CHAPTER TWELVE

SCHOOLS AND LIFELONG LEARNERS

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For the past ten years, educators have been using the term 'Lifelong Learning' to mean engagement in learning throughout life rather than adult education or second chance education. This more recent interpretation embraces the notion that we keep learning from the cradle to the grave (European Commission, 1995). In this interpretation, school years are a part of a journey that continues throughout life. They are, however, a very significant step in the journey, being a time when foundations for future learning are laid.

For schools, the term 'Lifelong Learning' represents an immense change in orientation. This change may be as momentous as that of the industrial revolution of the late eighteenth century (McKenzie, 2000) from where the idea of compulsory education for all emerged. Although notions of equity and 'equality of opportunity' (Karmel, 1981) have been a part of the compulsory education rhetoric, education offered in the nineteenth and much of the twentieth centuries was underpinned by beliefs that 'academic' was superior to 'non academic' and 'professional' was superior to 'trade'. In school education children were ranked, classified and labelled as successes or failures, as 'clever' or 'good with their hands', which meant 'not clever'.

Need for an orientation to lifelong learning arises from the present information age, where knowledge changes so rapidly that technical knowledge learnt one year may be obsolete the next, where, arguably, it is more important to possess the ability and resource skills to learn rather than to possess specific technical knowledge at any given point in time. Some of the most significant implications for education are that facts, which were once the basis of a school curriculum, are now regarded as transient. We cannot be certain that knowledge is truth (Aspin, 1997). The workplace no longer values the precision, regularity and predictability of the past. More important than possession of facts and ability to follow set patterns, is to know how to learn, and to have characteristics such as curiosity, self-confidence and ability to make links from one area to another.

There is now a considerable literature that outlines the elements of lifelong learning for schools (for example: Bryce & Withers, 2003; Chapman, Toomey, Gaff, McGilp, Warren, & Williams, 2003; Enterprise & Career Education Foundation, 2002; Hargreaves, 2004; Longworth, 2003; OECD, 2004a & b). This chapter will review characteristics of school pedagogy that are oriented to lifelong learning. It will draw heavily on the outcomes of a project undertaken by the Australian Council for Educational Research (ACER) that investigated ways of improving the foundations for lifelong learning in secondary schools (Bryce, Frigo, McKenzie, & Withers, 2000; Bryce & Withers, 2003). The chapter will then conclude with a discussion of some challenges that schools embarking on a lifelong learning journey are likely to encounter.

A LIFELONG LEARNING PEDAGOGY

The ACER project started with an exploration of the theoretical basis for lifelong learning in a secondary school context. An extensive literature review was undertaken and key educational concepts that are thought to provide the foundations for lifelong learning were identified (Bryce et al. 2000). Through case study work the research investigated ways to operationalise these concepts by exploring curriculum structures and teaching and learning strategies observed in secondary schools of various kinds which followed approaches to lifelong learning suitable to the particular school culture. Seven schools were visited. They were not necessarily 'light-house' schools – exemplars of practice. But all had some interest in orienting towards a 'lifelong learning' approach. The schools were government and non-government, located in South Australia and Victoria (Bryce & Withers, 2003).

Major elements that emerged from this study suggested that schools with an orientation to lifelong learning:

- focus on information literacy;
- stress certain values, dispositions and attitudes;
- stress certain skill sets beyond the 'basic';
- acknowledge the significance of self concept and self regulation in learning how to learn; and
- acknowledge the importance of teachers as facilitators and role models of lifelong learning.

Information Literacy

A part of learning how to learn and becoming an independent learner involves learning how to handle information, and learning how one best handles this in terms of one's own strengths and weaknesses. It is essential to have some information literacy in order to become a lifelong learner. At upper primary and secondary school students can explore information independently with guidance from teachers. These students are aware of multiple sources of information – for example, deriving information from telephone conversations and interviews as well as printed and electronic material. Students were fluent users of the Internet in many schools in the ACER study. But the term 'information literacy' encapsulates a great deal more than information technology. It involves knowing how to retrieve information from various sources and recognition of the need for information. It involves collecting, analysing and organising information from multiple sources and the ability to pose appropriate questions and integrate the information. Most importantly, students who are information literate are able to evaluate and offer critiques of the information they gather, sort, and classify. As one teacher explained:

> It's not just a matter of finding out some information and that's it. We actually sit down and plan what they are going to learn, their skills, their knowledge, their experience.

