Why Teachers matter: Policy issues in the professional development of teachers in South Africa.

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1. Introduction

Education is a basic human right. When that right in the context of educational growth and self-fulfillment is granted development opportunities, it is likely to be accompanied by improvement in the individual's and society's well being as a whole. The inseparable themes of improving access and quality of education are at the heart of the millennium development goals of Education for All (EFA) Global Monitoring Report 2008 (UNESCO 2008). As education systems expand, the question is how the goals of EFA can be achieved when numerous countries in Africa are faced with problems that seem far too intractable to overcome. The unfortunate reality is that for many African countries, larger socio-economic issues precede improving the quality of education. Poor learning outcomes remain a tremendous challenge in most countries of sub-Saharan Africa. As a result, many African countries including South Africa are significantly disadvantaged globally and in terms of their national priorities by the poor performance of the education sector.

For South Africa this deficiency of the education system is particularly evident in science and mathematics education (TIMMS 2003; Reddy 2006; Centre for Development and Enterprise (CDE) 2004). Science and mathematics subjects are increasingly important to any economy that wishes to compete in the global economy. Competitive economic activity for the 21st century will inevitably involve greater access to, and extensive application of new information and communication technologies that ultimately have their basis in mathematics and various branches of science (CDE 2004). South Africa for example, cannot hope to develop and use these technologies without producing a critical mass of citizens with a sound mathematics and science education background. Even more importantly, it cannot hope to produce this core of specialists without effective school-based education in those subjects by well-qualified, adequately paid and highly committed teachers. It is said that the quality of an education system cannot exceed the quality of its teachers. In this regard, the teachers' pivotal role is recognized as being essential for educational advancement and in turn, its contribution to the development of a modern society.

This recognition of the teacher's role and relevance in the development of modern society was first enshrined in the declaration of the special intergovernmental conference on the 'The Status of Teachers' held in Paris in October 1966 (Moon, 2006). In the four decades since the Paris declaration few would argue about how highly significant the role of teachers has become in the attempt to achieve stable and productive societies. The rapid development of knowledge

economies, the increasing demand for primary or basic education in achieving millennium development goals of education for all, and the corresponding pressure to expand the secondary sector have accentuated the need for more subject specialists and a wide range of teachers. It has become clear that no analysis of any country's expansion of teacher education capacity to meet national needs can exclude the crucial issues of teacher supply, the quality of their teaching and hence the quality of their education and their retention.

It is against this backdrop that this paper examines developments in the past fifteen years, around teachers and teacher education in democratic South Africa. These developments we would argue have given rise to an urgent need for policy intervention to overcome the looming teacher shortages and the need for reform and the continuous professional development of teachers. The paper further addresses ways in which issues of policy around teacher education and teaching in South Africa may be enhanced so as to overcome some of the identified constraints as regards:

- Teacher supply, recruitment and retention
- Teacher education reform and development
- Continuing professional development of teachers.

2. The changing landscape of teacher education in South Africa: reflections of the past fifteen years

It appears that recognition of teacher's relevant role in the development of modern society as enshrined in the Paris declaration of 1966 had been taken seriously by South Africa's post apartheid government that came into office in 1994, when in 1995, less than a year after taking office, it commissioned the first ever audit of teacher education in the country. This was in response to the lingering concerns raised about the quality of so called Bantu education, to which the majority of black South Africans were exposed under apartheid, and gross inequalities and waste in the distribution of resources. Fragmented and wasteful duplication of programme offerings along the various racial groups was the order of the day. The Audit indicated that there were, as of 1995, 281 different institutions providing teacher education in South Africa (Hofmeyer and Hall, 1996). These ranged from universities to technikons (equivalent to polytechnics), state colleges to distance education providers, non-government organizations (NGOs) and private for-profit colleges that had been established and managed based on racial classification. In 1994, there were about 480,000 students engaged in some form of teacher education, and the annual output of new teachers at that time was about 26,000 (Hofmeyer and Hall, 1996). During this period colleges of education were responsible for teacher training and were under the control of the provinces. In some provinces teacher supply and demand were not properly aligned, and this poor planning in the education system resulted in newly qualified teachers not being able to find employment, a situation sometimes exacerbated by an already existing pool of unemployed teachers in those provinces. The annual average rate of attrition from the teaching profession at the time was 6 per cent. The international average attrition rate is 5 per cent a year.

