn' and are negative outcomes of the classroom interactions and the student-teacher relationship.

5.2 Obstructive teaching approaches and interactions

The articulation by students of the teaching approaches that facilitated their change of conceptions provides deeper understanding of the varied ways that students perceive their object of learning. On the other hand, if the voices of the students describe teaching approaches that are obstructive or inhibitive to learning, these may lend valuable insight into the reasons that the major task of teaching, 'developing teaching and learning situations which students experience in similar ways to that which the teacher has designed' (Trigwell and Prosser 1996, p 2) often remains an elusive goal.

The approaches to teaching that students perceived as obstructive or inhibitive were in many cases the opposite of those which students related as helping to change their conceptions. The analysis identified that some special things contributed to this overarching category, 'struggling to learn'. These were: *directing*, *obstructing* and *expectations* supported further by the concepts of: *asking for feedback, dismissing, earning a reputation, feeling disaffected* and *rushing through material*. All were closely linked and at times had common characteristics. Talk of dismissive, unfriendly or abrupt approaches had their seeds generated in the time constraints that some of the teachers were placed under for delivery of the prescriptive curriculum. The language that the teacher used also contributed significantly to how students perceived the classroom environment, thus impacting on 'classroom encounters'.

Directing

The strategies used by teachers when lecturing in the classroom were sometimes *didactic* in nature and afforded students little opportunity to feel comfortable enough to engage in open dialogue or feel like an equal partner in the learning process. The strategies identified were *talking over*, *dismissing*, *not explaining* and *rushing through material* all of which tended to leave students out of the negotiation process. As one student said when asked what she did in class to help her learning: *"Not a lot – it is fairly boring and the ones in class who always answer the questions really talk a lot with their point of view. I don't know what they are talking about half the time" (S10-BT).* The teacher was leaving this student out of the learning process by talking over her head and not explaining the internal control theory so that she could reflect upon it and deepen her knowledge. To her, the class was *"boring"* and it was only when she did her own research at home that her learning was enhanced. *"The lessons are a bit in one ear and out the other, but the research at home, I*

like that and I learn a lot more that way. I get the most out of the take home assignments." Teachers who have experience in the application of the theory that is being studied, and who actively engage the students in challenging and debating the topics make the classroom a place where the teacher has an opportunity to change internal control concepts through a student focus (Reid 2001). The text book is a complementary learning tool and a reference for deeper meaning and on reflection may help *knowledge change*. When asked to explain further why his class was a little monotonous this student replied: *"because he just read the book, underlined this section, then another and a little bit of information and so on and so forth" (S4-BT).* The teacher was *directing* the students to the text, asking them to highlight the written words rather than using the classroom encounters to discuss cutting edge topics that may or may not be supported by that text book view.

At times teachers failed to adequately explain internal control concepts and this left students *struggling* to keep up with things. Sometimes the failure to explain was linked to dismissive language. *"I would say: could you explain that, and he would say: oh I have to explain more things, more things" (S14-ET).* This student was then hesitant to ask further questions or seek deeper explanations as the student-teacher relationship was damaged. This dismissive behaviour left the student stranded. *"Sometimes they did explain it but sometimes they just focus on exams and when you ask they say don't worry about it because it is not going to be examined" (S14-ET).* In this last case the teacher was obviously only focused on giving information for formal assessment, not on helping the student restructure their existing knowledge of the subject and explore new ways of thinking about their object of learning (Prosser and Trigwell 1999). For internal control theory to be deeply understood students need to expand their knowledge of the many areas in accounting and administration systems that need good quality internal controls. In reply to a question of what they do in class if they do not understand something, this student's response highlighted the different approaches to learning taken by school leavers and the more mature aged students.

> *"I just ask a question, and especially as you get older, and you have been working and you are giving up your own family time and stuff to come, so it is probably very different being straight from school and a full time student I guess, very different" (S19-CT).*

Another more mature aged student commented: *"So what we need is more lively actual case studies which are corporate examples" (S4-BT).* The dialogue in the classroom can be a powerful learning tool and according to Surma (2005) students can judge the rhetoric (delivery) of the teacher as self-serving if it lacks the commitment to engage them in

learning or is used to emphasise the 'power or authority' (p 5) in the classroom that students perceive as *directing*. I went on to ask this student (S4-BT) if perhaps they were encouraged to collect articles from newspapers and keep them for discussion in class. *"I am afraid not. Throughout the course there was one test and one final examination. There were no projects."* This particular class was scheduled for three hours each week so there was time to discuss examples that provoked debate and to set aside sessions to promote changed conceptual understanding of internal controls. I suggested to this student that the internal control theory was important and his reply was succinct: *"I mean theory is important, agreed, but however ... tell me, how do you put the theory into practice?"* These comments certainly reinforced the importance of *listening* to students in the classroom rather than *directing* them and ensuring that explanations to difficult internal control concepts are discussed and well understood so they can be usefully applied in the real world.