The library is often the hub of learning in those schools that have a focus on information literacy. There are practices where it is acceptable for students to come and go freely from this centre during class time. In other schools there may be a 'learning centre' that serves a similar purpose. This focus also assumes that there will be staff in the library or learning centre who can help students to plan and evaluate information as well as to retrieve information.

Values, Dispositions and Attitudes

Young people need to be able to make connections between different fields of knowledge – to have what Candy, Crebert and O'Leary have described as 'helicopter vision' (Candy, Crebert, & O'Leary, 1994). Lifelong learners need to be willing to adapt and be prepared to be flexible. Curiosity is an important attribute for the lifelong learner – a disposition where one uses initiative to explore avenues regardless of traditional subject boundaries. There is a close link here

with information literacy, where a person uses initiative to explore various sources in pursuit of knowledge. In a school that values lifelong learning, one sees young people working in groups in all kinds of places, not necessarily in the classroom or the resource centre. There is often animated discussion.

Differences and change are celebrated. The importance of such values and dispositions is now recognised at a policy level where lists of work-related or 'employability' skills include working in teams, adaptability and flexibility, curiosity and, indeed, 'lifelong learning' (for example, ACCI, 2002; OECD, 2001).

Traditionally, 'intelligence' has been viewed as logico deductive reasoning, particularly in mathematics. Knowledge has been conveyed by reading. In the past, if a student had difficulty reading, he or she was pretty much doomed to be regarded as 'unintelligent'. The idea of multiple intelligences was popularised in the 1980s by Howard Gardner (Gardner, 1993, 1993b). Other writers (such as Goleman, 1996; and Sternberg, 1985, 1996) acknowledged that intelligence is not necessarily logico deductive reasoning – people may be intelligent in many ways, including emotionally, practically, creatively, kinaesthetically. In keeping with these views, teachers now recognise that students who have difficulty learning by listening or reading, may be very good at learning and expressing themselves in other ways all of which are valid.

Reading and numeracy continue to be essential abilities for the learner. The point to make here is that where there is a lifelong learning approach, different kinds of intelligence are acknowledged and valued, whereas in the past the range of abilities considered to be 'intelligence' was more limited.

One teacher in the ACER study referred to different kinds of intelligence as different strength groups:

> We encourage the students to develop strength groups and when they are working on a project to incorporate within their strength group someone who is not strong in that area so that that person can have a different input into their project.

This was a case of both acknowledging and celebrating different kinds of intelligence: acknowledging that people may tackle problems in different ways and from different perspectives and celebrating the richness that a diversity of approaches may bring to a task.

Whereas for some time lip service has been paid to individual differences, teachers are now encouraged to teach group work explicitly and to use strategies that 'support different ways of thinking and learning' (SofWeb, 2005). For

example, in Australia, the Victorian Government Department of Education states that teachers are to help students 'to understand their own specific learning needs' and to set 'a variety of types of tasks during each unit and [use] a range of resources eg. print, visual, aural, experiential' (SofWeb, 2005, p. 7).

Thus the main values, dispositions and attitudes that are evident in schools with a 'lifelong learning' approach are:

- encouragement to develop 'helicopter vision';
- encouragement to develop curiosity;
- encouragement to be flexible and adaptable;
- the welcoming and celebration of change;
- recognition of different kinds of intelligence; and
- recognition of different ways of learning.

Skill Sets Beyond the 'Basic'

Over the past decade there has been a focus on the importance of encouraging students to develop certain generic skills. Some of this interest has been driven by economic factors; in particular high rates of unemployment or casual rather than career focused work for young people (Mayer, 1992). But, in addition to this, generic or cross-curricular skills have also been considered important in light of the 'information age' mentioned above. Because knowledge is readily accessible and changing rapidly, it is considered important for young people to learn how to access, evaluate and use this knowledge. These skills are context independent – not tied to any particular domain of knowledge. Whilst being cross-curricular and context independent, it is the case that these generic skills are learned and practised within particular contexts and it is assumed that the skills, having been learned in one context, can be transferred to another.