The Audit report highlighted the fragmented provision of teacher education, a mismatch between teacher supply and demand (on the basis of race and ethnicity), and high numbers of unqualified teachers. As the Report indicated there was a substantial proportion of teachers (36 per cent) who were under or unqualified. This high percentage of unqualified teachers would have significant impact on the demand for continuing teacher development generally, and in particular for in-service teacher education upgrading programmes (Hofmeyer and Hall, 1996). Interestingly enough at the time the audit report was published, the conclusion was that South Africa would have surplus teachers in the years to come, and that the biggest problem facing the teacher education sector was the quality of teachers and the teacher education programmes on offer.

Furthermore the report highlighted the fact that the teacher education system was not cost-effective, that teacher supply, and utilization policies were predicated on the wrong premises and assumptions that were racially and ethnically based, which would ultimately fail to build and maintain human capital in the teaching profession. Thus, the prevailing circumstances then in the education sector made it imperative for a restructuring of the system of teacher education in the country to be initiated (Hofmeyer and Hall, 1996). Intervention measures for redress and equity including policy driven implementation activities were to be embarked upon in order to put teacher education at an acceptable level of quality delivery. But just as the issue of quality provision of teacher education was being addressed other competing transformation imperatives came to the fore. The major ones were the rationalization and redeployment of teachers, and the introduction of a new curriculum. Suffice it to say that with most of the education budget going towards teachers' salaries and severance packages deriving from the rationalization policy, little funding and inadequate resources were made available for continuing teacher professional development, with regards to the implementation of the new curriculum. As a result, the quality of education on offer was compromised because of unprepared teachers, leading to poor performance of learners in the 'matric', school leaving certificate examinations (CDE, 2004) as well as the TIMMS study (Reddy, 2006), where South African learners were among the worst performers.

Rationalization of teacher education in the post apartheid period (1994-2000)

One of the issues that arose in the National Teacher Education Audit report was whether South Africa had sufficient teachers, and which institutions were best placed to train teachers for the post apartheid education system. Colleges of education were regarded as not cost-effective primarily because of their comparatively small size. Low staff-student ratios, among other things made the unit cost of training teachers very high and uneconomical. Following the recommendations of the Report and that of the National Commission on Higher Education (Hofmeyer & Hall, 1996; NCHE, 1996), colleges of education were to close, teacher education was to be offered in universities, and colleges of education that were still open by 2001, were to be incorporated into universities.

The closure and incorporation of colleges into universities over a period was undertaken with some swiftness resulting in massive reduction of the number of colleges and registered

students (Jansen, 2003). These drastic measures in later years, impacted on the capacity of the system to produce and supply sufficient teachers when the need for it became urgent.

3. Teacher rationalization and utilization: Some Policy Issues

Under the apartheid government, spending on school education varied greatly depending on the race categorization of the school. This resulted in an imbalance in terms of facilities and equipment but also in terms of staffing and teaching posts available at the school (Jansen and Taylor, 2003). The teacher rationalization programme was one of the policy reforms initiated by the new government to try and achieve greater equity, through a more equitable distribution of teachers across different schools and provinces. As part of this redeployment process, those teachers who were not willing to move to other schools could apply for voluntary severance packages (VSPs), the cost of which at that time was estimated to be around R600 million (Jansen and Taylor, 2003).

