*HJ Steyn**
Hennie.Steyn@nwu.ac.za
Faculty of Education Sciences
North-West University
(Potchefstroom Campus)

JL van der Walt
Hannesv290@gmail.com
Faculty of Education Sciences
North-West University
(Potchefstroom Campus)

CC Wolhuter
Charl.Wolhuter@nwu.ac.za
Faculty of Education Sciences
North-West University
(Potchefstroom Campus)

*To whom correspondence
should be directed

Ensuring academic depth and rigour in teacher education through benchmarking, with special attention to context

Abstract

Benchmarking is one way of ensuring academic depth and rigour in teacher education. After making a case for setting benchmarks in teacher education based on the widely recognised intra-education system contextual factors, the importance of also taking into account the external (e.g. the national-social) context in which teacher education occurs is highlighted. A five-step plan is offered for ensuring academic depth and rigour in teacher education through benchmarking. The process is illustrated with examples from the South African situation. The article concludes with an outline of the contextual conditions with which teacher educators in South Africa have to cope.

Keywords: *Benchmarking, education system, best practice, national education context, social education context, teacher education, South African education*

1. Introduction and purpose of the article

Teaching-learning communities are essential parts of education systems. An education system can be defined as a logistical structure for meeting the education needs of a particular target group, where the structure may consist of various elements such as education institutions, education levels, education programmes, curricula, knowledge, teachers, learners, teaching methods, language of learning and teaching and physical facilities (Steyn, 2014a: 55-58). Each education system is located in a political policy, social and economic national context that helps shape it and co-determines the success of its various elements. In view of this, education system planners should take into account the directives flowing from general education system theory, the educational needs of the target group, the external national-social conditions and effective practices in other education systems (Steyn & Wolhuter, 2010: 461-462). Such information should be kept in mind when framing or developing a benchmark for assessing a particular education system and its constituent elements.

A discourse concerning academic depth and rigour in teacher education implies benchmarks and measuring such

academic depth and rigour in teacher education. Teacher education of excellent quality will supply appropriately equipped teachers (Townsend & Bates, 2007: 3), thereby contributing to an efficient national education system and a flourishing national community. The line of argumentation so far raises the following question: What steps could be followed to ensure that a benchmark for teacher education guides towards depth and rigour in that it conforms to all the relevant academic and international norms but also remains locally context-sensitive? In order to find an answer to this question, we first examine the essential features of teacher education, its 'formal elements'. Morrow (2007) identifies the formal elements of a practice as those elements without which the practice ceases to be. In the area of teacher education, we propose that the formal elements of teacher education may be the knowledge for practice that prospective teachers learn in university-based coursework, the craft knowledge they learn from their apprenticeships in schools, the prospective teachers themselves and the teacher educators who teach them. The 'material elements' on the other hand, refer to the contextual conditions under which the practices of learning to teach takes place. These material conditions can vary enormously between contexts (with respect to resources and languages of learning and teaching). This examination, as we will show, reveals that among others, an effective teacher education programme should be benchmarked against the formal elements of its practices but needs to consider the material elements in which it operates in order to be context-sensitive. We conclude the article by offering a schema to ensure the academic rigour and the context-sensitivity of teacher education programmes within the South African context.

2. Academic depth and rigour in teacher education

According to Slonimsky and Shalem (2006), a curriculum for teacher education programmes in a developing country such as South Africa should be dually *responsive*. On the one hand, it should provide for the needs of the large numbers of underprepared students, students who as a result of a historically developed poor quality school education system are not appropriately prepared for the exigencies of university study. On the other hand, it should also be epistemologically responsive in that it offers access to the systematic inquiry that is typical of academic practice, i.e. inquiry characterised by knowledge depth and independent thinking. The curriculum for a teacher education programme should nevertheless be internally coherent; it should attest to the fact that knowledge from a myriad of material for such programmes has been selected and packaged in a systematic manner that can convey meaning to student teachers, particularly meaning relevant to equipping them for their future profession (Rusznyak, 2015).

Planners of teacher education programmes in countries such as South Africa have to formulate benchmarks that could guide them in assessing how well the teacher education curriculum and programme in general measures up to these demands. Put differently, teacher education programmes should demonstrate rigour and depth in two dimensions: theoretical (among others, by being plugged into the global/universal knowledge system) and contextual (among others by serving local education needs). Teacher education systems that fail to comply with these two requirements are doomed to resort to interim 'fire-fighting' initiatives such as special courses, radio and television programmes, collaborations with universities and other short-term (crisis management-type) interventions (Rusznyak, 2014).