Generic skills similar to those developed in Australia (Mayer, 1992) emerged at about the same time in various Western nations (for example Department for Education and Skills: Key Skills in the UK; Ministry of Education: The New Zealand Curriculum Framework of Essential Skills; United States Secretary's Commission on Achieving Necessary Skills). Generic skills that were considered important in all of these countries included Communication, Working with Others, Planning and Organising and Problem Solving.

In schools oriented to lifelong learning, generic skills are seen as helping students to think independently and reflect on their learning. For example, problem solving is not necessarily a convergent exercise of trying to find the

correct answer; divergence and creativity are encouraged, and the problems themselves may be conceived by the students.

Communication skills are highly valued, where students work collaboratively and express themselves clearly in both formal and informal situations listening to others and making appropriate contributions. Through interpersonal interactions students acquire 'reflective independence' (Nixon, Martin, McKeown, & Ranson, 1996) whereby they build for themselves a richer and broader community that assists the development of their sensitivity and judgement. Interaction with both peers and adults helps to develop such independence, especially when the interactions are common and valued by all parties. These skills are enhanced when the classroom becomes a 'community of enquiry' (Splitter & Sharp, 1995), a place where it is safe to take risks and students feel comfortable asserting their own opinions or challenging those of other students or teachers. It is also important to have time to work alone and reflect – to monitor one's learning needs and set personal goals that will take learning further.

One way of encouraging students to reflect on their learning is to have them keep reflective journals. It is, however, essential that the teacher allows some time with each student to discuss the journal entries. Even very young students can reflect on their learning. The writer observed a double class (approximately 50 students) of six year-olds reflect on their learning when she was evaluating an arts program at a school involved in the South Australian Learning to Learn program (Department of Education and Children's Services). Each student spent about five minutes thinking about what he or she needed to do next to progress learning.

Significance of Self Concept and Self Regulation in Learning How to Learn

If young people are to become lifelong learners, they need to know how they learn and to be self-regulated learners. According to Zimmerman (2002, pp. 65-69), a self-regulated approach to learning involves three phases:

1. The *Forethought* phase, which includes task analysis, goal setting and planning, and self-motivation;
2. The *Performance* phase, which involves self-control, deployment of the strategies planned in the forethought phase, and self-monitoring, and;
3. The *Self-reflection* phase, which includes self-evaluation, including causal attribution to errors or successes.

Zimmerman (2002) maintains that the skills required to implement each of these phases can be learned. The extent to which a student can be a self-regulated learner is related to his or her confidence and sense of agency as a learner (Bryce & Withers, 2003; Candy et al., 1994). This confidence and sense of agency depends to a significant extent on an individual's view of the nature of ability (Pomerantz & Saxon, 2001). If a student views ability as 'fixed', and if that student views him or herself as 'a failure', this failure will be accepted passively as being outside the student's control. (Pomerantz & Saxon, 2001, p. 154).

The cultivation in all students of positive self-concepts as learners is probably the most important way that a school can shape young people to be lifelong learners. A Year 10 student interviewed in the ACER study had been 'dead set' on leaving school as soon as possible, he then moved to the particular case study school and changed his mind because:

> The teachers want to help you and they really show a keen interest. [They] help you set your own goals. I know if I didn't come here, I wouldn't be doing much. I'd probably be sitting at home doing nothing.

Another way of encouraging a positive identity as a learner is when teachers help students to recognise how much they know. The following is from a conversation with a teacher at the same case study school referred to above:

> They have got lots of skills, but they don't know how to audit the skills that they have achieved. . . . So I try and break down their tasks that they've done into smaller parcels and then push it in front of them and say, you just did that – do you realise you did all those steps? Like a kid said to me the other day, I took a cutting deck off a [*brand name*] rider mower, that's all he wrote. I said, how do you do that? . . . And he said, you do this, you take these bolts – and I said, what bolts, tell me exactly what you've got to do, so that if I was going to do it . . .and we wrote down 19 steps.

