

Issues in competence and pre-service teacher education. Part 1. Can outcomes-based programmes produce competent teachers?

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Abstract

The Department of Education's *Norms and standards for educators* (Department of Education 2000) require that higher education institutions design and implement outcomes-based teacher education programmes to enable novice teachers to demonstrate their competence across a range of teacher roles. In this article the question of whether outcomes-based programmes can produce competent teachers is explored. This is done firstly by taking a closer look at competence and competence-based education, the role of standards and the four types of competences as defined in the *Norms and standards for educators*. Thereafter we discuss outcomes and outcomes-based education. The article also points out the necessity of distinguishing between competences for beginning and pre-service teachers on the one hand and experienced teachers on the other.

INTRODUCTION

Two documents in particular have had far-reaching consequences for education and teacher education since the dawning of the new, democratic South Africa in 1994. The South African White Paper on Education and Training (15 March 1995) specifically covered the need for good quality education and training as follows: 'In many schools and colleges serving the majority of the population there has been a precipitous decline in the quality of educational performance, which must be reversed. But quality is required across the board. It is linked to the capacity and commitment of the teacher, the appropriateness of the curriculum, and the way standards are set and assessed.'

This subsequently led to the formulation of the *Norms and standards for educators* which was adopted as national policy in 2000. This policy laid the foundation for defining competent teachers and appropriate teacher education programmes (Department of Education 2000).

The White Paper set the scene for a total restructuring of education and training, and emphasised that the new system and programmes would be outcomes-based.

No longer would the mere accumulation of knowledge be sufficient; performance in authentic contexts would be emphasised. The implications of these changes for curriculum design, for classroom teaching practices and for assessment are far reaching and many of them have been explored in detail by others such as Jansen and Christie (1999), Steyn and Wilkinson (1998) and Dreyer (2000). However, the true impact of these changes as well as the implications of the recently formulated *Norms and standards for educators* (Department of Education 2000) for *preservice teacher education programmes* have not been looked into extensively.

PROBLEM STATEMENT

The basic issues to be explored in this article can be summarised as follows: the *Norms and standards for educators* (Department of Education 2000) require higher education institutions to design and implement outcomes-based teacher education programmes that will guide beginning teachers to demonstrate *competence* across a range of teacher roles. Ultimately, these competences must be demonstrated in real teaching contexts. However, the *Norms and standards* do not explicitly require teacher education programmes to be competence based. They favour an outcomes-based approach instead. This raises two problems. The first problem centres around the question of whether outcomes-based programmes can contribute to the development of competent teachers and how these programmes can be structured and taught so that students develop the knowledge, understanding, skills, abilities and values to fulfil each of the educator roles outlined in the Norms and Standards for Educators (Department of Education 2000).

The second problem relates to the question of how a valid judgement can be made about a student's readiness to enter the teaching profession. In other words, how and when will we know whether a student, on completion of a training programme, is competent enough to perform the duties, roles and functions of the profession to the levels of mastery or competence that are required by the profession? The first of these problems is dealt with only partially and in broad terms in the *Norms and standards for educators* which specify the parameters within which new courses must be designed. However, the *Norms and standards* document does not look at the second problem of how best to determine a student's readiness to teaching and whether teaching competence can ever be determined in any way other than through direct observation in the classroom. Nor does it provide answers to the question whether the level of competence that can be expected from experienced teachers and from pre-service or beginning teachers who have recently completed their training programmes, can ever be the same.

These two problems will be explored in two different articles. In the first article, we will undertake a conceptual analysis of competence and take a closer look at issues such as the relationship between outcomes-based education and competence-based teacher education. In the follow-up article (*The assessment of teaching practice*) we consider the dilemma of how to assess the competence of pre-service

teachers during teaching practice. It should be kept in mind that teacher training programmes alone cannot contribute to the development of competent teachers. The success of any training programme depends on a variety of factors such as the quality of the programme itself, the aptitude of the students and the commitment of the educator (lecturer) who implements the programme. This article, however, does not address the role of educators and students in particular.

