Chapter 2

OUTCOMES-BASED EDUCATION A framework for outcomes-focused learning¹

After successful study of this chapter you will be able to:

- Explain the basic principles of outcomes-based education.
- Compare Spady's "ideal" approach to outcomes-based education with the approaches taken by at least one Australian State education system.
- Review syllabus documents and critique the ways in which they incorporate the principles of outcomes-based education.
- Use the principles of outcomes-based education to guide your programming and assessment.

When teachers are attempting to use the pedagogical practices described by the Quality Teaching model, they do so within a context defined by the curriculum, the school, society and other external influences. One of the strongest influences on what teachers do in NSW schools is the Board of Studies (similar organisations exist in other States). Because the Board determines the curriculum in each Key Learning Area (KLA) and controls the School Certificate and Higher School Certificate (HSC) examinations, its approach to curriculum design dominates teaching and learning in schools. For the past decade, the Board (and, in turn, the Department of Education and Training) has been advocating an outcomes-based approach to curriculum design, teaching and assessment-the moves towards outcomes-based education in some other States have been more recent. To understand how these approaches influence programming and assessment, it is first necessary to explore the foundations of outcomes-based education (OBE). This will enable you to see some of the strengths and limitations of this approach to education and to see how the approach to OBE taken in the State in which you teach varies from the more "ideal" vision of OBE originally proposed by Spady (1994a). This chapter will establish the foundation from which you can translate the theory and philosophy of OBE into practical action in your instructional planning, teaching, and assessment of student learning.

¹ This chapter is a modified version of a paper published as: Killen, R. (2002). Outcomesbased education: Principles and possibilities. *Interpretations*, 35(1), 1-18. It also contains extracts from other published works by Killen listed in the references.

THE BASIC PRINCIPLES OF OBE

OBE, like most concepts in education, has been interpreted in many different ways. The term is often used quite inappropriately as a label for a great variety of educational practices that pay little more than lip-service to the fundamental principles of OBE. To clarify some of this confusion, you must start by realising that OBE can be viewed in three different ways—as a theory of education, or as a systemic structure for education, or as classroom practice. Ultimately, we need to align the systemic structure and the classroom practice with the theory if we are to have genuine outcomes-based education. We can think of OBE as a theory (or philosophy) of education in the sense that it embodies and expresses a certain set of beliefs and assumptions about learning, teaching and the systemic structures within which these activities take place. The most detailed articulation of the theory underpinning OBE is given in Spady (1994a, 1994b, 1998). While Spady is not the only person to have made a significant contribution to OBE, he is regarded by many as the world authority on OBE and it is evident that his ideas have had considerable influence on the approaches to OBE that have been taken in Australia.

In the 1980s, it was quite common (particularly in vocational education programs) to describe desired student learning in terms of "objectives"—specific things that students would be able to do after instruction. This approach usually emphasised student mastery of traditional subject-related academic outcomes (with a strong focus on subject-specific content) and some cross-discipline outcomes (such as the ability to solve problems or to work co-operatively). The approach usually had a short-term focus, with "objectives" generally describing what students could achieve within a single period of instruction. Not surprisingly, this approach was frequently criticised for trivialising education (see, for example, Brady, 1992).

Spady's major contribution to the debate about objectives and outcomes was to redefine the concept of outcomes-based education. He started by suggesting that outcomes should be "high quality, culminating demonstrations of significant learning in context" (Spady, 1994a:18) and that:

Outcome-Based Education means clearly focusing and organizing everything in an educational system around what is essential for all students to be able to do successfully at the end of their learning experiences. This means starting with a clear picture of what is important for students to be able to do, then organizing the curriculum, instruction, and assessment to make sure this learning ultimately happens. (Spady, 1994b:1).

This "big picture" approach to outcomes and OBE places considerably more responsibility on curriculum designers than the "specific objectives" approach. To begin with, it requires that someone determines what things are "essential for all students to be able to do", and that these things are expressed in terms that will enable teachers to

use them to guide their instructional practices. Spady's approach also places a specific responsibility on funding agencies and administrators at all levels to provide an appropriate organisational structure within which teachers can implement OBE.

Spady's vision is often referred to as "transformational" OBE to distinguish it from the "traditional" approaches that focused on short-term, subject-specific outcomes and the "transitional" approaches that focused mainly on short-term outcomes but incorporated some cross-curricula outcomes. For Spady, learning is not significant unless the outcomes reflect the complexities of real life and give prominence to the life roles that learners will face after they have finished their formal education. This notion of orienting education to the future needs of students, and of society in general, is the underlying principle of the Key Competencies in Australia (Mayer, 1993).

In New South Wales, recent syllabus documents acknowledge the Key Competencies in several different ways. For example, all the New HSC syllabus documents in NSW contain a general statement similar to:

Engineering Studies provides a context within which to develop general competencies considered essential for the acquisition of effective, higher-order thinking skills necessary for further education, work and everyday life (Engineering Studies, Stage 6 Syllabus, 1999:14).

In most of the New HSC syllabuses, this general statement is followed by a more detailed statement that refers to specific Key Competencies in terms such as:

The Key Competencies of collecting, analysing and organising information and communicating ideas and information reflect core processes of inquiry and reporting which are explicit in the objectives and outcomes of Engineering Studies (Engineering Studies, Stage 6 Syllabus, 1999:14).