The Importance of Teachers as Facilitators and Role Models

For many teachers, the change from a traditional role of imparting knowledge to facilitating lifelong learning poses a significant challenge. This will be discussed at greater length later in the chapter. In order to help students to set their own goals and evaluate their progress towards them, teachers need to be mentors and facilitators rather than dispensers of knowledge. They also need to be role models of lifelong learners – showing that they are continuing to learn, acknowledging that there is a lot that they do not know.

With a lifelong learning approach all students are valued as learners – not just those who show academic potential. Teachers need to have high expectations of all students. This means taking an interest in each student as an individual and also taking an interest in *how* each student is learning rather than only evaluating the end products. If teachers are to be models of lifelong learners they need to feel comfortable about taking risks. This is a part of being open about their own lack of knowledge in certain areas. It is helpful to work collaboratively not only with teaching colleagues but with specialists such as librarians, and members of the local community.

To sum up, what are the main elements of a lifelong learning pedagogy?

Learning how to find, analyse and interrogate information is considered as important as the content of the information. It is helpful to be able to take a 'helicopter vision' (Candy et al., 1994) of a field of knowledge – to be able to make links from one field to another without being confined by traditional subject boundaries. It is important to recognise and value different ways of learning and different kinds of intelligence. Generic or cross-curricular skills are valued, including working with others and independent reflection. Students are encouraged to know how they learn and to become self-regulated learners (Zimmerman, 2002) with a strong sense of agency as a learner and a positive self concept. Students usually learn best in a 'warm' environment where the classroom is a community of enquiry (Splitter & Sharp, 1995) and teachers are facilitators more than imparters of knowledge.

WAYS THAT SCHOOLS CAN BE ORIENTED TO LIFELONG LEARNING

There is no recipe for becoming a lifelong learning school. The ACER study (Bryce & Withers, 2003) observed many different approaches that were in keeping with schools' particular philosophies and cultures. One school with a strong Christian ethos viewed lifelong learning as underpinning that school's philosophy of mercy. Another school with a strong focus on preparation for work saw lifelong learning as opening the school and developing it as an integral part of the local community and another described itself as 'a safe house for learning how to learn' (Bryce & Withers, 2003, p. 41). Some significant indicators of lifelong learning that emerged from the study were that:

- ownership of the need to learn rests with students, who are helped to set and evaluate their own learning goals;
- there is a central hub of learning in the school (such as a learning centre or library) rather than a rigid vertical structure;

- there is provision of time and encouragement for students to think and reflect and this is supported by someone with the role of a mentor;
- teachers themselves are model lifelong learners;
- there is an emphasis on formative rather than competitive assessment; and
- there is an environment where learning is fun.

Before discussing each of these indicators in turn, it is important to emphasise that a school's orientation to lifelong learning is a journey (Longworth, 1999) that cannot be accomplished quickly. A principal at what was described as a 'very traditional' high school at the very beginning of the lifelong learning journey said:

> If I'm passionate . . . and I come in and say, right – we'll have 100 minute lessons, we'll have work placements – I may have the authority to do that, but I don't think it would be sustained. After a little while, the arms would be folded and we'd see all the problems it would have caused because it had come too soon. So – I think it's stealth. My approach here has been to keep that stuff on the boil, to ask those challenging questions, to cause a little bit of discomfort.

All schools are already learning communities and to some extent they will already have strengths in some of the indicators mentioned above. Once significant members of a school community have become interested in the idea of becoming a lifelong learning school, they can start to consider the extent to which that journey has already started, by asking questions such as:

- Do students at our school set their own learning goals?
- Is there fluidity between year levels?
- Is there a learning centre that is the hub of learning in the school?
- Are students given time for reflection, and is there opportunity for them to share their ideas with a mentor?
- Do we value and support our teachers?
- To what extent are our classrooms communities of enquiry?
- What are the strengths in this school that we should build on?