3. Literature survey

3.1. What should qualifying teachers know and be able to do?

Ever since the publication of the two much cited papers of Shulman (1986, 1987), the role of knowledge in teacher education programmes has been a focus of research. Shulman (1987: 8) identified seven categories of knowledge as a base for teaching. These categories are content knowledge (the amount and organisation of knowledge per se in the mind of the teacher) (Shulman, 1986: 9), general educational knowledge, knowledge of the curriculum, pedagogical content knowledge (how to teach particular topics), knowledge of learners and their characteristics, knowledge of educational ends and purposes and knowledge of contexts. According to him, this last category ranges from working with a group or class, governance and financing of school districts, to the character of communities and cultures. He does not explicate the category of knowledge of contexts but goes on to develop his concept of reasoned pedagogical judgement. Knowledge or ideas should be transmitted; the teacher should use her knowledge base to provide grounds for choices and actions regarding how best to represent knowledge in ways that learners will find understandable (Shulman, 1987: 13).

Other researchers have also concluded that teacher knowledge is a significant determinant in the overall quality of a (national) education project particularly because of its bearing on the achievement levels of learners (*cf.* Wolhuter, 2014). The *Professional Competence of Teachers, Cognitively Activating Instruction for the Development of Students' Mathematical Literacy (COACTIV)* project, based on the 2003/04 PISA study results, concluded after having investigated the correlation between various forms of knowledge of teachers and the outcomes of mathematics teaching, that a strong positive correlation existed between teacher knowledge and learner achievement. In fact, it discovered that the teacher's knowledge is a much better predictor of learners' achievements than the former's teaching experience (Kunter *et al.*, 2011).

Hammerness *et al.* (2005: 359) provide another perspective on teacher education, namely that that there are three widely documented challenges that students face when they learn to teach. The first is that 'learning to teach' requires that new teachers come to think about (and understand) teaching in ways quite different from what they have learned from their own experience as students (the so-called apprenticeship of observation, eye blinkers problem; the efficiency versus innovation problem) (*cf.* Lortie, 1975). The second is the problem of enactment: putting their knowledge into practice. Related to this is the third problem, namely complexity: the complex task of having to juggle a multitude of academic and social goals on the one hand and on the other, trading these (goals) off from day-to-day and from moment-to-moment against changing student needs and unexpected classroom events. Helping student teachers think systematically about this complexity is important. Students need to develop metacognitive habits of mind that can guide decisions and reflection on practice (Hammerness *et al.*, 2005).

Darling-Hammond *et al.* (2005) link up with these three problems when they identify five issues salient in the design of teacher education programmes. The first is that of connection and coherence (which resonates with the needs for students to think systematically about education and the need to develop metacognitive habits of mind). The second is *what* content to include in teacher education programmes (i.e. which of Shulman's categories and in which relative proportions) and the third is the organisation (including the sequence) of that content

i.e. the systematic process of learning. There is, fourthly, also the issue of the learning process: how to introduce and teach key concepts in ways that teachers can enact them. Finally, there is the problem of situating learning in productive contexts: situating the content in a context where it could be developed and transferred to other situations.

3.2. Learning to teach in the South African context

The problem of what exactly the knowledge should be that a prospective teacher should be exposed to and master and how it should be packaged in teacher education programmes, particularly in the South African situation, has been the focus of much research in South Africa. Rusznyak (2015: 140), for instance, distinguishes between two main principles for ensuring curricular coherence in teacher education programmes, namely contextually driven coherence and conceptually driven coherence. According to the first principle, the curriculum will provide prospective teachers the opportunities to acquire a set of contingent knowledge, skills and attitudes directly relevant to meeting the local demands of classroom life and the realities of the contexts in which they will practice. Conceptually driven coherence in initial teacher education programmes, on the other hand, will enable prospective teachers to acquire a systematised body of knowledge from which they can draw principles for informing rational judgement in their teaching practice. However, *both* are needed for the development of conceptually informed practice, as Rusznyak (2015: 15) correctly concludes; the professional teacher needs to draw on a pool of theoretical knowledge for comprehension of the practical or contextual situation on the ground.