A major fall-out of the teacher rationalization programme was massive overspending by the Provinces, largely because of the unanticipated large number of teachers taking voluntary severance packages. In contrast to the initial estimate of about R600 million by early (April) 1997, more than 19000 teachers had applied for the packages and more than 16000 had been approved at an estimated cost of R1.05 billion (R=Rand). Although the rationalization programme had ultimately succeeded in distributing approximately 30,000 teachers more evenly across schools based on a given set of criteria (Jansen and Taylor, 2003), however it soon became clear that this improved placement strategy was done at some cost. Teachers who left or were leaving the profession were generally often those with higher qualifications, skills and experience than those remaining (Jansen & Taylor, 2003). The exodus of these well qualified teachers, many of whom were young, would later have an impact on the teacher supply and demand the country faced in the following years.

4. Curriculum Reform

One of the priorities identified by the post apartheid government was to jettison the then Bantu Education curriculum which was designed to socialize black people to servitude. The curriculum was underpinned by fundamental pedagogy which instilled passiveness and obedience to authority, thereby undermining teacher creativity and autonomy. It was thus agreed that this curriculum should give way to a new curriculum in line with the development and transformative goals of the government. Thus, in 1998, four years into the government's term of office, and in the midst of the teacher rationalization programme a new reform based curriculum, known as Curriculum 2005 was introduced.

The introduction of the new curriculum could not have come at a worse possible time for the teaching profession. With the introduction of the new curriculum, came the need for the training and retraining of teachers, development of new materials, preparing curriculum facilitators, and

the monitoring and evaluation of the implementation process. These processes would obviously come at a cost. According to Jansen and Taylor (2003) the effective implementation of the outcomes based education curriculum was one that would be heavily dependent on motivated, committed and knowledgeable teachers.

With the big slice of the education budget going towards the salary bill, which in 1997 was estimated at being 85% of the education budget, there was little funding left to invest in the implementation of the new curriculum. Teachers who were not sufficiently prepared and in some cases never received any training were tasked with the responsibility of implementing the new curriculum. Teachers teaching out of their areas of specialization is one of the ignored or overlooked deficiencies existing in the system. There are currently no adequate statistics to tell us how many teachers are teaching out of phase and out of area of specialization. This hidden demand factor of teachers not sufficiently qualified or trained to teach in a particular learning area has been shown to have an impact on teacher confidence and teacher morale.

Following the implementation of the new curriculum, continuing professional development became one of South Africa's national development goals in the continuing reform of its education system. An example of such continuing professional development for the implementation of Curriculum 2005 at the Foundation Phase was the UNIVEMALASHI Project (Onwu & Mogari, 2004). This project was a district-level systemic reform initiative for school based teacher development in 25 schools. The project was successful in improving the content knowledge, skills, beliefs and attitudes of 110 participating foundation phase teachers (6-9 years) (Onwu & Mogari, 2004). This intervention however, was just a drop in the ocean given the large number of teachers in the system that still requires such training.

The teacher rationalization programme was therefore viewed as ill-timed coming at the heels of the new Curriculum 2005. Both the rationalization policy and the closure of the colleges have had fairly dramatic and lasting implications for the supply of teachers and the prestige associated with the profession, with the result that the teaching profession once seen as a very stable and secure one is no longer a profession of choice or a profession of mobility.

In summary, within the first six years of South Africa's democratic dispensation, teacher education and teacher education reform have undergone a number of changes and rationalizations bordering in some cases on unintended upheavals. These interventions include the closure of colleges of education, the compulsory deployment of teachers to areas of need, the introduction of voluntary severance packages, and the introduction of the new outcomes based education Curriculum 2005. It could be argued that there was not adequate provision of qualified and well prepared teachers and material resources for the successful implementation of the new curriculum. Any discussions therefore about the quality of the supply of teachers in the South African setting would have to take into account these contextual factors that have had a fairly negative impact on the status and perception of the profession in the eyes of the public.