Obstructing

When students were asked about their lecture experiences they commonly described situations where they perceived teachers to relay information in a manner that was considered to be boring, unnecessary and automatically disregarded the students' input. In some cases this may have been due to the time constraints for the face-to-face teaching hours allocated, but in other instances it was simply obstructing the *knowledge review* and *knowledge change*. When this student was asked what he did in class if there were problems, he replied: *"Normally we just solved them ourselves" (S4-BT)*. Sometimes however, the students themselves knew that just asking for explanations does not always help deep learning. The teacher can use obstruction to the students' advantage as this student perceived. *"I feel that I would accomplish more if I looked for it and then, otherwise it is just too easy to just go and ask someone and get the answer straight away" (S5-FT)*. Obstructing learning can also occur when a student feels overwhelmed and unable to hold their own in the classroom. *"I try to ask questions, but sometimes it can be difficult because I am in a class with older more boisterous people and I am less inclined to ask questions because they do take the stage a bit" (S10-BT)*. At times the older more mature aged students held the floor with discussions so it appears that this was obstructing less vocal students by not ensuring they are brought into the discussions. One student found the text obstructed learning. *"I think for a theory subject the book should be written in simple language, not too complicated, but easy to follow" (S12-IT)*. In this class the teacher used the text quite heavily and although there were explanations made, this student found it

difficult to follow. Another teacher relied on the text with this comment from the student: *"Just sitting in the class reading passages from the text book. I found that not helpful at all" (S16-HT).* One student was quite definite about the things that obstructed her learning. When asked what was important to her learning she replied:

> *"Not just working straight from the text book either I guess, like them knowing, being pretty well educated and not having to rely on the text book. ... Good support is needed as there are always questions that people want to ask and I get really annoyed when they [the teachers] don't know" (S19-CT).*

Expectations

When students are new to a class of internal control they have expectations of what they think the subject will be like. *"I honestly thought it had a lot to do with facts and figures. I thought sales and purchases and more practical – with numbers and that sort of stuff" (S11-IT).* It is often useful for teachers to know of their students' expectations so they can think about their classroom community (Wenger 1998) and the various ways that they might encourage discussion and debate. *"I thought it would be like numbers and a bit like law. I thought it might have a bit of law" (S13-GT).* Some students were fairly close to the mark as far as their expectations were concerned. *"Actually I had some ideas about it and some expectation about it being about all the auditing in a company" S14-ET).* Then another student commented: *"Well I wasn't too sure but I knew it was about fraud and accounting controls but I didn't know what it was going to cover in any particular way" (S1-AT).*

Teachers were asked if they thought students had any expectations of the subject or understood the meaning of *curriculum.* Most felt that students generally envisaged the curriculum as a list of objectives. This teacher replied:

> *"I don't know [long pause]. I don't know that they understand the broader view of curriculum. The way I describe it to them ...it's like a check list, to give them an idea of what they should achieve from any particular subject and, ... because that's the way I teach I think ... by the time I see the students in Internal Control [Principles] when I hand out the assessment criteria they hone in on that. I just say that's a check list of things you need to know. I think they use that as part of their learning process. I don't know that they think beyond that" (FT).*

This teacher had the students for only 16 hours in the whole semester. Perhaps it is not surprising that a check list was used to convey to students a list of things they should know. No attempt was made to find out what the students expected of the subject.

The following response to a question on what they expected Internal Control Procedures to be about was by one of this teacher's students:

> *"Well I thought that it had something to do with how money and systems work in an organisation, like the different people and people double checking to make sure there was no fraud or anything like that. That was pretty much what I expected" (S5-FT).*

Her perception of this subject was that it had fraud as its main theme, but as she became more involved with the readings she offered this further comment:

> *"My view was very simplistic and then to actually be doing the reading and things like that and see that there are so many other ways for people to get through it, it did, it changed my view of it [Internal Control Procedures]."*

This student's approach to her learning was to read as much as possible, probably because it made up for the lost face-to-face hours in the classroom. As time went on her view of the subject obviously changed even though the teacher's objective was to describe the subject in terms of specific objectives on a check list detailing what the students needed to know for their formal assessment. This represented a classic information transmission/teacher-focused approach set out in the 'Approaches to Teaching Inventory' by Prosser and Trigwell (1999). Nearly all the teachers designed their teaching on the assumption that students had very little knowledge of the topics contained in the subject. These next responses were fairly typical of the teachers' perceptions of how their students viewed the curriculum. *"They are not really interested in the curriculum. They really just look at what is required to pass" (IT).* Another teacher said: *"I don't think [the students] would understand curricula as such, they would probably look at it as 'what do we do in this subject' and they would be looking for guidance from the chapters of the books that we use" (DT).* These teacher perceptions could be changed if they were to ask their students what they expected at the start of each class. Such information may help teachers focus on ways that can assist students in 'changing concepts'.