A number of South African researchers have underscored the relevance of context over the years in drafting teacher education programmes and hence highlighted various contextual aspects. Morrow (2007: 6), for instance, claimed that the aims of education are relative to particular socio-historical conditions. Because of widespread poverty, the disruption of family life and of community safety nets, the caring function of schools need to be dramatically expanded in South Africa, compared to the situation in a typical developed country where the brief of the school mainly revolves around the transfer of knowledge and the development of the cognitive faculties of the educand (*ibid.*: 4). Similarly, the content and method of education, which are basically a scaffold for taking the educand from where s/he is (situated in a particular context) to gain access to the modern world, will be co-determined by context (*ibid.* 51-68).

Morrow levels two criticisms against the Department of Education of South Africa's (2000) policy on teacher education. First, the policy ignores the context in which South African teachers work and second, it posits as criteria for teacher education programmes the training of students to fulfil the seven roles (discussed below). According to Morrow (2007), these defined roles of the educator amount to a teacher's job description; they have little to do with the quintessential work of a teacher (what Morrow refers to as the 'formal elements' of teaching). Because of the complexity of the knowledge that prospective teachers have to master, the development of their teaching practices cannot be reduced to verifying that they are able to comply with a simple checklist of competences or tasks. Teacher education should instead be couched in an appropriate philosophical approach such as that provided by Alasdair MacIntyre (1981) which emphasises the importance of the moral goods typical of a community engaged in a particular 'practice' (in this case, that of the professional teacher). He refers to these goods as "internal goods" or "goods of excellence" associated with the profession and which can be achieved by participating in the practices. The focus in the education of future professionals should be on these internal goods of the practice, on the

obligations of the moral agent or on the consequences of a particular act (utilitarianism). The focus should not be on the roles and competences of the teacher, but rather on the *telos* ('end', or completion) of a social practice and of a human life, within the context of which the morality of acts may be evaluated.

Samuel (2002), in a case study of the 1994-2002 history of drafting curricula for teacher education programmes at the former University of Durban-Westville, contended that 'context' should not only refer to the (national and educational) context in the educational and social field outside of the university. Teacher education programmes should also be aligned to the new (post-1994) context *within* a teacher education institution or university. The new intra-university context embodies a generation of academics schooled in paradigms of critical pedagogy (of which many pre-1994 academics were ignorant) and a new student body (more diverse, many from previously dysfunctional schools, many being first generation university students).

The relationship between theory and practice remains another perennial problem. Reeves and Robinson (2014) distinguish between three approaches in teacher education programmes with respect to the primacy of theory versus practice: programmes privileging theory over practice, programmes based on the premise that student teachers should acquire theory from practical experience and programmes based on the premise that student teachers should master theory and practice simultaneously. With respect to the second, they distinguish between a number of sub-approaches. One of these is the social-critical-reflective practice model based on the assumption that student teachers need to become more critical of the role of education in the larger socio-political context (particularly the reproduction of socio-economic inequalities) (Reeves & Robinson, 2014: 241).

To summarise, teacher knowledge is a key factor in terms of its impact on the quality and outcome of a teacher education project. This knowledge has a widely recognised theoretical base (from which international benchmarks may well be derived) and a contextual base. While South African scholars have identified the need for a contextual base for teacher education and have highlighted aspects of the previously overlooked context, there is a need for a more detailed exposition of this context and for a strategy for considering that context in teacher education. Put differently, there is a need to give a positive shape or form to universal, constant principles in contingent historical circumstances (Strauss, 2009: 94).

Accordingly, benchmarking for teacher education cannot be based on the outcome of a straightforward comparison of teacher education theory and practices in different countries or systems for the sake of identifying the best programmes or qualifications on the different levels that reflect optimal outputs in terms of high pass rates and/or competences acquired by students (Singmaster, 2015: 38-41). While programmes, qualifications and student achievements may be regarded as the core of benchmarking exercises, the focus of teacher education planners should attest to greater theoretical and philosophical depth. Teacher education programmes should be anchored in the global knowledge base of education as an academic discipline and in the internal goods (MacIntyre, 1981) or the formal elements (Morrow, 2007) of the teaching profession. In addition to this, however, it should also attest to having taken account of context, that it has been operationalised for a particular situation on the ground, in schools and classes.