DEFINING COMPETENCE AND COMPETENCE-BASED EDUCATION

Competence-based education is founded on the assumption that many occupations such as teaching, accounting, engineering and nursing are substantially committed to prescribed skills, competences, techniques and strategies. Efficiency and expertise within such professions are generally measured by the success workers achieve in the execution of the tasks and functions that characterise their particular vocation. In terms of this approach, training curricula are developed on the basis of an analysis of the roles the student should fulfil on completion of the training programme. The focus is thus on the ability of learners to demonstrate proficiency or competence in these roles, rather than on their ability to master course material. For example, the World Health Organisation (WHO) (2000, Glossary) defines competency of nurses as: 'broad composite statement(s) derived from nursing and midwifery practice, which describe a framework of skills reflecting knowledge, attitudes and psycho-motor elements', while the CA School of Business (sa, 1) regards competencies for chartered accountants (CAs) as 'particular tasks or roles that experienced CAs perform while applying the pervasive qualities and skills that characterize CAs'. Because of the specialised nature of many professions (including teaching), it is necessary to design training programmes that will enable students to master the skills and competences required in their particular profession.

Competence may be defined in many different ways (Saunders 2000, 37; Whitty & Willmott 1991, 309) and Eraut (1998, 128) points out that 'the use of *competence* is no less diverse than the usage of such terms as *knowledge, skills and ability*'. His analysis of how competence should be defined starts with the question 'What does it mean when a person is described as "competent" in an everyday situation?' He concludes that the public understanding of competence in relation to a profession (such as teaching) could be described as 'the ability to perform the tasks and roles required to the expected standard'. Saunders (2000, 37) elaborates on this definition of competence as follows: 'The knowledge, skills and behavioural attributes required to perform a job to an acceptable standard'. It is worth noting at this point that, in many respects, it seems pre-service and beginning teachers are required to perform the same tasks and roles as experienced teachers. Something else worth noting is the use of 'expected standard' and 'acceptable standard' in the two definitions cited above.

Eraut (1998, 129) touches on these issues when he claims that one advantage of defining competence in a somewhat flexible way is that it ‘can be applied to a professional at any stage of their career’ with the ‘expected standard’ depending on the experience and responsibilities of the professional. This is a particularly useful idea in teacher education because it enables us to develop the concept of *beginning level competence*, that is, the competence we should expect of teachers at the point they have completed their teacher education programme and are about to embark on a teaching career. It is clear that the standard that is ‘acceptable’ at the beginning of a teacher’s career will not and should not remain the same forever.

The *Norms and standards for educators* (Department of Education 2000) does not distinguish between those standards expected from pre-service and beginning teachers and those from experienced teachers. As Eraut (1998, 127) suggests, this is something that needs to be negotiated between employers, professionals, clients, the relevant professional body, providers of education and training, and the government. For teachers, this would typically require negotiations between the Department of Education, teachers, students and parents, the teachers’ union, universities, and the national government. These negotiations should include a discussion on the distinction between ‘expected standard’ as defined by Eraut (1998, 128) and ‘acceptable standard’ as defined by Saunders (2000, 37). A possible solution could be to associate ‘expected standards’ with experienced teachers and ‘acceptable standards’ with beginning teachers.

Defining teacher competence in terms of standards

The idea of directly linking occupational competence to the tasks and roles typically associated with a particular occupation leads to the notion of ‘functional competence’ which can be considered as ‘competence in reality’ (Fraser 1995, 7). It is based on the assumption that competence can be adequately defined in terms of the knowledge, skills and abilities that an individual can demonstrate under conditions that are typical of occupational situations. Functional competence is similar to Tomlinson’s (1995, 181) notion that a competent person is capable of certain sorts of actions that are required to achieve particular purposes or intended outcomes in specific job situations. To be useful indicators of competence, these actions must be capable of demonstration, observation and assessment (Norris 1991, 332; Stuart 1990, 16).