Teaching delivery

Employing inhibitive actions, whether consciously or unconsciously meant the teacher maintained his/her position of power. Students articulated how certain teachers had been *dismissive* which made it very difficult for positive student-teacher relationships to be formed. *"I had a lot of difficulties with my internal control teacher. He has constantly given me very bad marks and put me down" (S10-BT).* The student's perception of the teacher was one of *feeling disaffected* and inadequate.

Students did acknowledge that teachers in most cases had a good knowledge of the subject, but they preferred to obtain this through sharing rather than sitting in a class as isolated observers and reading the text book or *rushing through material*. This is how one student articulated the perceptions of a teacher.

> *"A teacher that you can relate to and uses down to earth words and laymen's terms as well. Not just working straight from the text book either I guess, like them knowing, being pretty well educated and not having to rely on the text book" (S19-CT).*

Another student did acknowledge that the teacher relied heavily on the text but that he *"sort of reads from the book and ...you know in shorthand, he's read from the book, then he summarises in his own words, which I quickly summarise in my own words" (S1-AT).* This, however, is simply reinforcing the concepts contained in that particular text and fails to widen the concepts of internal controls. One student was obviously very shy and found it hard to feel comfortable with the student-teacher relationship. She was *struggling* a little to keep pace with the internal control material. I asked her if she approached the teacher about the bits she did not understand? *"No, I just study it, I don't worry the teacher" (S12-IT).* She explained that *"the textbook I think is written a bit complicated"* and when pressed further she did acknowledge that the teacher *"explains more in detail than what is written in the book"*. Another student stated: *"We just sort of looked at the text book; it was quite boring" (S16-HT).* In this class there was very little interaction and although the student said the teacher handed them some articles she went on to say: *"He mainly gave them to us ... it was up to us whether we read them at home or not and then if all the class had read them we could discuss it and if people hadn't then he just left it."* This left the student feeling very dissatisfied that not more was done to encourage discussion on the articles. S16-HT was a more mature aged student with a job and was quite definite about the value she found from internal control studies. *"I mean you have your accounting work but Internal Control [Principles] out of the other topics on the side was the most relevant to working."* I asked this student if she ever had any benchmark by which she was able to measure her learning. *"No, not really ... although there were certain things the teacher did where he used certain models or flowcharts that we were meant to sort of memorise and know that but I didn't find that that helpful."* Obviously her teacher wanted the students to regurgitate diagrams and charts from the text but the student knew that this did not help her learning, reinforcing the view of Biggs (2003) who stated: 'It is therefore important that teachers not only say that reproduction of lecture or text material will be counterproductive, but also show that it is not required in the assessment tasks' (p 94).

The teacher of this previous student made an interesting comment when asked what his perceptions of a good teacher were. *"My perception is that you get the student to participate to show real interest in the topic [pause] which is ambitious on occasions" (HT).* I asked him if he had any activities in class to help this philosophy. *"No, what I do, every week I ask them to talk about something they have read or bring in that article and we discuss it in class for the first, say, 15 or 20 minutes."* At this point I then inquired if that was what they did. *"This crowd, this semester, have not done that, even though I have tried to push them."* When asked to further explain why he thought that had happened he replied: *"It depends on the composition of that particular group."* From that response I was prompted to ask if he found he learnt from those particular instances and if that changed his teaching pattern. *"Do I learn? Yes, the first few hours you try to get some recognition out of them and it's not always ... if that doesn't work you trying something else until you hit on the magic formula."* Good teaching has it roots in good planning and 'part of a teacher's role is to assist students to bring the relevant aspects to the foreground of their awareness' (Prosser and Trigwell 1999, p 25).

Analysis of teaching skills

For each teacher whose classroom was visited I asked them to complete the 'Approaches to Teaching Inventory' (Prosser and Trigwell 1999 p 176). The use of this tool helped strengthen my understanding of what the teacher had said during the taped interview, which was centred on the curriculum object. The classroom observation then focused on the enacted curriculum, watching the interactions and student activity. It was here that the relationship between the initial curriculum intent, the teachers' approaches to teaching and what went on in the teaching of that curriculum slowly emerged. Knowledge of the dialogue from their students and the teachers' own interview added to the epistemic picture that emerged of their approaches to teaching. The Likert scale gave a mean score for each of the 16 items and also an aggregate mean score for the four categories that covered both the intention and strategies in either a teacher focus or student focus context. A summary of these results is shown in Table 9 and the detailed results are contained in Appendix 3. From this summary it can be seen that in general the approaches to teaching were intended to transmit information through a teacher focus and that the strategies used also had a teacher focus.