After now having argued for depth and rigour with regard to its knowledge base, praxis and context, we have, as it were, formulated a three-pronged benchmark for teacher education.

A teacher education programme should provide evidence that (1) it is rooted in a widely (universally) recognised theory and knowledge base, (2) that it is responsive to the exigencies of the praxis of the teaching profession and (3) that it shows an awareness of the context in which the prospective teachers will be plying their future profession. In view of the purpose of this article, attention will now be devoted to the third prong, namely how to promote context-awareness in teacher education. This will be done by outlining a possible procedure, illustrated with the situation in South Africa.

4. Planning for context-sensitive teacher education in South Africa

Step 1: Evaluate the existing benchmarks for teacher education

The 2000 *Policy framework* (Department of Education, 2000) is the first extensive post-1994 teacher education policy document. It is a document that describes the seven roles that a teacher who is "appropriately equipped" for the task of teaching has to master and then describes how it can be ensured that teachers master these seven roles. The *Minimum Requirements for Teacher Education Qualifications* that replaced the 2000 document in 2015 no longer spells out the seven roles but enumerates eleven basic teacher competences expected of beginner teachers.

The *Minimum Requirements for Teacher Education Qualifications* document (South African Department of Higher Education and Training, 2015: 62-63) confirms the contextual picture by acknowledging the complexity of teaching, the different kinds of knowledge, the concomitant competences to be mastered and the recognition of prior learning.

The 2015 document further states, also related to context, that teacher education programmes should address the critical challenges facing education in South Africa today. Challenges singled out include the poor content and conceptual knowledge found among teachers. Teacher education programmes should incorporate the legacies of apartheid and the situational and contextual elements that assist teachers in developing competences that enable them to deal with diversity and transformation. Then teacher education programmes should recognise the importance of inter-connections between different types of knowledge and practices and the ability of teachers to draw reflexively from integrated and applied knowledge in order to work flexibly and effectively in a variety of contexts (South African Department of Higher Education and Training, 2015: 8-10).

This latest policy document represents a considerable shift in policy. A 2007 policy correctly states that the notion of having seven roles of teachers as key criteria, contained in the 2000 *Norms and Standards* policy (which in turn was cast in the mould of the doctrine of Outcomes-Based Education in use at the time) is no longer tenable. The 2015 policy states that teaching is a complex activity and not a "purely skills-based approach" which relies almost exclusively on "evidence of demonstrable outcomes as measures of success, without paying attention to how *knowledge* should underpin these skills for them to impact effectively on learning" (Department of Higher Education and Training, 2015: 9). Emphasis on skills will produce technicians who "may be able to replicate performance in similar situations, but will be severely challenged" should a new situation arise (*ibid.*). The 2015 policy is also articulated in terms of competences (see appendices B and C to the policy, pp. 60-63) and though these competences are nearly all knowledge (rather than skills) based, they still seem to echo

the defunct doctrine of Outcomes-based Education. In other words it focuses (in Alasdair MacIntyre's words) on the competencies of teachers and overlooks the internal goods or formal elements of teaching and hence of teacher education. Although the competences mentioned in the 2015 policy in some ways reflect the South African context and society (implicitly or assumed, as the case might be), the policy never indicates what the South African context actually entails. Furthermore, it does not offer a benchmark or a yardstick for assessing whether a teacher education programme is indeed aligned to this context or whether teacher educators succeed in sensitising student teachers about the South African context of teaching and learning. If education policy can be defined as a statement of intent of the way in which the education needs of a target group are to be met (Steyn, 2014b: 74), it could reasonably be expected that it should spell out the contextual parameters for which it is designed.

Step 2: Show awareness of the internal conditions of the system and hence of the teacher education project

During the benchmarking process knowledge of and insight into the internal conditions or forces and factors of the teacher education system, that is those aspects within the system that co-determine the nature, structure and functioning of the system from the inside, should be developed, amongst others by means of comparisons amongst education systems.