However, other syllabuses simply list the Key Competencies and then make a general statement such as:

These Key Competencies are developed by the core processes of composing and responding that are essential to each course. They are reflected through the objectives, outcomes and content of each of the Stage 6 English courses (English, Stage 6 Syllabus, 1999:19).

It is clear that the Key Competencies influence, but do not drive, the curricula of NSW schools. They are appendages that can be overlooked or ignored. Because these curricula are not driven by any other consistent set of principles that focus on the long-term "significant" outcomes that are characteristic of Spady's approach to transformational OBE, the outcomes-based education approach being advocated by the NSW Board of Studies is, in Spady's terms, "transitional". Nevertheless, it is informative to approach the discussion of outcomes-based education from the perspective

provided by Spady's (1994b) seminal book because it provides an insight into what could be achieved through a more future-focused approach to outcomes-based education.

The debate about the extent to which schooling should focus on preparing students for their lives after school is not new. Eighty years ago Bobbitt (1924:8) put forward the proposition that "Education is primarily for adult life, not for child life. Its fundamental responsibility is to prepare for the 50 years of adulthood, not for the 20 years of childhood and youth." Even then, not everyone agreed and Dewey (1938) argued that viewing education as preparation for adult life denied the inherent curiosity of children, and that ignoring their present interests and abilities in favour of more abstract notions of what they might wish to do in future years was undesirable. Dewey urged that education be viewed as "a process of living and not a preparation for future living". Brooks and Brooks (1999:10) claimed that these two approaches to education can co-exist, that teachers can successfully prepare students for their adult years while "recognizing that, for students, schooling must be a time of curiosity, exploration, and inquiry, and memorizing information must be subordinated to learning how to find information to solve real problems". These ideas are also reflected in Spady's approach to OBE and in the *Quality Teaching* model described in Chapter 1.

In addition to the idea that outcomes should describe long-term significant learning, OBE (as described by Spady, 1994b) is underpinned by three basic premises:

- All students can learn and succeed, but not all in the same time or in the same way.
- Successful learning promotes even more successful learning.
- Schools (and teachers) control many of the conditions that determine whether
 or not students are successful at school learning.

It is important to understand why Spady made these statements and exactly what he meant by them because they have been frequently misunderstood (see, for example, Venter, 2000). Spady developed his approach to OBE as a solution to what he saw as some major problems with school education in the United States of America in the 1980s and early 1990s. His major concern was that the school education system was outdated and not designed to prepare children to meet the challenges of the information age (most notably the need to be flexible thinkers, problem solvers and life-long learners) or to take advantage of the high-technology learning tools that were becoming available in the early 1990s. To make his point, Spady described schools as being frozen in a bureaucratic culture that valued hierarchy, status, process and coordination above learning. He claimed that, as a result of this culture, schools were still using an industrial age one-size-fits-all delivery system that artificially divided the school curriculum into subjects in an attempt to make teaching more efficient. Delivery of this curriculum was constrained by an agricultural age calendar (with a long summer break so that children could help with the harvest!) and which was

driven by a feudal age agenda that expected and allowed only some students to succeed. This view of the American education system was later echoed by writers such as Clark (1997) who claimed that education systems should be designed to cultivate inquiry, meaningful understanding and personal engagement, rather than the accumulation of isolated facts.

Spady proposed a reorganisation of the school system that he claimed would better prepare children for their lives after school in a very rapidly changing world. He claimed that children would have a greater chance of succeeding at school (that is, learning useful things and learning them well) if:

- (a) schools were organised around learning, rather than being organised for administrative convenience;
- (b) teachers took more responsibility for student learning;
- (c) teachers rejected the idea that it was "natural" for some students not to succeed at school;
- (d) ability was judged in terms of how quickly students could learn, not in terms of their total capacity to learn;
- (e) time at school was used as a flexible resource;
- (f) school learning was linked directly to the knowledge, skills and dispositions that learners would need in their life after school.

It is hard to argue against some of these ideas. For example, every teacher knows that not all students can learn the same thing in the same way and in the same time. However, not all teachers agree that the students who need longer to learn, or the ones who need to learn in different ways, should continue to be given learning opportunities and assistance until they have succeeded. Nor are all teachers prepared to accept that they (and the school and education systems within which they work) are ultimately responsible for determining whether or not students learn. It is much easier to blame the students for not being enthusiastic enough, or blame the system for not providing enough time and resources, or simply to say that nature did not intend everyone to have the same ability to learn. From Spady's perspective, these "excuses" are simply not sufficient reason to continue schooling the way it was in the USA (and in Australia) in the 1980s. There is considerable evidence that education systems of the type that Spady was criticising are failing many students. Although the education system may not be entirely to blame, in Australia there are still large numbers of children finishing their compulsory schooling with extremely low literacy and numeracy skills-"In Australia today, one in five adults do not have the literacy skills to effectively participate in everyday life" and "less than 20% have the level of functionality deemed as appropriate for the new knowledge-based economy" (Australian Council for Adult Literacy, 2001:5 & 15). In addition, many school leavers do not have important life skills (such as the ability to manage personal finances or deal appropriately with conflict). So perhaps Spady's ideas are worth considering.