As we start to specify the components of functional competence for any profession it becomes necessary to consider the standards of performance that should be expected. The idea of defining teacher competence in terms of standards is well illustrated in the *National science education standards* (National Research Council 1996). These standards (which are often used to illustrate the use of standards in general (Gentile and Lalley 2003, 44–45) are divided into the following six areas: the planning of inquiry-based science programmes; the actions taken to guide and facilitate student learning; the assessments made of teaching

and student learning; the development of environments that enable students to learn science; the creation of communities of science learners; and, the planning and development of the school science program (National Research Council 1996, 4). In addition, there are a set of professional development standards for teachers that emphasise that teachers need ‘opportunities to develop theoretical and practical understanding and ability, not just technical proficiencies’ (National Research Council 1996, 5). This difference between technical proficiency and teaching competence is emphasised by, for example, issues such as teachers’ continual ‘struggle with the tension between guiding students towards a set of predetermined goals and allowing students to set and meet their own goals’ (National Research Council 1996, 33). Clearly, such tensions cannot be resolved through the application of some fixed recipe for teacher action – they can be resolved only through the application of wisdom and deep knowledge, hallmarks of a competent teacher.

The standards referred to above are usually thought of as levels of achievement or performance (Norris 1991, 335) and do not explicitly describe the underlying abilities or traits of the individual. Standards in themselves will not ensure effective instruction or learning, but they can describe concrete qualities and assessable levels of expectation. A given standard must therefore comprise two parts: the *element of competence*, and its *associated performance criteria* (Fraser 1996, 80).

One of the difficulties of establishing standards for teaching is that the relationship between standards and good practice is not at all straightforward. Standards are very often the product of some collaborative attempt to describe best practice rather than the result of precise empirical calculation. This is evident, for example, in the following suggestions about what should be taken into consideration when setting and applying standards to any branch of teaching, training and education (University of Pretoria and National Education Group 2000, 1–6):

1. Standards are not meant to lay down absolute prescriptions for the teacher or the teacher educator.
2. Standards provide a clearly defined framework of the knowledge, skills and experiences that are essential for the teacher and teacher educator.
3. Standards provide significant guidance for the development and revision of teacher education programmes.
4. Standards provide criteria for the necessary qualifications a teacher should have.
5. Standards are meant to focus on the skills, knowledge and experiences necessary to teach.
6. Standards are meant to specify the minimum competences required of well-qualified teachers and also the minimum competences required to teach at all.

In addition, Kluth and Straut (2001, 43–46) feel strongly that, in order for standards to be effective and have any significance, they must answer the needs of diverse learners.

At this stage in the reform of South Africa's education system, the standards for teaching have not been integrated with standards for learning in the comprehensive way that is demonstrated by the *National science education standards* (National Research Council 1996). Rather, the approach which has been taken is to define teacher competence indirectly through the *Norms and standards for educators* (Department of Education 2000, 10) and to treat learning standards as a separate issue. The *Norms and standards for educators* focus very strongly on the idea of *applied competence* as an overarching concept that embodies the three interconnected forms of competence discussed below.

Practical competence is the demonstrated ability, in an authentic context, to consider a range of possibilities for action, make considered decisions about which possibilities to follow, and to perform the chosen action. It is grounded in *foundational competence* where the learner demonstrates an understanding of the knowledge and thinking that underpin the actions taken; and integrated through *reflexive competence* in which the learner demonstrates an ability to integrate or connect performances and decision making with understanding and with an ability to adapt to change and unforeseen circumstances and explain the reasons behind these adaptations.

These definitions embody the idea that a person who is acting competently will be able to integrate knowledge with skills and values in diverse situations and will be capable of reflecting on and learning from their own experiences. This multi-faceted definition is consistent with the suggestion by Gable (1991, 178) that it is useful to distinguish between *knowledge-based competenc(i)es* and *performance-based competenc(i)es*. This is similar to the stance of Messick (1984, 227) who suggests that 'competence refers to what a person knows and can do under ideal circumstances, whereas performance refers to what is actually done under existing circumstances', and that of Eltis (1997, 130) who points out that 'competence is much more than performance'. What is important here is not the intricacies of the different definitions of competence, but the fact that successful job performance requires professional knowledge, the ability to apply that knowledge and the professional values to apply it ethically.

Each of the competences identified in the *Norms and standards for educators* needs to be interpreted against the backdrop/within the framework of the competences expected from pre-service and beginning teachers.