Three types of internal forces and factors can be identified. The first of these factors are of an educational nature, such as the theory of education that drives the teacher education programme in question and which determines the guidelines for what is regarded as quality in that particular teacher education project (Townsend & Bates, 2007: 5; Newby, 2007: 116-119; Angus, 2007: 141; Greenberg, 2010: 20). Generally, it can be said that such theory embraces the following notions with regard to teacher education: the use of the best research findings in putting the project together, the establishment of a strong philosophical and educational foundation for teacher education and the implications of globalisation and the need to be able to cater for ever-increasing diverse education populations. It also embraces the appointment of quality assurance bodies and measures that reflect what the notion "good teacher" entails, the formulation of a conceptual and theoretical base for teacher education that is consistent with the notion "good teacher" and an outline of the academic studies required for mastery of the selected school subjects. Furthermore, an outline of the professional studies to give the students a proper grounding in the principles and practices of teaching and learning, including (if relevant in the particular system) the shift from teaching to learning is also embraced.

This step should also attest to an understanding on the part of the teacher education system planner of the formal elements of teacher education (according to Morrow's [2007] scheme) to ensure a supply of well-equipped and successful teachers for the future (regardless of context). That is to say, teachers should be delivered who, according to Shulman, not only possess the relevant knowledge base but can practice the profession by using the knowledge base to make reasoned pedagogic judgements to guide and inform practice. The MRTEQ 2015 policy demonstrates an understanding of this requirement by enumerating five types of knowledge associated with the acquisition, integration and application of knowledge for teaching purposes. These types of knowledge are disciplinary learning (foundations of education disciplines), pedagogical learning (study of the principles, practices and methods of teaching), practical learning (work-integrated learning), fundamental learning (competence in communicating in English, ability to use information and communication technologies and

acquisition of academic literacy) and situational learning (in education environments such as classrooms) (Department of Higher Education and Training, 2015: 10-11).

This second step should also reflect an understanding of internal factors of a historical nature. Planners should acquire knowledge and insight into the past, present and hoped-for future of the system under scrutiny. New developments should be planned in terms of the existing capacity of the system to implement them and by determining whether they are being introduced based on a generally agreed upon future for the system.

The same applies for internal factors of an interactive nature. A change or innovation with respect to one aspect of the teacher education project will necessarily affect more than one other aspect of the system. It is therefore important for teacher education planners not to concentrate myopically on only one aspect of the project. The benchmarking process has to reflect the interaction among the various aspects of the teacher education project.

Step 3: Show awareness of the external conditions of the education system and hence of the teacher education project

The planning of the teacher education project should also be informed by contextual factors of an external nature, i.e. the forces that (co-)determine the nature, structure or functioning of the teacher education project in a particular country or education system. Among these co-determining factors and forces count the demography of the country in question and its student population. The demography will supply the rationale for the numbers of students to be educated to become teachers and where they will be employed after training (urban or rural areas, as the case may be). The demography will also explain migration trends among teachers (Mclaughling & Burnaford, 2007: 331).

A second external factor that for example determines the nature of a teacher education programme and hence of the benchmarks to be set, is the state of science and technology in the country and at the disposal of teachers and teacher educators. The science and technological status quo will tend to be reflected in the school and teacher education curriculums and in the use of technology as a teaching aid. In technologically more advanced countries, there will most likely be a trend to employ modern information and communication technologies in schools and in teacher education. In systems where (open) distance learning has become part and parcel of teacher education programmes, information and communication technologies tend to be widely used (Townsend & Bates, 2007: 21; Jansen, 2007: 25).

Another external factor is the language of learning and teaching. Comparisons of different teacher education projects have to reflect the differing levels of use and sophistication regarding languages of learning and teaching. During the benchmarking process, one should avoid recommending something from a system having at its disposal the use of a rather scientifically sophisticated language to be transferred to a system that does not have a similarly sophisticated language to work with or in. Similar results cannot be achieved in the target system if the same benchmark has to be achieved using a second or third language by the teacher educators and the students concerned. Benchmarking in the target system should reflect the difference in language sophistication. For example, using a second or third language as the language of learning and teaching but accepting that the same or similar standards will be reached over a longer period with smaller groups of teacher education students, with the aid of certain support services and technologies and with compensatory programmes, if necessary.

Teacher education planners/bench markers should furthermore be aware of the political and institutional conditions in which teacher education takes place in the education system. While it can be assumed that all teacher education programmes will strive at forming students that will as future teachers support learners to become competent and worthy citizens of their respective countries, it must also be accepted as a reality that all countries and education systems are not able to do this effectively. This is because of conditions such as political instability or budgetary shortfalls (Jansen, 2007: 27-29; Reid, Brain & Boyes, 2007: 79). Although the international expectations might be the same for all countries (for instance as member states of the United Nations, UNESCO or the BRICS grouping), contingent local conditions might prevent member states from performing as expected. Budgetary constraints and political instability (wars, xenophobia, budgetary constraints, tension among neighbour states, disrespect for basic human rights and so forth) might prevent them from performing optimally.