5. Post 2000 developments: Some aspects of teacher supply, retention and policy issues

Over time, as we have seen, important changes which impact on teachers and the teaching profession have occurred in South Africa. According to Welch and Gultig (2002), the changes in the philosophical approach to education in South Africa have meant a new conception of the role and identity of the teacher. And as we indicated earlier the new roles which teachers are expected to play in effectively implementing curriculum 2005 would require continuing professional development.

The role teachers are expected to fulfill in line with the philosophy of Curriculum 2005 is clearly spelt out in the publication of the Department of Education (DOE) *Norms and Standards for Educators* (DOE, 2000). The educator or teacher is seen as playing seven roles in the school, namely, learning mediator; interpreter and designer of learning programmes; leader, administrator and manager; scholar, researcher and lifelong learner; assessor; community, citizenship and pastoral role and, the overarching role into which all other roles are integrated, learning area and phase specialist (DOE, 2000).

Considerable resources would have to be invested to attain such ideals in the professional development and provision of a sufficient number of qualified teachers.

In most countries of Africa the problem of teacher supply, and retention to meet the needs of expanding primary and secondary education sectors have been well documented as a particular challenge if not a continental crisis (Lewin & Stuart 2003, Dladla & Moon, 2006; UNESCO 2006, 2007a). Successive research reports, such as the Multi-Site Teacher Education Research Project (MUSTER) have pointed to the large number of unqualified teachers in schools and these numbers will increase if expansion to meet Education for All (EFA) targets continues (Lewin & Stuart 2003). Over half of the existing teachers are unqualified or under qualified in the African countries studied (Lewin 2000).

The dispute around teacher supply in sub-Saharan Africa still appears to centre on getting more accurate information and understanding of both the needs and current provision, and issues of attracting the right candidates to the profession. Issues of salaries and working conditions have costly implications for teacher supply, recruitment and retention, especially if the teaching conditions are such that capable students will not consider entering training because of what awaits them at the end of the road (Avalos 1993). The decline in teacher salaries relative to other comparable professions (Colclough et al 2003), low levels of job satisfaction and poorly motivated teachers in sub-Saharan Africa (Bennell and Akyeampong 2007) have been well documented, leading to a continuing decline in teacher supply.

In South Africa, the closure and incorporation of colleges of education into universities has resulted in the reduction of sites of delivery for initial teacher education. For over a decade from 1995-2006 this incorporation has resulted in a significant decline in the enrolment of student teachers. The graduate output of new teachers in 2006 was said to be 6,000, down from a high of 26,000 in 1994. Over that period, about 2000 teachers were reported to be leaving teaching every

year, a rate which has left government officials worried and prompted educators' unions to warn of dire consequences if the trend continues (DOE, 2007).

In very recent times the Basic Education Minister, in a reply to a parliamentary question indicated that 24,750 teachers had left the profession between 2005 and 2008 (DOE, 2010). The figures are made up of deaths, dismissals, resignations and early retirement due to ill health. The perceived causes of diminishing interest in teaching as career are the poor public image of the profession and its status particularly among young people, strenuous working conditions, low teacher morale, uncertainty about where new teachers would teach after qualification, and the decline in the number of service-linked bursaries awarded by the Provincial Education Departments to student teachers (DOE, 2010). In addition, student discipline, low salaries and a profession that has lost its spark are driving teachers out of the classrooms

In South Africa, the disproportionately low enrollment of black African student teachers has been particularly worrying. The Department of Education notes that the situation is of serious concern especially in the Foundation phase, where learners to be taught require teachers with mother tongue competence. For example, out of the 6,000 new teachers who graduated in 2006, fewer than 50 were competent to teach African Languages in the Foundation phase (DOE, 2007:10). Of the newly qualified primary school Foundation phase teachers in 2008, 80% were white, and 66% were white women. Whilst foundation phase teachers are very much needed nationwide, it needs to be pointed out that without substantial increase in African enrolment, there will be teacher shortages in the early childhood education phase, where mother tongue African languages, are the medium of instruction.