Table 9 Approaches to Teaching Inventory

Summary	Mean response	FT	JT	IT	KT	DT	BT
Category							
Approach intended to change students' conceptions through student focus	12.50	10	14	10	16	16	9
Strategy used to change students' conceptions through student focus	10.17	5	12	9	14	13	8
Approach intended to transmit information through teacher focus	14.17	16	14	17	11	12	15
Strategy to transmit information through teacher focus	14.17	16	14	16	11	12	16

Source: Prosser and Trigwell (1999)

While the strategies used to change students' conceptions through a student focus scored an aggregate mean of only 10.17 one teacher was significantly above that and also scored well above the aggregate mean for intention to change students' conceptions. It was this teacher who placed an emphasis on preparing a flexible lesson plan and delivering material with classroom activities that were interactive. Earlier in this chapter the successful role play this teacher conducted (KT) was documented. When interviewed the teacher was halfway through a graduate diploma in teaching at university and the fascinating dialogue that follows was in response to a question on the way students learn.

> *HB: Tell me, how do you think students learn best?*
>
> *KT: I don't really know.*
>
> *HB: Well you must have had an idea when you wrote this [your workbook]. How did you think they learn best when you wrote that? You have also been talking about somebody [the teacher at university] who is doing her PhD with role plays, she obviously thinks students learn through role play, so how do you think they learn best?*
>
> *KT: Well I am not much on the role plays. I don't really see how they work, except in subjects like business communication and a few of those where role plays have got a place. But I think there is a lot of learning that comes from group work.*

Some months after that interview I sat in the classroom and observed how this teacher's approaches to teaching had changed quite dramatically. Not only was the role play she conducted interactive but it also provided an enthusiastic learning environment for the students in the classroom. In Table 9 the score for this teacher shows a positive lean towards both intention and strategies for changing students' conceptions through a student focus.

Those teachers who carried out activities that supported the theory they were teaching, were perceived by students to be engaging them on their own level. When

teachers employed inhibitive or obstructive approaches, whether consciously or unconsciously, they restricted the opportunities for student learning. Under these conditions it was extremely difficult to develop a positive student-teacher relationship, either because the student struggled to learn or the teacher struggled to teach.

One of the difficulties centred on the amount of time allocated for delivery of the curriculum material. One teacher had only one hour per week for 16 weeks. "*At the moment we are not discussing very much but as I have to worry less about getting them into the mode I'll start picking case studies. So for the hour we 'll pick a case study" (FT).* The results in Table 9 show that this teacher had both intent and strategies to transmit information with a teacher focus. In the short face-to-face hours allocated it is impossible to imagine that it could have been otherwise. Even though lesson plans were prepared, there was no opportunity for discussions where students could reveal their changed conceptual understanding. The teacher did not have enough time to develop a conversation with the students about the topics they were studying. This same teacher knew the difficulties were impacting on student learning as she made this comment: *"Last year I had the nominal hours of three hours per week with both the full time class and evening class. The evening class bring their own experience to the subject and that really enriches the delivery of the subject."* The following account of the observation of the one-hour class reinforces the fact that this teacher had to *rush through material* in order to get through as many topics as possible.

This 54-hour class is being taught as flexible learning - run for only 16 hours, that is one hour per week.

Topic being discussed: Non-Current Assets (NCA) and Cash
Started with overheads of a flowchart of the transaction cycle for Non-Current Assets.
Handouts were then given to students, these being quite detailed.
Teacher explained the NCA cycle. The teacher integrated this topic with issues the students might learn in Financial Management.

Then overhead slides with the objective for INTERNAL CONTROL for NCA were shown.

No student interaction at this stage.

Objectives:
Teacher talked about the learning outcomes and linked these to fraud and the safeguarding of assets.
Nature:
Internal Control explanations given for the Non-Current Assets cycle and supported by some real life examples from the teacher. Some examples of theft.

Specific Objectives:
INTERNAL CONTROL explanation given for these and the reasons that sound INTERNAL CONTROLs are required. For example, separation of duties etc.

No student interaction at this stage.
Some students were jotting down notes as the teacher talked.

(I made a note here that a flow diagram showing the transactions in process might have helped at this stage. Also, it could have been a good spot for a class activity here to reinforce the message from the notes.)

The teacher then asked some questions about the Non-Current Assets that are vulnerable to theft.

One student only offered an answer.
Teacher prompted with some part of the answer.
Same student answered the next question.
The teacher kept referring to the notes handed out and reminding the students about the INTERNAL CONTROL needed in all entities.

Accounting standards were mentioned from the notes and a brief mention of ratios for detecting fraud.
(I made a note at this point because I remembered a ratio example given in one of the exemplar questions in the teacher guidance notes of the curriculum material that I had written. This would have fitted in nicely and the simple time series analysis that students can draw would have reinforced this aspect of the topic being studied.)