In the 'very traditional' high school mentioned above, there was already a learning centre, but it had been used for special education and the Learning Assistance Program. This was an excellent strength to build on because the program represented many elements integral to lifelong learning. In particular, each student in the program had a mentor, a volunteer from other students,

parents, or members of the local community. The school counsellor described the motivation of some of these volunteers:

> A lot of them had trouble themselves in their early years at school and they want to help somebody. A lot of them need a boost in their own self-esteem and they become the guru rather than being at the other end.

One significant step was to open the centre to all students, not just those who had been classified as 'special ed'. Gradually the stigma of 'having to go to special ed.' could be removed and the role of the centre could be seen as a place where any student could go to talk to a mentor about his or her learning.

A Year 12 student in the school indicated how this transition was progressing:

> It is good, because it's not a specific – right, we're going to teach you how to read. They [groups of students] just have sessions and they do – maybe work they have to do for a subject or learn how to use a program on a computer. Most importantly it gives them confidence. I think it would be good if we could have heaps more volunteers so that everyone could use it – not everyone – but a lot more people who didn't think that they needed assistance.

There is also a strong pastoral program in the school based on 'home groups'. Home group teachers are encouraged to get to know their group well and they teach the group as often as possible in a secondary school. The group is encouraged to evaluate how they are working as a group. The school can build on this a practice that encourages students to reflect on their learning.

The discussion now turns to examples of ways that schools have started to address the indicators of lifelong learning.

Ownership of the Need to Learn Rests with Students

Traditionally, ownership of the need to learn has rested with the teacher. If students in a class are not learning, the fault has been seen as that of the teacher, whose responsibility it is to motivate them. Programs exist that can help schools to orient to an approach where responsibility for learning rests with the student. For example, one of the case study schools (Bryce & Withers, 2003) used the Australian Quality Council quality learning program: Plan, Do, Study, Act (Business Excellence, 2002). As the school principal pointed out, traditionally, most emphasis for the student has been on the 'Do'. But at this school, students were actively involved in all four phases. For example, at this school the Languages Other than English (LOTE) teacher gave her students the prescribed

set of curriculum outcomes and asked the students to rewrite them in a way that was meaningful to them. She pointed out many benefits of doing this. It gives students a clear purpose – they know where they are heading. Some comments from students in other classes at this school indicated the effects of the Plan Do Study Act approach, for example, a Year 10 student in an Industry and Enterprise class said:

> In this class you get to make your own decisions. You get to think for yourself and not have the other teachers think for you. That's what I like about it.

And some Year 12 students said:

> In English they've changed the course around, so, instead of the teacher teaching you, you're learning for yourself. So they're pushing you more to do the stuff yourself, even to correcting your own work as a group.

At another school, for the first assignment in Year 10, students had to analyse their learning styles. They could then reflect and build on this information as they planned their learning for the year.

There is a Central Hub of Learning in the School

The most appropriate focus for learning in a school will, most likely, depend upon that school's culture. A case where one school developed a 'hub' from what had been a centre for special education has been mentioned above. It must be stressed that this 'hub' is available to everyone, not just the people needing 'special' help, or privileged students who behave well. When this researcher visited the case study schools (Bryce & Withers, 2003) it became evident that if students are given the opportunity to learn at their own pace, in their own way, something that they want to learn, they will do it readily. There seems to be no need to worry about students abusing opportunities for independent learning when these things are in place. But these things will fall into place gradually.

Within a hub of learning, year levels and age levels mix. There are many instances of older students helping younger ones. In senior colleges in the ACER study there was a considerable range of ages, which seemed to be beneficial to students' learning. For example, speaking of the school's learning centre, one group of students said:

K: There's not like the dud group, or whatever.
W: You're all here together; you all want to learn.
K: You could have someone who's 26 and someone who's 18 on the same table chatting.

What's it like working with older people?
K: It's interesting – you hear their views. A lot of them say they like hearing our views.