Step 4: Learn from the best

The fourth step to develop a sound benchmark for teacher education is to learn lessons from the content and content-structure of other education systems. In fact, this is not a fourth step that has to follow the others in sequence; it should take place coterminous with all the other steps. A study is made of the theory and practices with regard to teacher education in different education systems. The description is not a mere report of the particular issues; it also reflects and takes into account all the contextual conditions (sometimes referred to as "determinants") of a system in question. In this process, certain lessons, both positive and negative, can be learned and the results of this process used for refining the benchmarks (yardstick). Best practices in and for particular settings are identified, analysed, motivated and described. Best practices represent the best solutions or applications that can be discovered among the various education systems. Such practices are linked to particular settings and hence are not necessarily generalisable to all education systems. In some cases, a best practice derived from a particular situation in a particular education system has received general acceptance in the field of teacher education or in an international evaluation exercise such as an IEA study.

Regarding teacher education, the term "best practices" refers to practices in the teacher education programmes of other systems of education that have been found effective and efficient in accordance with norms and standards applied by the authorities in those systems and programmes (Stenström & Laine, 2006: 12-13). When comparing different practices, teacher education planners, meaning academics who inform policy makers and who draft teacher education programmes, have to ensure that programmes on the same or similar categories of teachers are compared. Cognisance also has to be taken of the nature and structure of the education system that offers a comparable teacher education programme. The same applies for qualifications of the teacher educators in the various teacher education programmes. The nature of support provided to students at the various levels at which they conduct their studies, the linguistic challenges that come into play, particularly where students have to study in their second and third languages and also the affordability and appropriateness of the facilities and infrastructure available to the teacher educators. It is also important to ensure that the comparison is accurate in terms of full- and part-time students, contact and (open) distance learning, i.e. the mode of delivery.

Step 5: Operationalise

The benchmarking process is completed with the phase of planning operationalisation. Care has to be taken that the benchmark formulated for a specific situation does not merely reflect universally acceptable norms and best practices or is construed as "a generally acceptable point of departure". Ideally, a benchmark that emerges from this process should reflect the widely accepted norms and practices as well as the particular context and situation for which its application is intended. Put differently, it should also reflect the internal and external conditions of the system or the project in which it will apply. Exactly the same benchmark might therefore slightly differ in terms of formulation depending on whether it is intended for application in South Africa, Finland or China.

Mention has been made throughout this article of the importance of showing awareness of the socio-political context of teacher education in a particular system or country. This raises the question: what is the nature of such a context in a particular, concrete situation? The question can be answered in terms of the following brief outline of the context of teacher education in South Africa.

The current (2015) size of the teacher corps in South Africa is in the region of 426 000. Sixty-six per cent of these teachers possess a matric and three years of post-matric education and only 15 per cent have matric plus four years (Centre for Development and Enterprise, 2015: 8). The teaching profession is also an aged and ageing profession with most teachers falling in the 40-49 years of age category. These two contextual factors imply that teacher education has to be geared to supply the required numbers of well-qualified teachers and replacements when a significant number of teachers retire between 16 to 26 years from now or leave the profession for medical or other reasons.

Teacher education takes place at universities in the form of either a four-year B.Ed. degree or a three-year Bachelor's degree and a Postgraduate Certificate in Education. There were 94 237 student teachers at South African universities and 13 708 graduates in 2012 (Centre for Development and Enterprise, 2015: 4). Teacher education programmes are currently characterised by a high attrition rate and the profession itself by a high turnover rate (Centre for Development and Enterprise, 2015: 6). Supply-demand projections are difficult because of a plethora of factors involved, of which many are unknown right now. The Centre for Development and Enterprise (2015: 3) states that while there will most probably be a shortage of teachers in particular phases (such as the foundation phase) and subjects (mathematics and languages), it is unlikely that South Africa will experience an overall shortage of teachers in the next ten years. The lack of quality is another contextual factor. The national government's own investigations have revealed a lack of quality in teacher education. This is a condition that could be attributed to low admission criteria of teacher education programmes, a lack of rigour in selection processes, deficiencies in programme coherence, content and cognitive demand and a failure to take into account the needs and realities of the education system (Centre for Development and Enterprise, 2015: 5).