The teacher drew the attention of students to an internal control checklist in the handout notes. Teacher mentioned that a search of the Web, in particular the police in South Australia, shows a good checklist for INTERNAL CONTROL.

(There was no mention of how checklists are prepared and how they should relate to the transaction cycles. There is a very good description of a checklist in the exemplar accompanying the teacher guidance notes.)

The teacher also referred students to the EPA website which apparently has some good checklists, a particularly good one for motor vehicles.
Students were also told to look at the CPA Website for good checklists for INTERNAL CONTROL.

Teacher then asked for anyone who might have had work experience.
No replies.

CASE STUDY from HOMEWORK set the previous week.
Asked the students what type of fraud this case represented.
No replies.

Teacher then gave the answer.
Only one student had prepared an answer from the homework case study even though they had all been asked to do so.

Teacher puts up an overhead of a flow chart for the cash transaction cycle.
Teacher then says she will act as the scribe and asks for comments on the transaction cycle. She has drawn two columns - DEFICIENCIES and REMEDIES.

Asks the students to think of deficiencies.

Only one student answered - the same student who answered before. This was the only student who had done the homework.

Teacher probes for more responses.
Two more students made attempts to answer.

At this point the teacher gives the answer while trying to draw out the student responses.
Teacher now writes up the answer on the board and the students all diligently copy down the answer.

While there was some response, it was the same three students every time.

Teacher referred back to the fact that the tone of the entity comes from the top management. She referred to the National Australia Bank foreign exchange debacle.

(Made a note again that this would have been a good point to go back to the three most important basic elements of INTERNAL CONTROL that the students should have covered in the first session. This could have been a good point for a reflective exercise.)

Teacher revisited a real life example of the 'clever secretary' that they had obviously talked about the previous week.
Teacher then gave out an answer to the homework case study. Students seemed glad to get that.

One student asked about the assignment that they would have to complete, and when it was to be handed out. Teacher said it would be handed out the following week and students could complete it during the break.

Teacher asks if there are any questions.
No answer - no questions by any student.

Teacher tells students what they will do next week. Reminds students to check the learning outcomes to ensure they know what is expected of them.

Just one hour and the lesson ended.

END OF ONE-HOUR LESSON

This class had only 16 hours in total to go through the same material that other Colleges take 48 hours to deliver face to face. There were no discussions, no reinforcement of

learning with varied activities because the teacher struggled to get through the material. This was a classic case of the teacher struggling to teach.

Another teacher (DT) who intended to change students' conceptions through a student focus did not quite implement the necessary strategies to do so. Once again, the time constraints might have had an impact here as the teacher was allocated only 24 hours for the whole semester. A comment that was significant in the interview was: *"I'm more interested in how I am going to get it across and what type of teaching strategies I am going to use to get it across."* This classic teacher-focused response was indicative of the short face-to-face hours this teacher had to contend with.

When asked if he felt his teaching was valued by TAFE he replied: *"Who are we talking about, TAFE management or my colleagues? I don't think they [management] are aware of a lot of the things that TAFE teachers are doing."* When teachers do not feel their teaching is valued then unconsciously this may transmit into their approaches to teaching. As another teacher stated in response to that same question: *"Yes but they're [management] operating in an environment where they value it but they are so busy doing other things that they are not actually thinking about how they should value it, I think" (FT).* Table 9 shows that this teacher was well below the mean response for a student focus and well above the mean for a teacher focus. Both these teachers were constrained and frustrated by time *rushing through material* and it seems that this tended to push them more towards a teacher focus approach. This may filter through the domain of getting the message across with weak signals leading to the student 'struggling to learn'.

Other noticeable variations in approaches to teaching came from BT where the scores in Table 9 show a very distinct teacher focus. *"At the beginning of the lesson I tell them [the students] what I hope to achieve during that lesson and what I am going to cover."* This teacher obviously felt it important that the subject be described in terms of what he wanted the students to know. The focus quite clearly was on transmitting information. He also stated that: *"I go very slowly through the theory and break it down and I keep reinforcing it."* In this classroom the students reported there was not a lot of discussion and when there was, the questions were always directed to and answered by the same couple of students. Students also pick up on the teachers' cues and behaviour and are quick to notice when approaches to teaching are inhibitive. The results of the analysis for this teacher were reinforced by comments from his students: *"If the teacher doesn't seem to enjoy the subject then it makes it so difficult for us to learn" (S9-BT).* Another one said: *"The lack of research work done by him, because of lack of time or whatever" (S4-BT).*

This analysis was a small contribution to the validity of the data and it was carried out in the latter part of the research. Patterns of communication were explored and matched with the students' comments. Focusing on 'who' was communicating and also on 'what' was communicated allowed me to explore the concepts and categories from a different perspective. The students' stories spoke of teachers who used discussion, negotiated and shared information as opposed to teachers who instructed or transmitted information to them. This allowed the analysis to be taken one step further and infers meaning; referred to as latent or inferred analysis (Boyle 1994).