Foundational competence

It is self-evident that professionals cannot perform their roles without specialist knowledge and, as Evans (1993, 145) points out, if there is a lack of public confidence in teachers' professional knowledge there will be a parallel crisis of

confidence in teachers' professional education. Therefore, it is quite appropriate that the Norms and Standards should emphasise this aspect of teachers' competence. However, there is a risk in assuming that knowledge related to a specific profession can be any sort of guarantee of competent performance in that specific field. It is likely that very low levels of knowledge will contribute to poor performance. However, it is worth noting Stedman's (1985, 202) finding that an analysis of the failure to meet standards of medical performance revealed that a lack of knowledge was rarely a primary or even a major contributing factor to such failure. It was found that situational factors played a more important role. An important question that needs to be answered regarding teacher education is: What levels of foundational knowledge and capacity for divergent thinking are necessary to support the decisions that must be made when practical competence is being demonstrated by pre-service or beginning teachers?

The issue of foundational competence is of particular importance in teacher education in South Africa where research has shown that a major weakness of South African teachers is their subject or content knowledge. Taylor and Vinjevod (1999, 139) comments as follows on the results of a number of PEI (President's Education Initiative) research projects: 'One of the most consistent findings of a number of PEI projects pointed to teachers' low levels of conceptual knowledge, their poor grasp of their subjects and the range of errors made in the content and concepts presented in their lessons'. In fields such as mathematics, science and geography in particular, it is well recognised that many teachers have insufficient foundational knowledge to enable them to teach effectively, and according to Taylor and Vinjevod (1999, 142) that acts as a 'major inhibition' to teaching and learning.

Practical competence

As defined in the *Norms and standards for educators*, practical competence is that aspect of competence that can be observed directly when teachers are performing their jobs. For example, they may be observed performing a great variety of 'chosen actions' that result from considering 'a range of possibilities' and 'making considered decisions about which possibility to follow'. Teachers do this all the time in their attempts to facilitate learning. Because practical competence can be observed more readily than foundational competence or reflexive competence there is a danger that it might be over-emphasised when evaluating teaching. Such an approach was common in the teacher education programmes of the 1970s before there was general acceptance of the importance of teacher reflection (Calderhead 1989). It is important at this stage to take note of Miller's (2001, 1) observation. According to her, a new definition of education standards has emerged – one that places greater relevance on the world of work. It is believed that all learning should take place within the context of a work situation with the emphasis on workplace competences. The result has been a 'narrower education

that focusses on practical skills to the detriment of broader academic education. The danger is that the new standards may elevate workplace competencies above essential academic knowledge' (Miller 2001, 2).

A significant question that needs to be answered is: 'What standard of practical competence should be required of pre-service and beginning teachers?' If this standard is defined in an appropriate way, it will encompass descriptions of what has to be demonstrated, under what circumstances the demonstration must take place and the criteria for judging the quality of the performance. It should also distinguish clearly between requirements for beginning and experienced teachers.

Another question related to practical competence is how this competence could best be assessed and whether an evaluation of practical competence during training (often in artificial circumstances) reliably predicts whether a teacher will perform well in the classroom. (This question will be dealt with in the follow-up article *The assessment of teaching practice*.)

Reflexive competence

The benefits of teacher reflection are well documented. Most Western writing in this area seems to be based either directly or indirectly on the work of Dewey (1933) who made a distinction between 'routine' action (guided by tradition, habit, authority and institutional expectations) and 'reflective' action (guided by constant self-appraisal and development). These ideas have been refined by later writers such as Van Manen (1977, 1991), Zeichner (1981–82, 1983, 1987), Schön (1983, 1987), Cruickshank (1987) and Korthagen and Kessels (1999). Teacher education based on these ideas have as their general aim 'the development of teachers who have the skills and dispositions to continually inquire into their own teaching practice and into the contexts in which their teaching is embedded' (Zeichner 1987, 565). Without the ability to reflect on and learn from their experiences, teachers will not be aware of the limitations of their foundational competence and they will be unable to improve on their practical competence. A significant question that needs to be answered is: 'How can reflexive competence be developed and demonstrated by pre-service and beginning teachers?'

Teacher roles

In addition to providing a broad definition of *applied competence*, the *Norms and standards for educators* outline seven educator *roles* that collectively define the occupational functions of teachers in South Africa. These roles (learning mediator; interpreter and designer of learning programmes and materials; leader, administrator and manager; scholar, researcher and lifelong learner; community, citizenship and pastoral role; assessor; and, learning area/subject/discipline/phase specialist) describe the functional areas in which competence must be displayed by teachers within their subject or phase of specialisation. In particular, the specialist role 'is the over-arching role into which the other roles are integrated,

and in which competence is ultimately assessed' (Department of Education 2000, 12). The complex web of relationships that links these roles makes it obvious that a teacher cannot be classified either as competent or not (yet) competent in any simple categorical way.