In South Africa, there is enough evidence to suggest that young African school leavers are not entering teacher-education programmes in the numbers required (DOE, 2007). The reported figures for teacher education suggest a looming shortage of teachers. The Department of Education has indicated that the minimum annual requirement for new teachers as a consequence of retirement, resignation and mortality is 21,000. A more realistic estimate for the next few years would be 25,000. The system needs 21,000 new teachers every year but only 8,000 were qualifying (DOE, 2010). The Human Science Research Council Educator Supply and Demand Study Report (2005) projected a shortfall of around 15,000 teachers by 2008. A related study by the HSRC entitled Educator Supply and Demand in the Public Education System (2005), reported the alarming incidence of ill-health among too many educators and especially inroads being made by HIV and AIDS into the lives, careers and well-being of teachers.

On the basis of current trends, in the next decade we anticipate that the rate of resignation may increase as a result of the ever expanding knowledge economies and their accompanying employment opportunities. The issue of teachers remaining in their profession is one that very much threatens to undermine efforts to achieve national education goals. This is precisely because as Colclough, *et al* (2003) have argued a range of better paid jobs would be available as attractive options for those who traditionally chose teaching. Teachers in general are relatively better educated and have a fair chance of competing quite favourably for jobs against the pool of the unemployed (Moon, 2006). Given those circumstances, rural schools would be particularly at risk,

because of limited access to social amenities and resources generally, and poor remuneration and working conditions of those who work in those communities. In consequence rural areas are unlikely to attract the more qualified, skilled and knowledgeable teachers.

In a recent survey of newly qualified teachers in South Africa, 74% of newly qualified teachers take up teaching appointments in an urban setting, 13.9% in a peri-urban/semi-rural area and only 9.7% in a rural area. Research by the Human Sciences Research Council (2005) for the Nelson Mandela Foundation reveals growing community disquiet about the qualifications and competence levels of teachers in rural communities. Across South Africa rural communities are the most challenged in terms of recruiting and retaining qualified teachers.

Besides the concern about the inadequate supply of school teachers at the early childhood phase and in rural communities there are alarming indications of specific shortages in 'scarce subject' or 'scarce skill areas' especially at the secondary level. In 2006, with the implementation of the new curriculum 2005 at the Further Education and Training (FET) band (grades 10-12), which included new learning areas such as mathematical literacy as a compulsory subject for those not taking mathematics (DOE, 2002), there was always the issue of whether there are sufficient teachers available to handle those new learning areas. Furthermore, the limited use of the phrase 'scarce skill areas' needs to go beyond the confines of science and mathematics only, to include other niche areas such as early childhood education, the Arts, computer technology, technology, economic and management sciences with regards to the provision of sufficient specialist teachers.

The same argument is advanced in respect of the country's language policy. The policy intention is for learners to learn one indigenous language, and the right to be taught where feasible in one of the 11 indigenous languages. But the question is: does the country have enough specialized language teachers, and what can be done as policy intervention to produce more quality teachers in order to meet up with a constitutional requirement and keep the pupil-teacher ratio within acceptable limits? There is no doubt that policy systems for developing teacher education in South Africa in line with the demands for meeting the global Millennium Development Goals (MDGs), are under particular strain. The MDGs relating to education cannot be met unless the teacher supply is adequate to keep the pupil-teacher ratio within reasonable limits, and the quality of their training is sufficient to result in minimum acceptable levels of learner achievement (Lewin & Stuart 2003). Increasing recruitment, strengthening teacher motivation, equity and improving qualifications are clearly some of the policy issues at the heart of teacher governance in South Africa.