Learning through feedback

The student-teacher relationship is supported by the overall quality of the classroom environment and communication plays an important role in the learning process for students wanting support. While the concept of feedback was considered only a support to the emerging categories it nevertheless brought to the surface some important issues that play a role in 'Learning to Learn'. In the whole pedagogical process of the enacted curriculum, designers, developers, teachers and students all need feedback to help them learn.

The literature on assessment and feedback is well documented (Harris and Bell 1990; Angelo and Cross 1993; Laurillard 1993; Brown and Knight 1994; Boud 1995; Fraser 1996; Gonczi 1997; Worthington 2002) and one of the common complaints made by students in the research was that they did not receive enough valuable feedback. This can be de-motivating and often leads to poor channels of communication between the teacher and the student. One of the most constant sources of success at getting the message across is *asking for feedback* or *providing feedback*. Persons receiving messages through communication channels will respond in ways that help the sender determine the level of comprehension. This student had trouble knowing what the teacher was asking in the exam question.

> *"I was disappointed with my exam because I put a lot of effort into reading everything and being as prepared as I could time wise and the result wasn't as good as I had hoped and I found some of the questions could be taken several ways ... not understanding what the question was asking" (S9-BT).*

The questions were not clear and the student did not know how they should be interpreted. The student went on to say: *"I find this particular teacher if you don't hit on key words that he likes to use, he generally just doesn't give you the marks."* The student had to learn the hard way what the teacher wanted as feedback. Thus, providing feedback is essential for good communication (Dwyer 2003). The ability of a teacher to provide good feedback

will be a determining factor in the students' learning pathway (Brown and Knight 1994). The teacher may perceive how the message is getting across quite differently from the way the student receives it. Could this impact on the teachers' methods of delivery and the verbal interactions in the classroom? A student who is 'struggling to learn' needs more than ever to communicate with the teacher. The language has to avoid being *dismissive* and the signals read carefully using cues prompted by seeking feedback and giving feedback (Harris and Bell 1990). Only when this process is completed can real learning take place. One student had great difficulty in communicating with the teacher.

In response to a question about how the teacher helped her learning she replied: *"This teacher says we will never get it, and another teacher only gives credit to those students who are like, about 20 years my senior, with 20 years of experience" (S10-BT).* The perception here was that the teacher was *dismissive* and only the older students seemed to matter. This student finished by saying: *"Here we are who know nothing – can't get a word in and they [the older students] just say, 'oh you'll pass'!"* Obviously she was not able to communicate with her teacher and maybe the teacher was unaware of how the messages were received in the classroom.

The teachers themselves also need regular feedback if they are to learn what teaching methods work well and what ones do not. They were asked if they felt their teaching was valued. Some of the following responses uncovered perceptions that the teachers have of their teaching: *"There is a perception in TAFE in this department of accounting and finance that category A and B have a higher status than category D subjects. I don't agree with that" (BT).* This teacher felt that because he was teaching a subject that carried no weight in the final grading for the students it was relegated to a lesser priority in the whole program. The next dialogue with another teacher was in response to the same question and was very clearly stated.

ET: No I don't think so, no.

HB: Why not?

ET: They [TAFE] wouldn't know. No one ever comes and looks at my class or anything ...[pause]

HB: Is there any evaluation ever done?

ET: No, not now, no.

HB: Does anyone ever evaluate your teaching; do the students ever evaluate you?

ET: No. Well yes I suppose, the only way you would ever pick that up, you might teach them in stage three and they will come and say; "what are you

teaching in stage four?" and then you know that you must have done something right.

HB: But there is no official evaluation. Do you think there should be?

ET: Oh yes, there should be.

These comments displayed feelings of isolation, of teaching in a vacuum where no feedback is given to assist the teacher improve his or her own teaching skills. Teachers are expected to interpret and deliver the curriculum and if this is done in an environment where they feel quite isolated and out of the communication channels then their behaviour may be the result of *feeling disaffected*. ET went on to say that much of the administrative work now makes the teachers' lives too busy.

HB: So you really don't feel that TAFE has got the ability to value your teaching?

ET: Well I think what has happened is that the head teachers are becoming so administratively involved that they have lost sight of their original task; that was to guide teachers in education, that's what it was all about, that was the role of head teachers and senior head teachers, to act as a mentor for teachers.

A dialogue with another teacher supported the view that feedback should be given to teachers.

HB: Do you think they should do some more sort of evaluations?

FT: I think it should be done, yes.

HB: Do you think they should ask students to help evaluate?

FT: I think they should ask students to help evaluate but there is a danger in taking too much on what students say but I think it should be part of an overall evaluation. And obviously if everyone is evaluated you are going to get both random differences.