Spady's premises are consistent with the philosophical base for education suggested by Mamary (1991) in his discussion of outcomes-based schools. Mamary emphasised that:

- All students have talent and it is the job of schools to develop it.
- The role of schools is to find ways for students to succeed, rather than finding ways for students to fail.
- Mutual trust drives all good outcomes-based schools.
- Excellence is for every child and not just a few.
- By preparing students every day for success the next day, the need for correctives will be reduced.
- Students should collaborate in learning rather than compete.
- As far as possible, no child should be excluded from any activity in a school.
- A positive attitude is essential. (If you believe that you can get every student to learn well then they will.)

From his three premises, Spady developed four essential principles of OBE. The first principle, referred to as clarity of focus, is that education systems should be organised so that teachers and learners can focus clearly, consistently, systematically and creatively on the significant outcomes that learners are ultimately to be able to demonstrate successfully. Thus, when teachers plan and teach they should always remain focused on helping learners to develop the knowledge, skills and dispositions that will enable them to achieve significant learning outcomes that have been determined before instruction starts. In school systems that use a centralised curriculum development process, the first step in achieving clarity of focus is for the curriculum developers to define the significant outcomes that learners will achieve as a result of their total program. These become the syllabus outcomes. In Spady's terminology, the final syllabus outcomes that students achieve (the HSC syllabus outcomes in the case of NSW students) are called the culminating outcomes. To achieve consistent clarity of focus, teachers must make both their short-term and long-term intentions for student learning clear to the learners at every stage of the teaching process. They must also focus all student assessment on clearly defined important outcomes.

The second principle of OBE is often referred to as designing down or designing back. This principle requires that the starting point for all curriculum design must be a clear definition of the significant learning that students are to achieve by the end of their formal education. All instructional decisions are then made by tracing back from this "desired end result" and identifying the "building blocks" (referred to by Spady as enabling outcomes) that will progressively take learners closer to this end result. In this way, the outcomes define the curriculum, not the other way around. This does not mean that curriculum design is a simple linear process, but it does mean that there should be direct and explicit links between all planning, teaching and assessment

decisions and the significant outcomes that students are ultimately to achieve. As Spady and Schlebusch (1999:39) put it, "curriculum developers who have a clear focus on the future believe that what students learn today should directly equip them to deal with the many challenges and opportunities they are likely to face in tomorrow's complex world".

If this approach were to be taken in school education systems such as NSW, it would mean that the Board of Studies would have to define a set of significant outcomes that all students were to achieve by the end of their compulsory schooling (Spady would refer to these as exit outcomes). These outcomes would then have to be used to derive a set of substantial outcomes for each Key Learning Area and then for each subject within each KLA. Within individual subjects, programs would be developed to enable students to achieve the subject outcomes. In turn, units of work would be developed to enable students to achieve the program outcomes. Finally, lessons would be developed to enable students to achieve the outcomes of each unit. Outcomes at the lesson, unit, program, subject and KLA level would all be seen as enabling outcomes that led ultimately to achievement of the exit outcomes. Curriculum strategies, such as integration of students with learning difficulties and "literacy across the curriculum", would have to be interwoven with this hierarchical web of enabling outcomes. Clearly, the process of curriculum design in NSW schools is a long way from this aspect of Spady's vision for OBE.

The third principle of OBE is that teachers should have *high expectations* for all students—they should expect all students to be successful in achieving significant outcomes to high standards. There is ample evidence in the literature (e.g., Queensland School Reform Longitudinal Study, 1999) that teachers must establish high, challenging standards of performance in order to encourage students to engage deeply with the issues about which they are learning. Without this challenge, learners are likely to take a surface approach to learning and be concerned with little more than memorising information that they think they might have to reproduce in an examination. When this principle is applied, depth of understanding and intellectual rigour are not reserved for a few learners—they are expected of *all* learners. Helping learners to achieve high standards is linked very closely with the premise that successful learning facilitates more successful learning. When students experience success, it reinforces their learning, builds their confidence and encourages them to accept further learning challenges. One of the most important reasons for using OBE is that it can help all learners to do difficult things well.

When we have high expectations we need to deliberately help all learners to reach these high standards. Hence the fourth principle of OBE—that teachers must strive to provide *expanded learning opportunities* and support for all learners so that they can be successful. Spady believes that all students can achieve high standards if they are given appropriate opportunities and assistance—what really matters is that learners understand the things that are important, not that they learn them in a particular way or by some arbitrary point in time. Therefore, he urges teachers to "do everything

possible to keep opportunities for continued learning and improvement open to students" (Spady, 2001:4). To achieve this, teachers must be flexible in the way they present information to learners, give them diverse opportunities to learn and be flexible in their approaches to assessment. It is obvious that traditional ways of organising schools do not make it easy for teachers to provide expanded learning opportunities and support for all learners. However, the practical difficulties of providing expanded opportunities and necessary support must be weighed against the long-term benefits of enabling all learners to be successful.