The complexity of teaching is further emphasised by the detailed breakdown of each role into practical competence, foundational competence and reflexive competence, with a total of 132 separate competences being listed in the *Norms and standards*. 'All the competences must be developed in all initial educator qualifications' but 'they may be developed in different ways, with different emphases and at different depths' (Department of Education 2000, 11). The responsibility for deciding how to do this is explicitly given to higher education institutions. The seven educator roles and their associated competences 'provide the exit level outcomes and therefore the central feature of all initial educator qualifications and learning programmes' (Department of Education 2000, 12). However, there is also a clear statement that the list of roles and their associated competences 'is meant to serve as a *description* of what it means to be a competent educator. It is not meant to be a checklist against which one assesses whether a person is competent or not' (Department of Education 2000, 13). This statement has some interesting implications for teacher education. On the one hand, teacher education is specifically required to be outcomes-based and to develop teacher competences. On the other, the defined competences that have been defined are not to be used as a direct basis for determining competence!

It seems that the intention of these apparently conflicting statements was to discourage teacher education providers from adopting a 1970s approach to competency-based teacher education in which it is reduced to an accumulation of minute competencies (instead of more comprehensive competences) that may be demonstrated isolated from real teaching contexts. Rather, the intention seems to be to encourage teacher education providers to develop programmes that integrate the competences in meaningful ways and focus primarily on the development of practitioners who can function effectively in authentic teaching contexts. A second possibility is that the apparently contradictory approach was taken for political reasons. If teacher competence is defined precisely in terms of detailed standards with appropriate assessment criteria then, inevitably, some teachers will be deemed to be incompetent. It is politically safer to side-step the issue.

One approach to the development of a teacher's applied competence is to focus separately on each subcategory of competence (practical, foundational and reflexive) and use the teacher roles and their integration as a backdrop. This is essentially the approach taken in many teacher education programmes – foundational competence is developed through studies of educational psychology, sociology and subject content (such as mathematics); practical competence is developed through methods, subjects and the practicum; and reflexive competence is assumed to develop with teaching experience. This approach would typically focus on teacher roles (such as assessor) in specific subjects or modules. The

integration of the different forms of competence and the different roles becomes a matter of chance if too much emphasis is placed on the development of foundational competence and too little on school-based demonstrations of applied competence. To avoid this problem it is necessary to formulate very clear outcomes for each component of the programme and to link them in a manner similar to that suggested by Killen and Spady (1999, 206–207). Even then, the assumption is made that if teacher education students are taught and assessed in an outcomes-based programme this will somehow guarantee their competence to fulfil each of the teacher roles, at least at levels of competence that would reasonably be ‘acceptable’ for beginning teachers. We next explore some of the consequences of this assumption.

DEVELOPING COMPETENT TEACHERS THROUGH OUTCOMES-BASED TEACHER EDUCATION PROGRAMMES

There seems little doubt that the principal purpose of teacher education programmes should be to produce competent teachers. In South Africa, there is currently little choice for teacher educators but to accept the definition of competence in the *Norms and standards*. To take a contrary view would place the standing of a qualification in teacher education in jeopardy. However, it is incumbent upon all teacher educators continually to question the relevance and attainability of the forms of competence that are currently being advocated. For now, the authors are prepared to accept that ‘applied competence’, as defined in the *Norms and standards*, is an appropriate goal. This leads the debate to the question of whether this competence can be developed through outcomes-based (as opposed to competence-based) teacher education programmes.

The South African Qualifications Authority supports the notion of *applied competence* in higher education and defines it as ‘the ability to put into practice in the relevant context the learning outcomes acquired in obtaining the qualification’ (SAQA 1998, 3). In relation to teacher education, this implies that the learning outcomes ‘acquired in obtaining the qualification’ will, when put into practice, result in competent performance in each of the teacher roles defined in the *Norms and standards for educators*. But is it that simple? If teacher education programmes focus on helping students to achieve clearly defined outcomes, will this produce competent teachers? Or is it necessary for teacher education programmes to be more explicitly competency-based so that the outcomes achieved in the programme will, in fact, be expressed directly as competences in real teaching situations? To answer these questions, we need to consider the essential differences between outcomes-based education and competency-based education.