Other challenges facing teacher education reform in South Africa are now briefly examined. Given the rapid pace of innovative changes in the use of information and communication technology (ICT) in schools and industry and the enormous impact on economic and education systems (UNESCO 2007b; Moon 2006), South Africa, now regards the mastering of basic ICT-related skills and competencies as an inevitable part of basic core education. While the use of ICT is becoming widespread especially among young people, its effective integration into the education system is complex, involving not only technology but also teacher competencies,

institutional readiness, curriculum and sustained financial resources (UNESCO 2007b). The effective integration of such applications in the classroom however depends to a large extent on teachers' skills and ability with the new communication technologies.

Are there policies in place and a sufficient number of competent, knowledgeable and skilled teachers to facilitate such integration in our schools, we may very well ask? While there has been an increased focus on teachers' ICT training, the recent African Survey on ICT initiatives noted that most of such training in the region tends to be once-off and short term with limited follow-up (UNESCO 2007b). To manage ICT in education in a better and more integrated way, countries in Africa would have to develop ICT policies if they have not done so already. In South Africa, in a few areas, policy systems are beginning to acknowledge this and new approaches are being adopted that would facilitate the training of more teachers in ICT. As part of the process the government has made provision for every teacher to be supplied with a laptop computer.

South Africa suffers additionally from another teacher supply related problem that occurs elsewhere in the world but not at the same scale. It is teacher migration. Europe and especially the UK is actively recruiting graduate level teachers from South Africa and a range of African countries (De Villiers, 2007). Thus investment in training and the benefits that ought to accrue to South Africa are reaped elsewhere.

Overall, existing forms of teacher policy on supply, demand, and retention may not be completely adequate in meeting the country's specialised future educational needs. South Africa's National Policy Framework for Teachers (DOE 2007) states that there is a lack of fit between overall demand and supply, and also between demand and supply for particular skills in particular schools. Projections for South Africa suggest a substantially rising demand for teachers, which, unfortunately is particularly sensitive to the demographic impact of the HIV/Aids pandemic (Crouch & Lewin 2003). It is evident that these shortfalls have to be met, by providing education and training. There is also the need to address those factors affecting the supply of future teachers more comprehensively in terms of how we attract them into the profession, how we prepare them for the world of work and how we retain them.

In examining the pressures for the correction of the imbalance in the provision of quality teachers in South Africa, the question arises as to what the defining characteristics of strong national policy structures ought to be around teachers and teaching. Putting it more specifically, what policy systems is, or should the government be adopting in addressing some of the problems and challenges associated with teacher supply and retention in terms of status, salary, education and training, skills development, impact of HIV/Aids to name just a few for quality education?

6. Policy interventions by government

How is teacher education in South Africa to be repositioned, to meet key national education and developmental goals? The concern for improving teacher education is to our mind the most critical quality input. In this regard it is important to first acknowledge that policy making for teacher education in South Africa is informed by the existing national structures for education

policy-making. In South Africa for example teacher unions have had a considerable impact on policy making in a way that they do not have in other countries (Moon 2006). At the same time the national government has, and does come up with common forms of intervention measures in the form of regulatory activity and laws directed at teacher education and teaching in the country. What is being emphasized here is that government has not been a passive spectator regarding the plight of teachers and teacher education in the country. The government has undertaken some initiatives aimed at improving some aspects of the situation. These include setting up of commissions to examine critical areas of the education sector with a view to making recommendations. For example, the commission of a study on rural education highlighted specific challenges in rural schools (Report of the Ministerial Committee on Rural Education (DOE, 2005a). The report noted a dire shortage of qualified and competent teachers in these rural schools, problems of teaching multi-grade and large under-resourced classes and limited professional development programmes for teachers.

The Government further commissioned a study to develop a National Framework for Teacher Education, which was published in 2005 (DOE, 2005b). The study subsequently led to the formal adoption of a new Framework for Teacher Development in South Africa (DOE, 2007). The initial study Report (DOE, 2005c) engaged with the concept of teacher education and recommended that it (teacher education) should be conceived of as a continuum without sharp breaks. The report makes a distinction between the Initial Professional Education of Teachers (IPET) and Continuing Professional Teacher Development (CPTD), and rightly argues that the development of the knowledge base of our corps of teachers is fundamental to quality improvements in education. The Higher Education (HE) sector no doubt has a key and inescapable role to play in teacher development.