It is only when the above principles are used as the core of an educational system that we can legitimately call that system outcomes-based education. We cannot, for example, conveniently ignore the principle of designing back and still claim to have an OBE system. Thus, although the Board of Studies claims that NSW has an outcomes-based school education system, it is clear that it currently falls short of the transformational outcomes-based education system that Spady (1994b) describes. I am not implying that the Board of Studies ignores all the principles that Spady advocates—quite the contrary, some of them are followed quite closely as the following quote demonstrates:

The syllabus acknowledges that students learn in different ways and at different rates. Teachers therefore may need to incorporate a range of activities [in learning programs] to accommodate the different ways students learn and to cater for the range of levels of students' current knowledge, skills and understanding in mathematics. (Board of Studies NSW, 2003a:6)

This situation presents teachers with essentially two alternatives. The first is to accept uncritically the "NSW version of OBE" and ignore the ways in which it falls short of Spady's ideals. The second is to critically evaluate Spady's ideas and work within the framework provided by the Board of Studies to develop approaches to teaching and curriculum that are more closely aligned with Spady's ideal and with the needs of Australian learners. The remainder of this chapter will help you to take such an approach, not because Spady's OBE model is perfect, but because it has the potential to produce curricula that will better meet the long-term needs of students in our evolving society.

USING OUTCOMES TO GUIDE INSTRUCTIONAL PLANNING

In an OBE system, there are three major steps in instructional planning: deciding on the outcomes that students are to achieve, deciding how to assist students to achieve those outcomes (i.e., deciding on content and teaching strategies), and deciding how to determine when students have achieved the outcomes (i.e., deciding on assessment and reporting procedures). For most teachers, these decisions will be made from their perspective as a subject specialist (e.g., a teacher of Secondary Science). However, if students are to achieve broader outcomes—such as the Key Competencies—learning programs have to be organised in an integrated way that draws on elements of all learning areas.

Writing outcomes

If we follow Spady's advice (1994a:18) that outcomes should be "high quality, culminating demonstrations of significant learning in context", then the most important outcomes are the long-term outcomes—those that describe what learners will be able to do "in the rest of their lives" after they have finished school. In Australia, the closest we come to this type of outcome statement is the Key Competencies. These statements describe outcomes that can provide a broad focus for all education and training—of necessity, they had to be written in broad terms. For example, the outcome "collect, analyse, organise and critically evaluate information" is not something that students can learn to do well in a short time. It is an outcome that students will achieve gradually-progressively reaching higher standards as they move through their formal education. Syllabus outcomes are more specific, but still quite general because (in NSW) they describe outcomes that students will achieve over a two-year Stage (except for the Preliminary and HSC outcomes in Stage 6 which each focus on one year of learning). These medium-term outcomes are defined by the Board of Studies and incorporated into syllabus documents. The longest-term outcomes that teachers are required to develop are for programs. Teachers also have to develop outcomes for units of work and for individual lessons. Although these shorter-term outcomes cannot be considered as "culminating outcomes" in the sense that Spady uses that term, they can (and should) still refer to "significant learning in context".

When teachers divide a Stage of schooling into learning programs (typically corresponding to one Term) they create the opportunity to develop outcomes that are quite specific. These outcomes describe the results of students' learning over, say, a tenweek period—and they represent significant steps in students' progress towards the Stage outcomes. When we come to the level of individual lessons, the outcomes should be very precise. In fact, it can be argued that in individual lessons students cannot achieve learning results that qualify to be described as "outcomes" in Spady's terms principally because they are not "culminating" demonstrations of learning—they are intermediate steps towards significant learning. For convenience, I will continue to refer to lesson outcomes, program outcomes and syllabus outcomes.

Program, unit and lesson outcomes can be developed by asking the following questions:

• What learning are students required to demonstrate in this KLA or subject at the end of their learning experience? Because English is the only compulsory subject at the HSC, the "culminating demonstrations" of learning in most KLAs are effectively the outcomes of Stage 5.

- What integrated set of outcomes will students need to achieve as the "enabling outcomes" (building blocks of knowledge and skills) so that they will eventually achieve these long-term outcomes?
- Which of these enabling outcomes will provide the focus for the program currently being designed?
- How can these program outcomes be further broken down into outcomes that students could achieve in individual lessons or groups of lessons?

At this early stage of program (or unit) design it is also useful to consider the following questions (as a first step towards developing assessment tasks and criteria):

- Why is the achievement of each outcome important? What makes this learning "significant"?
- What could learners be asked to do so that they have an appropriate opportunity to *demonstrate* how well they have achieved each outcome?
- How will I distinguish between high-quality learning and low-quality learning in relation to each outcome?

All outcomes should be clear and concise. Well-written outcomes (whether they are for a lesson, program or Stage) all have one very important feature—they all indicate something that learners will be able to DO as a result of their learning. The key word in each outcome is what Spady (1994b) calls an "action verb" (e.g., explain, calculate, construct, design, evaluate). These verbs serve two important functions: they force us to think about the ways in which learners could possibly demonstrate their learning; and they indicate the complexity of the learning that we are expecting. Both of these things are important guides for our decisions about teaching and assessment: if we want learners to be able to explain something, we have to teach them how to explain; if we want learners to be able to design a web site, then we have to teach them how to do it. We also have to develop assessment tasks that will give us reliable evidence of how well learners can do the things that are described in the outcome statements.

For an outcome to make sense, it must also contain an *object* for the action verb. For example, if the verb is "explain" then the object indicates what has to be explained; if the verb is "design" then the object indicates what has to be designed. In many cases, the outcome will also contain a *qualifier* to indicate the scope of the action or the complexity of the object. For example, if the basic outcome is "develop a business plan" the qualifier might be "for a retail business with no more than five employees".