There are staffing implications for a centre of learning. It will not have the desired influence if students who go there are frustrated because there is no one who can guide them. It is important that there will always be a teacher or a person in a position to offer assistance. To some extent, such assistance can be managed by forward planning. One of the case study schools had developed a lot of 'how to' pamphlets for the learning centre that helped students access information, write reports and use particular kinds of texts. This is helpful, but insufficient. In libraries, teacher librarians can fulfil the role of guiding students, but in a large school, more staff may be needed. As mentioned above, one school used volunteers from the local community. Students who come to a centre of learning mainly need a mentor; someone with whom they can talk through their ideas and strategies. A 'volunteer' or older student can, in many cases, fulfil this role very well.

There is Encouragement for Students to Think and Reflect

One way of encouraging students to reflect about their learning is to suggest that they keep diaries or reflective journals. It is important to support this practice by setting aside time to talk to students about their journal entries and to make use of the journals. Again, it is a role of mentoring. For example, at one case study school there was a Year 10 Industry and Enterprise class. These were students who, in a traditional school, might have been labelled 'reluctant learners'. They were not keen on writing and found it difficult to articulate their ideas in discussions. On Thursdays each student had a work placement. On Fridays they had an Industry and Enterprise class. The one hour class was spent reflecting on their previous day's work: what did you do? What did you learn? What did you do well? – the teacher helped them to structure their thinking. If they wished they could use photographs and sketches in their journals. In that one hour class, the teacher managed to talk to each of the students on a one-to-one basis.

Another way of encouraging students' thinking is to challenge their views and encourage them to challenge the views of the teacher – rather than taking a stand that the teacher is always right. This practice can help students to sharpen their

thinking and to make sure that they have strong grounds for their assertions. Students at one of the case study schools said:

> Boy: Sometimes teachers ask you to challenge them.
> Girl: You have to think about it first before you make a point, you have to make sure it's valid enough so they don't come up with a stronger point that challenges you straight away.

Teachers Themselves are Models of Lifelong Learners

In a school oriented to lifelong learning, ideally teachers make transparent their own learning journeys. They can learn from students (these days this happens particularly with information technology). It is quite acceptable for a teacher to not know something, because rather than being a repository of knowledge, a teacher is a model, a mentor and facilitator. One teacher in the ACER study said:

> I don't think I'll ever stop learning. . . . At the moment I feel more like learning through my teaching, that's certainly going to be a big focus for me for the next few years. I'd like to learn to teach better. When I was at university there was a huge gap between the lecturer and the students. You couldn't ask questions. It wasn't a two-way process. Although I passed, I didn't feel I learned a lot that way. I really feel today that I could learn better, having taught Maths.

At another school, a teacher said:

> One thing that really stuck out here as far as I am concerned is that the staff aren't frightened to let the kids know that they are learning new things too and to set an example regarding how ever long you have been doing something you are still always going to be learning something and you have always got to be willing to tackle new things.

It is important for teachers to realise that it is acceptable to make mistakes – to admit that they are learning. One principal referred to this as a 'no blame mentality':

> We worked very strongly on a no blame mentality about things. And the staff then gained some confidence. They tried things because they knew if it was a disaster they wouldn't be crucified because of it.

As model learners, teachers are valued. One case study school in particular was notable in valuing its teachers. In addition to the usual staff work room, there

was a lounge area with comfortable arm chairs, a pleasant outlook to a courtyard, coffee making facilities and various newspapers and magazines. It was an area that encouraged reflection. At this school, the principal was very aware that each teacher had a learning path. She had a systematic way of encouraging every teacher in the school to develop that path:

> What happens in August is that I see every member of the teaching staff for half an hour. It takes me a couple of weeks but I get to see everybody and those who are on leave come back and have an interview. We have a sheet that they fill out …it's a check list that says, 'what have been the good things about this year, what have been the frustrations, what was your teaching load like, what sort of professional development have you done in school time and in your own time, what sort of study.' They write responses to that and bring it to the discussion, with a copy for me and we use that . . . There is an expectation. If there is a blank in the study part, I'll say 'we'll talk about future career paths and where they might be headed…maybe a leadership course might be appropriate'…

> Another bit is, 'what would provide a challenge for you?' Some might say 'I'd really like a leadership position and I'd be interested in a couple of areas.' Those who have been in positions of responsibility have another sheet that they fill out that talks about their achievements for the year and whether they achieved their goals and where they might have left room for improvement and whether they are interested in a position for the following year and what their vision will be, where they might take the faculty. So that's just an automatic thing that happens every August.