Outcomes and OBE

The *Norms and standards for educators* (Department of Education 2000, Glossary) define an outcome as ‘the contextually demonstrated end products of the learning process’. This is broadly aligned with Spady’s (1994, 1) definition of outcomes as ‘high quality, culminating demonstrations of significant learning in context’. However, this raises the question of whether demonstrating learning in context is the same thing as demonstrating competence. The important point here is that both definitions emphasise that learners must *demonstrate* their ability to *apply* the things that they have learnt. If the demonstrated application of learning is in an authentic situation (one closely resembling the circumstances under which a professional might be expected to demonstrate competence) then, it could be argued, demonstrations of outcomes equate to attempts to demonstrate competence. On the basis of this point of view, the equivalence of outcomes and competences seems to depend on how closely the outcomes being tested match the characteristics of competent performance.

Whether or not a programme can legitimately be called outcomes-based, in the sense that Spady uses this term, depends on the extent to which the programme is designed around the basic principles of OBE. Spady (1994, 1) uses outcomes as the defining element of OBE in stating that ‘outcomes-based education means clearly focusing and organising 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.’

It is apparent that the *Norms and standards* intend this approach to be taken in teacher education programmes. The ‘clear picture’ is provided by the detailed competence statements and teacher education programmes are explicitly required to be designed to achieve these ends. However, the *Norms and standards for educators* make no attempt to define OBE (there is no entry for OBE in their glossary). The Technical Committee on the Revision of Norms and Standards for Educators (Department of Education 1998, ii) did, however, make it clear that these norms and standards are based on SAQA’s interpretation of the principles of OBE: ‘SAQA and the requirements of OBE require a holistic approach to defining and assessing the competences of educators’. It is further stated in the same document (Department of Education 1998, x) that outcomes-based education requires that providers develop educators who have the skills and not just the knowledge to teach and that ‘all teacher education programmes will need to focus on developing the competencies required in the workforce’. This approach is clearly in line with Spady’s notion of future-focused education in which the outcomes that matter are those that describe what learners will be able to do after they leave the educational setting. The *Norms and standards* also recognise the need for teacher education programmes to be future focused so that they prepare

teachers 'to meet the educational challenges raised by rapid changes in knowledge' and equip teachers to 'work in contexts for which they are not initially trained' (Department of Education 1998, 115). In Spady's (1994, 191) terms, this requires teacher education programmes to focus on *outcomes of significance*, that is 'Demonstrations of learning that have major consequences for one's later learning and living'.

The *Norms and standards* approach to defining competence seems to incorporate all the aspects of competence referred to by Spady (1994, 1998) whose ideas on outcomes-based education have influenced much of the debate about educational reform in South Africa. In particular, it accords with Spady's view that education should prepare learners for their future roles in life. It also supports Spady's notion that competence must be demonstrated in real, complex situations and that competence cannot be attained without foundational knowledge. However, it does not explicitly address Spady's suggestion that competence should also include another dimension – that of confidence. It could be implied that confidence is a component of making considered decisions, but Katz (1995, 38) goes further and claims that 'to render competent performance employees need a strong sense of self efficacy or self confidence'.

Competence-based education

When teacher education programmes are required to be competence based, a number of critical issues have to be considered. Short (1985, 2) suggests that they are the following: the different forms competence takes in particular contexts; the question whether competence can be taught; the debate whether competence can be detected; the issue whether the public has the right to hold schools (and therefore also teacher training institutions) accountable for developing competences in student teachers and pupils; the question whether legislative mandates can guarantee minimum levels of competence; and the relationship between teacher competence and student competence and, therefore, also student performance.

The *Norms and standards* explicitly address each of these points. There is clear acceptance that educator roles and their associated competences will take different forms and require different emphases in different contexts. There is an assumption that competence can be taught or, at least, the implication is that it can be achieved indirectly through an appropriate education programme. The *Norms and standards* are clearly based on the assumption that the public should hold schools accountable for the quality of teaching and learning and that legislative mandates are a way of achieving the goal of having competent teachers. This is essentially the approach taken in most Western countries. It seems that for all practical purposes, a teacher education programme that is designed to assist learners to perform the educator roles defined in the *Norms and standards for educators* must be competence based.