The main task in writing an outcome is to decide which verb will best describe the learning "action" and what information is needed to adequately describe the object of that action. If the outcome is clear, it will be possible to consider the criteria by which learners' performance will be judged, including the context within which the outcome should be demonstrated and the standard of performance that is expected of

students. This will help you to align your teaching and assessment strategies with the outcome. (More about this in Chapter 9.)

It is important to remember that progam outcomes describe the things that you want learners to be able to do by the end of the program (to demonstrate that they have learned what you wanted them to learn). The program outcomes should NOT describe the learning processes (e.g., learners will participate in group discussions) or the assessment processes (e.g., learners will be able to pass the final examination).

TEACHING STRATEGIES FOR OBE

Teaching is teaching only if learners learn. Therefore, "it remains the responsibility of educators to construct meaningful learning experiences that lead to the mastery of outcomes" (Cockburn, 1997:7). To construct meaningful learning experiences, teachers have to make informed decisions about teaching strategies. Although these decisions are an integral part of program development, they are not dealt with in detail in this book. The following few paragraphs raise some of the important considerations when selecting teaching strategies. For more detail refer to Killen (2003a).

In an OBE system, you cannot assume that all students will learn equally well from a strategy such as small-group discussion, and you cannot assume that all students will learn the same things in any fixed period of time. If you are to help all students to achieve the outcomes related to what you teach, you must be flexible in the way that you teach and in the expectations that you have for each student at any particular time. You must accept that, in most lessons, students will be at different stages of learning and, therefore, that they will be concurrently working towards different short-term outcomes. In order to help each of the students in your class (within the constraints of a traditional school system), you will need to be innovative, and you will probably find that you will not be using whole-class instruction very often.

One way to be flexible is to create an organisational structure that will allow some whole-class instruction (to revise prerequisite knowledge and to outline new areas of study), some group instruction (for students who are at equivalent stages in their progress towards common outcomes), and some individual instruction (for students who are learning substantially faster or more slowly than others in the class). In part, this can be achieved through a form of streaming that places students at equivalent stages of learning in groups where all students are working towards common goals. However, such groups will have some special features: they will be based on students' stages of learning (not on their ability or potential to learn); they will be flexible so that students can move from one group to another if their rate of learning or level of understanding no longer matches those of the other members of the group; there will be no special status attached to students in any particular group because the aim is for all students to be successful; and once students have achieved all the required outcomes in a particular topic (or subject) they can stop studying that topic and devote

their time to other topics in which they have not yet achieved all the outcomes. Within each of the groups, the teacher is free to have students engage in whatever learning experiences are most suited to their current stage of understanding. It is important not to misinterpret the information in this paragraph—it is not implying that group work is essential in OBE, or that it is the most desirable way to teach in most circumstances. The scheme outlined above simply explains how group work can be incorporated into a teaching program when it is an appropriate way of helping learners to achieve the outcomes.

If this approach to student learning is to be successful, students must be prepared to work towards difficult goals. In order for students to accept this responsibility for their own learning, it will be necessary for the goals to seem reasonable to the students, for achievement of the goals to result in an outcome that is desirable to the students, for the students to have a high level of self-confidence and a record of prior success, and for the teacher to organise the learning environment so that students can work relatively independently.

When teaching is focused on students' achievement of particular outcomes, it is necessary to consider the knowledge, skills, attitudes and preconceptions that students have prior to instruction. Teachers must also consider their students' developmental level and the other factors that influence the rate at which they can learn. Equally important, teachers must consider their own knowledge, skills and attitudes relevant to the outcomes, because these will influence how teaching is approached. Additional factors such as the relationships between particular outcomes, the resources that are available, and any constraints (including social and political pressures) must also be considered. Once the teacher has a clear picture of all these things, it should be possible to plan an initial period of instruction in which most students will achieve the desired short-term outcomes, and in which provisions can be made for those students who learn at faster and slower rates. All this requires careful planning.

Successful learning for all students is both the starting point and the bottom line of outcomes-based planning. For this reason, all decisions about instruction should be guided by a consideration of which approach will be most likely to enhance students' efforts to achieve the desired outcomes. The following approach to maximising the learning of all students has been developed from suggestions in Vickery (1988):

- > Start by assessing the students' prerequisite knowledge and skills; if they do not understand essential prior knowledge, or if they do not have the skills on which you want to build, you must provide instruction on these prerequisites.
- Next, prepare the students by explaining the outcomes that they are to achieve (what they will be able to do when they have completed the unit satisfactorily) and why you want them to achieve these outcomes. To be meaningful, each outcome must be placed within an appropriate context (so that it will be relevant for the students) and it should be related to one or more of the long-term significant outcomes that all students should be achieving.

- > Then provide whatever forms of whole-class instruction or individual/group work you consider will have the best chance of enabling all the students to achieve mastery of the essential knowledge and skills on which the unit is based.
- Next, organise guided practice so that students can be evaluated informally and provided with feedback to enhance their learning. The emphasis here is on successful guided practice through careful selection of examples and problems.
- When most students seem to be ready to demonstrate their level of achievement of the outcomes, assess their learning, or have the students assess their own learning through an appropriate form of self-assessment or peer assessment. This assessment should take into account the context in which the outcomes should be demonstrated and the standard of achievement that you expect from students.
- > Students who have achieved the outcomes to more than the minimum standard that you expect can continue to work on enrichment activities that will help them achieve even higher standards. Those who have not yet achieved the minimum acceptable standard should receive additional instruction and practice.
- At an appropriate time, all students take a summative assessment that will enable them to demonstrate the standard to which they have achieved the outcomes. Those who do not demonstrate achievement of the minimum required standard on this assessment receive an "incomplete" grade that they are required to convert to a satisfactory level through additional effort. Students are encouraged to take some responsibility for their own learning, and continued support from the teacher becomes contingent upon the students' acceptance of this responsibility.