This principal was herself modelling lifelong learning. She respected and valued every teacher. She made time to speak to each one. She encouraged each teacher to reflect on his or her learning.

In another school teachers' learning was celebrated through twilight seminars where teachers 'show cased' their innovative work. Teachers in this school were happy to stay back and give presentations outside school hours when they felt that their ideas and work were being valued. Much of this work was innovative and collaborative, so teachers were being encouraged to use each other as resources and change was celebrated. The principal described one of these seminars:

> They were little pockets of best practice that other people sat and looked at. We look to others outside, but we're not always looking for the big expert to come and tell us what to do, we're actually sharing amongst ourselves and building up that level of confidence as a community here.

At one case study school there was a 'buddy' system for new staff members that encouraged collaboration. The assistant principal of this school commented:

> If you are looking to engage students in their learning you really need to engage staff
> in their work and their own learning and develop or enhance the motivation for the
> work they do.

There is an Emphasis on Formative Rather Than Competitive Assessment

Given the impact that 'failure' can have on a student's self concept as a learner, there are important implications for how teachers introduce and handle assessment. On the whole, a formative rather than a competitive approach will provide students with opportunities to be 'self-regulated' – in other words, they can set realistic goals, in consultation with the teacher and then endeavour to achieve them. But there are times when students should not be shielded from competition that is inevitably a part of life. If a student believes that he or she has control over ability (as discussed above), the results of competitive assessment are more likely to be viewed as a part of learning rather than a 'sentence', a labelling or a barrier.

In most schools, students face a high stakes competitive examination at the end of their schooling. If students view ability as 'fixed', competitive assessment results will have a positive impact only on those few students who obtain high results and there will be a significant blow to the self-esteem of low achieving students.

By definition, formative assessment is a part of learning, it provides information about what a student can do and will help in the planning of what to learn next. In a school with a lifelong learning approach, competitive examinations are viewed as a part of the learning journey. This approach is favoured rather than one where the grade is the main goal. If the grade is the main goal, students focus on surface rather than deep learning (Biggs, 1987), they ask: how much do I need to know? Rather than: what do I need to know? Teachers in the case study schools (Bryce & Withers, 2003) suggested that students who are lifelong learners tend to do well in competitive exams because they have learned how to set goals and plan their learning. Although not yet proven, it could be argued that confidence as learners and good learning skills will equip students better for tertiary studies than surface learning imparted for a particular exam.

There are many formative assessment strategies. In particular, folios of work and approaches that encourage self-evaluation and reflection: where did I go

wrong? What do I need to improve? What did I do well? (Masters & Forster, 1996; OECD, 2005).

There is an Environment Where Learning is Fun

Students are more likely to have a positive outlook to learning if it takes place in an environment that is 'fun'. In place of the traditional Nineteenth Century classroom of compliance and punishment, silence and rote learning, today we value learning that is shared, enjoyable, open-ended and ongoing.

The ACER study (Bryce & Withers, 2003) endorsed the idea that students will learn well if the classroom environment is a 'warm' one, a community of enquiry (as suggested above), where students can feel comfortable about taking risks. Learning is essentially active, and thus students will learn well if they have opportunities to construct their own knowledge and set their own learning goals. Students will do this more readily if they can see a purpose to their learning. There needs to be time to reflect – to ask 'Am I going in the right direction?' Students can be helped to develop self-organisation skills so that when they have set their goals they can plan how to achieve them in a realistic way.

The context for learning is significant. Some students feel uncomfortable in an atmosphere that is dominated by seriousness and a lack of openness. For some students learning becomes more relevant if it has a practical, work-related orientation – such as that provided by Vocational Education and Training (VET) courses. Opportunities to combine school and work are often helpful to students in senior years. They can then relate their learning to the work place and to life outside school.