In the various education faculties of our universities, teacher educators have found themselves between competing pressures in terms of the undergraduate pre-service programmes that are offered, by trying to compete for relevance, status and prestige in the world of academia and at the same time wanting to respond to the pressure by the schools for programmes relevant to school curriculum, and the development of teaching skills. In some institutions we are now witnessing partnerships between schools and teacher education faculties that have embraced the use of the wider community of school teachers and principals as mentors and examiners during students' teaching practice exercise.

7. Government's proposals to improve teacher education and the status of the teaching profession

As indicated earlier, the South African education policy makers have not been passive in the midst of challenges facing teacher education but have adopted certain policies aimed at improving the quality of teacher education provision, while developing strategies to improve the status of the teaching profession This section will discuss these policy interventions in relation to (a) initial professional teacher education, (b) continuing professional teacher development, (c)

recruitment campaigns for new teachers and (d) retention strategies for teachers.

(a) Initial Professional Education of Teachers (IPET)

In South Africa a recently published National Policy framework for Teacher Education (DOE 2007) made proposals around initial professional education of teachers (IPET) which are aimed at improving the quality of the preparation of teachers via IPET. The Department of Education proposes two broad pathways that will lead to the first professional qualifications for teachers. The first is the 480 credit Bachelor of Education degree which will include the equivalent of a year's supervised practical teaching experience and will be pegged at level 8 on the National Qualifications Framework. The second is an appropriate 360-credit first degree (for example BA/BSc/BCom) followed by a 120-credit Advanced Diploma in Education. Both pathways are equivalent in status, and will lead to the registration as an educator with the South African Council of Educators (SACE) which is the national body for the education profession. What is important about the new IPET programmes is the emphasis put on the practical component of experiential learning by student teachers or serving teachers in schools under supervision by a mentor.

(b) Continuing Professional Development of teachers

Our overview of the current need in South Africa, to expand teacher numbers and to provide comprehensive initial professional teacher development and continuing professional development (CPD) programmes suggests that existing institutional structures cannot meet those requirements. In this context, we are likely to see in the coming decade the inevitable expansion of in-school continuing professional development opportunities and/or programmes requiring new and innovative modes of delivery.

Successful implementation of a continuing professional teacher development programme for school reform is greatly enhanced especially in the South African setting by a systemic approach; with strong support structures at the different administrative levels of government (namely, provincial, and district) and school levels, real support for classroom teachers and support and engagement from the community (Ono & Ferreira 2010; Onwu & Mogari 2004; Villegas-Reimers 2003; Loucks-Horsley et al 1998).

In this regard the new Teacher Education Framework (DOE, 2007) proposes the establishment of a new Continuing Professional Teacher Development system which will among other things:

- Ensure that current initiatives devoted to the professional development of teachers contribute effectively and directly to the improvement of the quality of teaching.
- Emphasise and reinforce the professional status of teachers.
- Provide teachers with clear guidelines about which Professional Development (PD) activities will contribute to their professional growth.

• Expand the range of activities that contribute to the professional development of teachers.

In the new system teachers will earn PD points. The PD method is an internationally recognized technique used by professional bodies in many fields to acknowledge members' continuing professional development. Each teacher will be expected to earn a target number of PD points in each successive three-year cycle by undertaking a variety of professional development activities, endorsed by the South African Council for Educators (SACE) on the grounds of their fitness for purpose and quality.