This general approach can be varied to suit particular subject areas and groups of students. Of course, teachers cannot expect instant success with outcomes-based programming. In particular, they may have to introduce gradually the idea that the teacher is responsible for creating situations in which students can learn, but the students are ultimately responsible for their own learning.

STUDENT RESPONSIBILITY FOR LEARNING

In an OBE system, it is often suggested that "learners are responsible for their own learning and progress" (Cockburn, 1997:6). This issue is likely to cause some concern for learners, teachers and parents because of a misunderstanding of the philosophy behind the principle. The principle acknowledges the fact that, ultimately, no matter what teachers do, learning is an internal and personal event. The teacher cannot learn for his/her students; the teacher can only facilitate that learning. In this regard, OBE emphasises the teacher's responsibility to clearly define the outcomes and to diligently guide and assist students to achieve those outcomes. It also emphasises the learners' responsibility to try to achieve the outcomes by doing such things as:

Attending class regularly and arriving on time;

- Participating actively in class;
- Setting their own goals and developing plans to meet those goals;
- Putting considerable time and effort into academic work;
- · Completing assignments on time;
- Trying to understand each teacher's requirements and expectations;
- Taking advantage of the resources (Library, etc.) that the school provides;
- Continually assessing their own progress and seeking help when necessary;
- Accepting the consequences of not meeting their responsibilities as a student.

One of the problems that may arise when students are encouraged to be responsible for their own learning is that they may have great difficulty in knowing whether or not they are learning. It might be easy for them to see that they are making mistakes or that they are answering questions incorrectly, but this does not necessarily mean that they are conscious that they are not learning. They may blame their lack of success on bad luck or lack of effort rather than poor understanding. Even when students know that they are not learning, some have difficulty in identifying why it is that they are not understanding (Killen, Meade, Yli-Renko & Fraser, 1996). This places a responsibility on teachers to help students diagnose their approaches to learning and to judge their level of understanding. One of the benefits of outcomesbased education is that it helps students to become aware of what they should be fearning, of what they are actually learning, and of the control that they have over their own learning.

DOES EVERYONE LIKE OBE?

One of the attractions of outcomes-based education is that it can provide administrators with some level of control over the outcomes of education, and at the same time provide teachers with a large degree of freedom to select the content and methods through which they will help their students achieve those outcomes. The control (or, if you like, the overall direction) comes through the specification of the syllabus objectives and outcomes, and the freedom comes through the choices (about content, teaching methods and assessment) that are left up to schools and individual teachers. There can be tension generated by these two issues of control and freedom: teachers may disagree with the controls that are imposed and administrators may not like the way teachers use their freedom of choice. This book will not attempt to resolve that debate because such a task would be impossible; rather I will attempt to show that teachers can work within an outcomes-based framework and, at the same time, have the freedom to address many of the moral, ethical or democratic issues associated with teaching and learning.

It must be acknowledged that not all educators are in favour of OBE. Sometimes this is because they disagree with the outcomes that have been mandated; more often it is because they disagree with the basic idea of pre-specifying the outcomes of education (at least in relation to what they teach). These two concerns will be addressed separately. When a syllabus is being developed, a committee usually does the work and a draft syllabus is circulated for wider comment. Inevitably, the final syllabus will reflect the views of the committee and the compromises they needed to make in order to accommodate the feedback they received and "get the job done". Given the same task, a different committee may have different views and resolve the compromises in different ways. The end result is that no matter how dedicated the syllabus committee might be, they will produce a document that contains some details that will appear unacceptable to some teachers. On occasion, some of the syllabus outcomes will be controversial. When this happens, all teachers should feel free to comment on the outcomes (or any other syllabus details) but this is not a sound basis for criticising the idea of outcomes-based education (i.e., its basic principles). I believe quite strongly that there is merit in specifying what we want students to learn, merit in directing our teaching towards helping students learn those things, and merit in attempting to determine how well students have learned. I acknowledge the utmost importance of addressing questions such as "what should students learn at school?" and "what is the purpose of schooling"? but however those questions are answered OBE can provide a useful framework for the resulting curriculum.

Some teachers argue that OBE is fine for others, but not for them-a sort of "not in my back yard" view of OBE. However, if we look at OBE rationally, we see that it fits very well with the commonsense notion that children at school (or in any other educational situation) should be learning something, and that specifying just what that learning is to be ought to help students to achieve it - no matter what subject or learning area we are considering. The decisions about what children should learn at school are, to a large extent, made by adults—teachers, curriculum planners, parents, politicians, and so on. Inevitably, the decisions are a compromise: firstly because those involved in making the decisions will have diverse ideas; secondly because of the practical constraints that limit what can be achieved with limited resources. Noone is ever likely to come up with a set of outcomes that everyone agrees are the best possible outcomes. It is, therefore, important that all outcomes are seen as problematic. Let's not shoot the messenger if we don't like the message. If you disagree with some of the outcomes that are being specified for school children, then argue against those particular outcomes and suggest more appropriate ones. Do not pretend that no outcomes can be appropriate just because the present ones are not to your liking.