In conversation with another teacher, the views about evaluations were a little mixed and the following quotes exemplify the perceptions:

HB: Do you think your teaching is valued by TAFE?

GT: I think so.

HB: And why do you think that, what are the indicators?

GT: Well, I don't know about TAFE but I am sure the teaching is valued by the students.

So it really was a feeling that his students valued his teaching. He was right as the following comments from his students attest when asked how their teacher helped their learning:

"It is like, you sort of look at the text book and it is just the dry bones, and the teacher puts life on these bones. He talks to us on our level and everybody feels that they can ask questions" (S13-GT).

When HT was asked the question about whether he felt his teaching was valued he paused for a moment or two before answering: *"I imagine it is but I am more concerned with [whether] the students appreciate it or not."* Another teacher commented: *"Not by TAFE nor by my supervisors. By my students 100%. I did my own personal question from them [the students] and I got a report and it was marvellous" (IT).* This teacher knew the value of feedback so decided to obtain his own feedback from students through a questionnaire. At least he was able to reflect on his teaching from his students' feedback. The next teacher did not seem too sure when asked if he felt his teaching was valued by TAFE. *"I think so. It is hard to say actually because there is no performance measure with any significant reward at the end of it or any promotion to look forward to" (IT).* Part of this value he perceived would have been gauged from his students' appreciation of the unit he was teaching. He finished by adding: *"No we don't have any formal evaluations on our teaching at all."* This next teacher was very definite that her teaching was valued by her students, but not by anyone else.

> *KT: Valued by TAFE? Probably valued by my students, probably valued by my head teacher but apart from that, no.*
>
> *HB: Is there any way that you get evaluated on your teaching?*
>
> *KT: No, not at the moment.*
>
> *HB: Is there no feedback on teaching?*
>
> *K-T: No.*
>
> *HB: Do you think it would help to have any feedback?*
>
> *K-T: It's a necessity.*

If teachers themselves do not receive feedback on their teaching there can be no communication continuity, misunderstandings can arise and remain unresolved and further discussion about curriculum, assessment and students is limited (Dwyer 2003). All the teachers interviewed knew that just as feedback is a way of learning for students, helping to remedy mistakes and diagnose faults (Brown and Knight 1994), it is also a way of reflecting on their teaching practices and methods. Feedback through this research brought to life this comment by a student. *"I find I learn more from sitting down doing short assignments than I do, like if I was there just looking at the blackboard for an hour and a half" (S9-BT).* As Brown and Knight concluded, 'feedback, evaluation, judgement and assessment are inherent in learning and living. And necessary for both' (p 37).

Conclusions

This chapter has explored student-teacher interactions that students perceived as either facilitative or obstructive to their learning, experiences that made up the categories 'changing concepts' and 'struggling to learn' shown in the learning space of Figure 12. When teachers and students were communicating well and able to read the cues and signals, there was more chance for students to 'establish competence' and be 'motivated to learn'. Students' self-confidence went up if they perceived the teacher as encouraging and approachable. This increased the opportunities to *negotiate strategies* that were beneficial to the learning environment and helped reduce the *feelings of inadequacy* which inhibit rather than facilitate learning.

These facilitative approaches and interactions by teachers paralleled closely those espoused in the literature (Elton 1988; Biggs 1996; Fraser 1996; Prosser and Trigwell 1999) as being student-focused and supporting a deep approach to learning. The benefits of the discussions in extending critical thinking and encouraging students to use higher order cognitive processes clearly emerged from the data to support this view. These approaches help the construction of interconnected knowledge and the pathway for the student that leads to a fuller and more satisfying learning experience. Through these processes students are encouraged to be lifelong learners (Chappell *et al.* 2003) and this assists them in answering further questions that deepen understanding.

The categories and concepts that made up 'changing concepts' were the positive part of learning to learn and collectively could be thought of as 'seeking wisdom' depicted in Figure 13. Perhaps this quote from one student sums up these facilitative approaches to teaching and the deep understanding that positive connections can bring: *"I know when I have learnt something because I can figure it out myself and know what other qualities of internal control are attached to it like control procedures, and I can comprehend in writing" (S18-KT).*

The chapter also described the category 'struggling to learn', emerging from the teaching behaviours that students perceived to be obstructive to their learning. Experiencing such unsatisfactory approaches added to the stress felt by students and led to *feelings of inadequacy* and an uncomfortable sense of detachment from the learning environment. Inhibitive teaching approaches reflected an authoritarian style of practice that was primarily a teacher-focused approach aimed at transmitting information rather than assisting students to change their conceptions of their object of study. Whether these approaches were taken consciously or unconsciously the students' perceptions were that

the teacher was controlling the environment rather than sharing values in a classroom community of practice (Wenger 1998). In some cases there was little or no recognition that deep knowledge comes from sharing experiences and ensuring students feel very much a part of the learning. These inhibitive approaches did not help students in their quest to 'establish competence'.