The marriage between outcomes-based education and competence-based education

The principles of outcomes-based education (Spady 1994) are distinct from the principles of competence-based education, but the two sets of principles are compatible. The four principles of OBE, namely clarity of focus, expanded opportunity, high expectations and design down (Spady 1994, 10) can be incorporated into competency-based teacher education programmes as follows: The principle of *clarity of focus* may be incorporated by developing clear descriptions of the required competences and by using these competences as the central focus of the programme. The principle of *high expectations* is accommodated by defining the competences in terms of the expertise required of professionals performing at more than minimum levels of expertise. The principle of *designing back* is firstly a procedure to guide curriculum design (in the manner suggested by Killen and Spady 1999, 206) and secondly a guide to the selection of teaching strategies. This is a logical way to design competency-based programmes – first decide what the required competencies are and then decide how to help learners progress from their initial levels of competence to the required levels. The principle of *expanded opportunity* depends on the organisation of the programme and on the teaching and assessment approaches taken. In a competency-based programme this principle is consistent with the idea that learning should continue (under changed circumstances or conditions if necessary) until an appropriate level of competence can be demonstrated.

It is largely for administrative convenience that the structure of undergraduate teacher education programmes has traditionally consisted of three or four years of study divided into a discrete number of modules or subjects (which may or may not be clustered into strands such as foundational studies, method studies, and so on). Again for administrative convenience, these modules tend to be presented and assessed in isolation from the teaching practicum in which students are supposed to apply their theoretical knowledge and practical skills. In such programmes, the links between the modules in each year and across years of the programme are often fairly tenuous. As students progress through these programmes they are expected gradually to accumulate the knowledge and skills that will eventually equip them for teaching, even if the practical application of this learning is never thoroughly and reliably assessed in real teaching situations.

The need for quality assurance

In the *Report of the President's education initiative research project*, Taylor and Vinjevoold (1999, 131) state: 'There is broad consensus that teaching and learning in the majority of South African schools leaves much to be desired.' They come to the conclusion that there is a vast gap between teachers' positive attitudes towards Curriculum 2005 and the ability to give effect to them in the classroom. Few teachers are able to translate the very complex logic underlying Curriculum 2005

into appropriate learning programmes, and to effectively mobilise student-centred learning (Taylor and Vinjevd 1999, 160–161). It is obvious that, in South Africa, there is a clear need to make a real difference to the quality of teaching in many schools.

The competence of pre-service and beginning teachers is just one aspect of the broader issue of quality assurance in schools and higher education institutions. As Graham and Barnett (1996, 61) argue, ‘conceptions of quality reach deep into the structures of higher education and into the construction of the professional identity of teachers’. This places a great responsibility on providers of teacher education programmes.

The *Norms and standards for educators* is a very comprehensive attempt to redefine the nature of teacher education in South Africa. This redefinition is taking place within a national qualifications framework that is claimed to be outcome-based. If teacher education programmes are based on the principles of outcomes-based education it is possible to focus and structure them so that the graduates will have the levels of foundational competence, practical competence and reflexive competence that are expected of novice teachers. However, these levels of competence will not be attained by students unless teacher education programmes incorporate appropriate assessment procedures, that is, assessment procedures that are aligned with outcomes that describe the components of competence in appropriate ways. This issue will be dealt with in a follow-up article.

SUMMARY AND CONCLUSION

Although the *Norms and standards for educators* promote the development of teachers who are able to demonstrate competence across a range of teachers roles, teacher education programmes are expected to be outcomes rather than competence based. The dilemma created by this state of affairs centres around the issue of defining teacher competence in terms of standards, the idea of applied competence that embodies practical, foundational and reflexive competence, and the complexity of teacher roles which teachers are expected to fulfil. It appears that a competence rather than an outcomes-based approach would be best for assisting learners to acquire these competences and to perform these roles. However, although the principles of outcomes-based education are distinct from the principles of competence-based education, the two sets are compatible and it would be possible to incorporate the four principles of OBE, namely clarity of focus, expanded opportunity, high expectations and design down, into competence-based teacher education programmes.

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