Outcomes are really no more than statements of intention, written in terms of student learning. It makes little sense to argue that school, or indeed any learning experience, should not have as its chief purpose that those participating as students learn something. It also makes little sense to argue that students learn better when the teacher does not know what it is that the students are supposed to be learning. (This is not denying the possibility or value of incidental learning.) Further, it seems illogical to

suggest that someone could claim to be teaching if his or her students are not learning. (Teachers may well be controlling, managing or entertaining, but none of these activities necessarily results in student learning.) Regardless of whether a teacher is teaching Mathematics or English Literature or Geography or any other subject, it is not possible to make this a rational activity unless the teacher knows what students are supposed to be learning. As will be obvious in later chapters, it is also impossible to assess students in legitimate ways unless you know what it is that they are supposed to have learned. It therefore seems that the basic idea of outcomes-based education is not inherently an inappropriate foundation for a system of education. However, as Fritz (1994) points out, this line of argument does not address the important question of whether or not it is appropriate to mandate compulsory outcomes for all students rather than to give them some freedom of choice. Debating that issue is beyond the scope of this chapter.

Some critics of OBE base their opposition on a belief that it has inappropriate roots—often rejecting it simply because they see it as too behaviourist. A detailed account of the development of the principles of OBE is given by Spady (1998) who describes how OBE was developed as a systematic application of a number of educational ideas that have been part of good educational practice for many years. Spady acknowledges that outcomes-based education does have its roots in earlier work on educational objectives (e.g., Mager, 1962), competency-based education (e.g., Franc, 1978), mastery learning (e.g., Block, 1971; Bloom, 1973) and criterion-referenced assessment (e.g., Masters & Evans, 1986), but it has synthesised, extended and transcended all these ideas. Therefore, the perceived shortcomings of, say, competency-based education is a weak basis for criticising OBE.

The central point of outcomes-based education is an unambiguous statement of what students are to learn. For some people, this immediately conjures up images of behavioural objectives of the type suggested by Robert Mager back in the early 1960s, but this is a very limited view of outcomes-based education. Outcomes can be specified precisely without being trivial. For example, outcomes such as "students will be self-directed learners" or "students will have high self-esteem" or "students will understand the principles of economic rationalism" are quite legitimate if the teacher has a clear idea of how to help students achieve them and how to judge when students have achieved them.

Of course, it cannot be expected that a system based on these principles could be introduced on a large scale without some difficulties and much concern from teachers and parents. Some people are fundamentally opposed to the idea of trying to decide in advance what students should learn. In a similar vein, some people argue that some learning experiences are valuable in their own right and that it is inappropriate or impossible to specify in advance exactly what a student will learn from an activity such as reading a poem or watching a play. This may be true. However, it is possible to specify in advance some of the things that students *could possibly* learn from these activities, and it is quite legitimate to express these outcomes in terms that are not

behavioural. It can also be argued that unless the teacher takes the trouble to think about what students might learn from particular activities it is difficult to justify engaging students in those activities. This issue will be addressed in a number of ways throughout this book. For now, you are simply asked to ponder what Zitterkopf (1994:76) points out: "A school that does not specify outcomes simply accepts whatever comes as a result of the educational process and, of course, places little, if any, emphasis on attaining results. Subsequently, quality in the process and product is acquired somewhat arbitrarily". Such a situation is difficult to justify.

In practice, one of the major points of debate about OBE is likely to be the question of what significant outcomes should be incorporated into a given curriculum. It has been this point that has fuelled much of the opposition to OBE in the USA. Spady (1994a:21) suggests ten categories of outcomes, based on "fundamental life performance roles". He suggested that these life performance roles "require complex applications of many kinds of knowledge and all kinds of competence as people confront the challenges surrounding them in their social systems". He proposed that no matter what major life roles learners face after formal education (worker, employer, parent, etc.) they need to be competent in his ten interrelated life performance roles. [This notion of "life roles" is reminiscent of the functionalist approach to sociology advocated by Emile Durkheim (1858-1917).] The life performance roles Spady suggested were: learner and thinker, listener and communicator, implementer and performer, problem finder and solver, planner and designer, creator and producer, teacher and mentor, supporter and contributor, team member and partner, leader and organiser. Spady (1994a:22) suggested that one way to prepare students for these life roles was to "continually engage students in both individual and team activities that explore important issues or phenomena, use multiple media and technologies, create products that embody the results of students' explorations, and call for students to explain their work and products to adult and student audiences". The New Basics experiment in Queensland is based on a similar philosophy (Department of Education and the Arts, 2001).

Even though we may not agree with the particular life performance roles that Spady identified, the concept of basing school education on the knowledge, skills and dispositions that young people will need after they have finished school is a useful one that we will explore further in the next chapter.