The recently published Victorian Principles of Learning and Teaching recommend a learning environment that 'promotes independence, interdependence and self-motivation' (SofWeb, 2005, p. 4). Students are encouraged to take responsibility for their learning and teachers are encouraged to establish what students know already and then to provide opportunities for students to build on their prior knowledge in manageable steps. It is suggested that students could design their own assessment tasks. One way of building on students' prior knowledge in a maths lesson is suggested:

> A lesson on triangles begins with an exploration of what students understand to be a 'triangle', including physical objects of a variety of types, The discussion is guided towards a class consensus on the essential characteristics of a triangle as an abstraction from the concrete examples, with the teacher monitoring the variety of student views as the discussion progresses *(SofWeb, 2005, p. 8)*.

These approaches that aim to enhance students' self confidence and their sense of agency as a learner are in no way seen as 'dumming down' or restricting the curriculum to what is popular with young people. Indeed it is intended that students will become engaged with learning to an extent where they enjoy being challenged to develop deep levels of thinking and application.

Continuing the Journey

At the beginning of this section it was suggested that all schools have started the journey of orienting to lifelong learning, but they will start the journey at different points, depending on the culture and history of the school. It is important to have a framework for evaluating how the journey is going, to ask what has gone well? What has been a challenge? Why? What are the next steps? As a part of the ACER study, some tools based on Longworth's work were developed (Bryce & Withers 2003, pp. 91-95; Longworth, 1999). These are checklists and questionnaires that could be modified by schools and used on a regular basis at staff meetings or professional development sessions. The most important activity is to set goals that will build on a school's strengths at particular points in time. This needs to happen at regular intervals so that momentum does not wane.

CHALLENGES TO LIFELONG LEARNING IN SCHOOLS

The main challenges to lifelong learning in schools stem from the fact that change of this magnitude cannot occur quickly. The key players: students, parents and teachers will take time to evaluate the worth of this new approach that challenges their traditional views of schooling. Students pick up the views of their parents, so although many relish the opportunities to set their own learning goals and to discover the exhilaration of learning, others expect teachers to be figures of authority, providers of knowledge and they find it difficult to respect someone who admits to not knowing all aspects of a particular specialist field of knowledge.

Parents expect their children to receive grades at school. They may consider that the school is 'slack' if children are not graded. They like to be able to compare the progress of their child with his or her peers rather than to be told whether or not he or she has achieved particular learning goals. This attitude is passed onto students, who expect to be graded. As the principal of one school in the process of orienting to more goal focused, formative assessment rather than grades commented:

> The kids aren't taking much notice of the comments we're putting at the side of the essay, they're just interested in: what was the result? . . . Now this means that we have to change the paradigm of what kids have learned [*about assessment*]. That is a difficult task. A lot of students, of course, don't like this because it involves a lot more work.

Many teachers were trained to believe that good teaching involves 'putting on a performance' and transmitting knowledge whilst standing 'in control' at the front of a classroom. Secondary school teachers are used to being regarded as authorities in their fields of specialisation, thus it is very difficult to step down from being an authority figure. Indeed some teachers will find it impossible.

Most teachers come from 'academic' backgrounds and a mindset where academic achievement is valued more than achievement in other areas. Some teachers will find it difficult to change this mindset; to take up a stance where different kinds of intelligence and different approaches to learning are seen as worthwhile: where a child who cannot articulate his ideas well in writing but can take good photographs is seen as just as good a student as one who writes well.

For those teachers who can change, implementing lifelong learning practices, although rewarding, is a lot of work that some teachers find very difficult to handle and suffer 'burn out'. A report from one of the case study schools observed:

> Many teachers seemed to be living their work every minute of the day, and at week ends. The results of this, on the one hand, are invaluable. Students frequently said that the best thing about the school is that they feel they belong and that people care about them. Inevitably this takes its toll on teachers. The only obvious solution is more money so that there can be more teachers to take on these roles.

One of the most satisfying aspects of taking on a lifelong learning approach to pedagogy is that schools can build on their existing strengths and they can choose to undertake the journey at a comfortable pace. Although, overall, it is an immense change, it is likely that every school already embraces some elements of lifelong learning. Lifelong learning itself celebrates change and celebrates difference, thus, however long it takes, the journey promises to be very satisfying and rewarding.

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