The problems associated with the teaching profession and with teacher education as such are exacerbated by the general administrative inefficiency in the South African education system and the absence of a culture of teaching and learning. The persistent inequalities in the education system (not only in the shape of the de facto existence of several education systems in South Africa, with widely divergent levels of quality) also exacerbate the problem. This is a legacy of historical developments and inequalities along gender lines, the rural-urban divide

and the affluence of provinces. The context is furthermore characterised by large proportions of learners entering educational institutions wholly unprepared and unequipped for the demands of being trained there. This is because a large percentage of learners' first languages is not the same as the language of learning and teaching in schools and universities, the low outcomes (achievement levels) relative to the amount of public and private funds invested in education and the fact that the education system has been undergoing a process of radical restructuring for the past few decades. Many of these reform initiatives have proven to be complete failures (*cf.* Wolhuter, 2014). Other external contextual factors include the youthful age profile of the population, huge socio-economic disparities (to a large extent running coterminous with the racial divide), the lack of social capital, widespread poverty, high levels of unemployment and the fact that the country is still in the throes of an ambitious political and societal restructuring project (*cf.* Wolhuter, 2011).

This brief overview of the contextual factors surrounding teacher education in South Africa illustrates the difficulties of benchmarking in teacher education. There are many imponderables in the context and even what is fairly well understood in the current and future context of teacher education renders benchmarking a daunting task.

5. Conclusion

The above clarifies that benchmarking for teacher education is no simple exercise of merely comparing different teacher education projects and adopting standards and views that seem to have general or universal coinage. While such an exercise is not without merit, a case can be made that taking account of contextual-particular forces constitutes an indispensable component of benchmarking for teacher education programmes. This is especially true in a globalised world in which the competitiveness of states and the well-being of their people increasingly depend on their quality of education, the education of teachers — a pivotal part of the national education project — should be well-considered. For that benchmarking is indispensible.

References

Angus, L. 2007. Globalisation and reshaping of teacher professional culture. In T. Townsend & R. Bates (Eds.). *Handbook of teacher education*. Dordrecht: Springer. pp. 121-132.

Centre for Development and Enterprise. 2015. *Teachers in South Africa: Supply and demand.* Parktown: CDE.

Darling-Hammond, L., Hammerness, K., Grossman, P., Rust, F. & Shulman, L. 2005. The design of teacher education programs. In L. Darling-Hammond & J. Bransford (Eds.). *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco: Jossey Bass. pp. 390-441.

Greenberg, J.D. 2010. Teacher education: So, what should we do now? Learning from the past; looking to the future. In W. Halloway & J. Maurer (Eds.). *International research in teacher education: Current perspectives*. Armisdale: The Printery. pp. 5-25.

Hammerness, K., Darling-Hammond, L., Bransford, J., Berliner, D., Cochran-Smith, M. MacDonald, M. & Zeichner, K. 2005. How teachers learn and develop. In L. Darling-Hammond & J. Bransford. (Eds.). *Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco: Jossey Bass. pp. 358-389.

Jansen, J. 2007. Learning and leading in a globalized world. The lessons from South Africa. In T. Townsend & R. Bates (Eds.). *Handbook of teacher education*. Dordrecht: Springer. pp. 25-40. http://dx.doi.org/10.1007/1-4020-4773-8_2

Kunter, M., Baumert, J., Blum, W., Klussman, U., Krauss, S. & Neubrand, N. 2011. *Professionelle Kompetenz von Lehrkräften: Ergebnisse des Forschungsprogramms COACTIV.* Münster: Waxmann.

Lortie, D.C. 1975. *School teacher: A sociological study.* Chicago: The University of Chicago Press.

MacIntyre, A. 1981. *After virtue*. Montreal: University of Notre Dame Press.

Mclaughling, H.J. & Burnaford, G.E. 2007. Re-thinking the basis for 'high quality' teaching: Teacher preparation in communities. In T. Townsend & R. Bates. (Eds.). *Handbook of teacher education*. Dordrecht: Springer. pp. 331-342. http://dx.doi.org/10.1007/1-4020-4773-8_22

Morrow, W. 2007. *Learning to teach the child.* Cape Town: HSRC Publishers.