In general, my response to critics of OBE is to say: first understand it, then try it, then criticise it. No system of education is perfect, and no system will "work" unless teachers are committed to it. It is true that in some other countries OBE has not been the spectacular success that its advocates hoped it would be. For example, some legislative attempts to introduce OBE in various States of the USA have failed because those charged with defining the essential competencies have placed undue emphasis on outcomes that focus on social reform rather than academic achievement and this has produced considerable community opposition. (See, for example, Manno, 1995.) The experiences in other countries should not be ignored, but neither should

they be used as an excuse for opposing OBE before objectively and thoroughly considering how it might work in the Australian context. As always in education, it is good to learn from the successes and mistakes of others, but it is important to base your opinions on carefully evaluated experience rather than prejudice. By taking a balanced view, it should be possible to identify the aspects of OBE that work and those that do not. Glatthorn (1993) provides a good example of how such an objective evaluation of OBE can be made.

CONCLUSION

Within the framework of the OBE premises and philosophies outlined in this chapter, all decisions about planning, teaching and evaluation are guided by four simple questions:

- What do we want students to learn?
- · Why do we want students to learn these things?
- How can we best help students to learn these things? and,
- · How will we know when students have learned?

When we think about these questions and the principles from which they are derived, we see that outcomes-based education has been developed from an interesting mixture of philosophical stances (van Niekerk & Killen, 2000). Perhaps the most radical component of Spady's view on OBE is that we should not allow schooling (or other aspects of education and training) to be driven by an "educentric paradigm—a paradigm defined by what the system is and (always) has been rather than by what it should and could be if student learning and future success in the Information Age were its true purpose and priority" (Spady, 1998:10). We could say that this is a critical theorist stance—a realisation that our education system has been shaped by society and, very importantly, that society has changed more rapidly than the education system that it created.

The notion that educational institutions, and the teachers who work within them, control the conditions that determine whether or not students will learn is consistent with systems theory. In fact, Spady has a deep concern for how education operates as a system. Like many other systems theorists, he is willing to view education from perspectives that are non-educational, and in so doing he has constructed a new paradigm for education. He advocates very strongly that successful implementation of OBE requires major system changes at all levels—from classroom to institution to legislature. However, to assume that OBE provides education with a text for a way of doing things to suit all educational contexts turns OBE into an ideological fixation. Successful implementation of OBE will require teachers to be able to contextualise the principles of OBE to suit their particular situation (van Niekerk & Killen, 2000).

From these principles, it should be clear that OBE is not an "event" but a total approach to education. It is not something that has to be "fitted into the timetable" but rather a set of ideas that influence the total school curriculum. A teacher once told me that "We only do OBE on Fridays". That was like saying "On Fridays we care about what students learn; on other days it does not matter", and indicated that she was confusing a philosophy of education with a teaching strategy (such as group work).

One of the reasons that outcomes-based education can lead to successful student learning is that it encourages teachers to be well prepared. Teachers simply cannot provide students with appropriate opportunities to learn if they do not take the trouble to assess the students' prior knowledge, to identify possible difficulties, to select appropriate content and learning experiences, to reflect on the moral and ethical principles implicit in their teaching, and to consider all these things in light of the needs, interests and backgrounds of particular students. Outcomes-based programming makes teaching purposeful and systematic, rather than haphazard, while still allowing students to discover, to follow their interests, to take responsibility for their own learning, and to develop both personally and academically. It enables teachers to provide students with appropriate and purposeful learning experiences and opportunities so that they can develop originality, self-motivation and independence at the same time as they acquire useful knowledge and skills.

Of course, it must be acknowledged that there will be some teachers who do not like the idea of outcomes-based programming and assessment.

If teachers want to succeed with outcomes-based education, they need to adopt the position that "there is no such thing as failure, only feedback and results . . . success depends on how well we process the feedback we get regarding our efforts" (Alessi, 1991:14). They should also encourage students to adopt this approach to learning as they strive to achieve significant and worthwhile outcomes. Teachers will know that they are achieving their goals when all students are successful, and until that time no-one involved in education should be satisfied with their efforts.

Review and reflect on your learning

- 1. Develop a brief explanation (no more than two pages) that you could use to inform parents about the basic principles of outcomes-based education.
- 2. Develop a response to the anti-OBE claim that "There is a fundamental contradiction in insisting that students use knowledge creatively only to inform them that the desired learning outcomes are already specified" (Jansen, 1999:150).
- 3. In what specific ways does the NSW Board of Studies' approach to outcomesbased education differ from the "ideal" approach to outcomes-based education advocated by William Spady?
- 4. If you teach in a State other than NSW: What evidence is there that your State has either adopted or rejected Spady's principles of OBE when developing curricula and providing advice to teachers about assessment?
- 5. What distinction does the NSW Board of Studies make between "objectives" and "outcomes"? Which curriculum theorists make a similar distinction?
- 6. Review the syllabus documents for one of the subjects you teach (or will teach). Which of the syllabus outcomes satisfy Spady's definition of an outcome? What evidence is there that the syllabus incorporates Spady's four principles of outcomes-based education?
- 7. What is the difference between competency-based education and outcomes-based education?
- 8. Develop a summary to show how the principles of outcomes-based education match or conflict with the principles of *Quality Teaching* that are described in Chapter 1.
- 9. How could teachers use Spady's definition of outcomes to help them identify the *deep knowledge* of the subject they are teaching?
- 10. Refer to any book on assessment that gives you guidelines for writing questions (multiple-choice questions, essay questions, etc.). Critically evaluate the suggestions in that book from the perspective of the principles of OBE.