There were some instances where students were relegated to the periphery of the classroom, where concepts were not explained or explored and dismissive behaviour left the student stranded. Student-teacher relationships under these circumstances became very difficult and strained and as a consequence some students were bored or at worst *struggled* to keep up as the teacher *rushed through material.* For some students there was a perpetual feeling of *peer pressure* and, in one or two cases, of *recriminations* when questions were asked. If the teacher did not engage the students interactively or they used rhetoric that emphasised their power or authority (Manke 1997) then students perceived this as *directing* rather than embracing and it left them 'struggling to learn'.

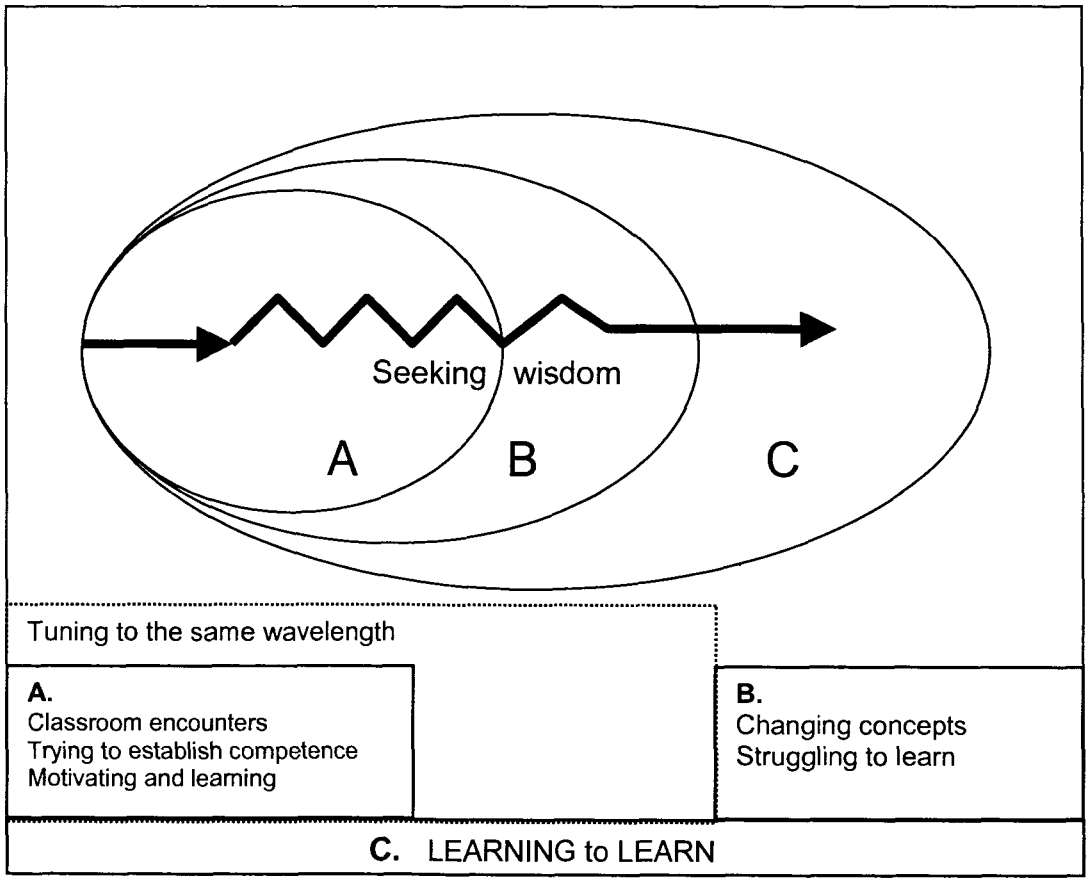

Figure 13 Seeking wisdom

All of these things represented in Figure 13 show the learning pathway lined with the hierarchy of categories, all having some impact on the student learning process. The diagram depicts the students' approaches to learning. This starts smoothly as they journey towards their learning outcomes, vibrating as they try proving competence, *juggling work and learning*, *reflecting*, *competing* and *fitting in* to the classroom community. As they gradually progress they find that they are either 'struggling to learn' or 'changing concepts' or indeed shifting between the two.

When students reach a point where they have learnt how to learn, they will more fully understand the relationship between their experiences of learning and the object of their learning. It is in this context, represented as the expanding knowledge change 'C' in Figure 13 that the teacher can attempt to change the students' 'perception of his or her learning situation' (Prosser and Trigwell 1999, p 18).

Chapter Six moves from an emic to an etic view of the students' experiences of learning and the approaches to teaching by presenting a discourse analysis of the teachers' interview data, class observation notes and the students' interview data. Triangulating the data sets in this way provides a cross-check of the information and conclusions and strengthens the theory developed in this research study of how students learn to learn.