Newby, M. 2007. Standards and professionalism. In T. Townsend & R. Bates (Eds.). *Handbook of teacher education*. Dordrecht: Springer. pp. 113-125. http://dx.doi.org/10.1007/1-4020-4773-8_8

Reeves, C. & Robinson, M. 2014. Assumptions underpinning the conceptualisation of professional learning in teacher education. *South African Journal of Higher Education,* 28(1), 236-253.

Reid, I., Brain, K. & Boyes, L.C. 2007. Where have all the teachers gone? Gone to be leaders, everyone. In T. Townsend & R. Bates (Eds.). *Handbook of teacher education*. Dordrecht: Springer. pp. 79-94. http://dx.doi.org/10.1007/1-4020-4773-8_6

Rusznyak, L. 2014. *South African education still fails many 20 years after apartheid*. Available at http://theconversation.com/south-african-education-still-fails-many-20-years-after-apartheid-22069 [Accessed 20 August 2015].

Rusznyak, L. 2015. Knowledge selection in initial teacher education programmes and its implications for curricular coherence. *Journal of Education,* 60, 7-29.

Samuel, M. 2002. Working in the rain: Pressures and priorities for teacher education curriculum design in South Africa: A case study of the University of Durban-Westville. *International Journal of Educational Development,* 22, 397-410. http://dx.doi.org/10.1016/S0738-0593(01)00061-X

Shulman, L. 1986. Those who understand: Knowledge growth in teaching. *Educational Researcher,* 15(2), 4-14. http://dx.doi.org/10.3102/0013189X015002004

Shulman, L. 1987. Knowledge and teaching: Foundations and the new reform. *Harvard Educational Review,* 57(1), 1-21. http://dx.doi.org/10.17763/haer.57.1.j463w79r56455411

Singmaster, H. 2015. Learning from the best: Designing an effective, high quality CTE system. *Techniques: Connection Education & Careers*, 90(5), 38-41.

Slonimsky, L. & Shalem, Y. 2006. Pedagogic responsiveness and academic depth. *Journal of Education,* 40, 35-57.

South African Department of Education (DoE). 2000 Norms and Standards for Educators. Notice 82 of Available at: http://www.polity.org.za/html/govdocs/notices/2000/not0082.html [Accessed 14 February 2016].

South African Department of Education (DoE). 2007. The national policy framework for teacher education in South Africa. *Government Gazette*, 367(29832), 1-40.

South African Department of Higher Education and Training (DHET). 2015. Revised policy on the minimum requirements for teacher education qualifications. *Government Gazette*, 596(38487), 1-72.

Stenström, M-L. & Laine, K. 2006. *Towards good practices for practice-oriented assessment in European vocational education. Institute for Educational Research, Occasional Paper 30*. University of Jyväskylä, Finland: University Press.

Steyn, H.J. 2014a. The education system: An exploratory perspective. In H.J. Steyn & C.C. Wolhuter (Eds.). *The education system: A comparative education perspective*. Potchefstroom: Keurkopié. pp. 47-72.

Steyn, H.J. 2014b. The structure of the education system. In H.J. Steyn & C.C. Wolhuter (Eds.). *The education system: A comparative education perspective*. Potchefstroom: Keurkopié. pp. 71-108.

Steyn, H.J. & Wolhuter, C. 2010. Creating sustainable learning environments in schools by means of strategic planning: The experience of engagement by a comparative education team at a university. *South African Journal of Higher Education,* 24(3), 456-470.

Strauss, D.F.M. 2009. *Philosophy. Discipline of the disciplines*. Grand Rapids: Paideia Press.

Townsend, T. & Bates, R. 2007. *Handbook of teacher education*. Dordrecht: Springer. http://dx.doi.org/10.1007/1-4020-4773-8

Wolhuter, C.C. 2011. The education system of South Africa. In P. Schneller & C. Wolhuter (Eds.). 2011. *Navigating the C's: Creativity, care, compassion, character, cosmopolitanism, contribution and critical awareness: An introduction to comparative education*. Noordbrug: Keurkopie. pp. 69-88.

Wolhuter, C.C. 2014. Weaknesses of South African education in the mirror image of international educational development. *South African Journal of Education,* 34(2), 1-25. http://dx.doi.org/10.15700/201412071120