The Department of Education has introduced measures to try to reduce the number of under-qualified teachers in its teacher workforce, mainly through the provision of in-service training courses; site based upgrading qualification such as the National Professional Diploma in Education (NPDE). As a result of these incentives the number of unqualified and under-qualified educators has been reduced significantly since 1994. The proportion of teachers falling under these categories has been reduced from 36 percent in 1994, to 18 percent in 2001 and by 2004 it was said to have declined to 8.3 percent (DOE, 2005b). One of the ways of meeting the demand for massive training of un- and under-qualified teachers particularly at the intermediate and senior phases has been the use of distance education schemes. Some of these open and distance learning programmes, have been concerned with the upgrading of uncertified teachers. The recent expansion of information and communication technologies has facilitated two education trends, notably, increased application for various models of distance education, sometimes called 'open learning': and pedagogical innovations linked to ICT including cellular or mobile phones which are used by teachers and learners (Farrell & Wachholz, 2003). The most visible changes in South African institutions involved in teacher preparation are in the use of open learning systems in the training of new teachers, especially of teachers in rural areas and in the retraining of teachers already in service. Open learning systems provide for maximum exposure of teachers to educational and communication technologies and offer various options to meet different educational needs.

(c) Recruitment Campaign

In response to the decline in enrolments in teacher education programmes and in order to meet the projected teacher supply need, the Department of Education has in collaboration with the Provincial Education Departments and, Faculties of Education, embarked on a campaign to recruit able and committed high school students, undergraduates and mature citizens in other occupations for the teaching profession. The recruitment campaign has been bolstered by the establishment of the national *Fundza Lushaka* teacher education bursary programme, which offers full-cost bursary to able and committed students to study to become teachers in priority areas of need. The condition is that such students should agree to teach in public schools for the same number of years for which they received a bursary.

(d) National Database and information service

The Department of Education proposed to establish a national electronic database, planning model and information service on teacher demand and supply, in collaboration with Provincial Education Departments and Universities. It is expected that the database will be capable of tracking and projecting teacher attrition, and projecting requirements by learning area, subject and phase, at a district level.

(e) Teacher remuneration and material incentives

The DOE acknowledges that salary increases are the most direct and powerful way to demonstrate a value accorded to the education profession. It further notes that a lack of financial progress following entry into the profession could encourage attrition after a few years and this needs to be addressed (DOE, 2007). In this regard, it proposes the need to create financial incentives to recruit and retain teachers in hard-to-fill teaching posts. Incentives could include salary increments, bonuses for continuing in teaching positions and support for professional development.

The Department of Education has taken the following steps to revitalize the teaching

- 1. Designed a new teacher career path structure which provides for the creation of school-based posts of senior teacher and education specialist which will allow greater promotion opportunities at school level. In addition, an entirely new career path in "learning and teaching" will allow a teacher to progress to the most senior levels, equivalent to a school principal, without ever leaving the classroom. Such teachers will play a mentoring role in the induction of new recruits, and in supporting other teachers of the subject.
- 2. **The Ministry of Finance allocated R4.2 billion** for the period 2006-2009 to improve the service conditions of teachers. The money is distributed accordingly as follows:
 - To recruit 'scarce skills' qualified candidates into the profession, such as the appointment of 400 new maths and science teachers in specialized 'Dinaledi' schools (these schools are designated and supported to produce good maths and science graduates)
 - To provide incentives for the appointment of well-qualified teachers in some of the poor urban and rural schools.
 - To pay additional rewards for top performing teachers, over and above the current 1% payable for "satisfactory" service.
 - To provide career path benefits to ordinary teachers by creating a longer salary scale, up to a requisite level in the public service.

In sum, within the overall challenges of teacher education and teaching, the government has enunciated and implemented several policy initiatives which seek to address several sub-issues as mentioned above the interplay of which is important for the realization of national education goals.

8. Conclusion

In this paper we have tried to highlight and address some aspects of teacher education capacity in South Africa, its challenges and prospects for meeting national education needs. Provision of sufficient and well qualified teachers is a sine qua non to meeting those needs including the millennium development goals of Education for All. In that regard, this paper has described and analyzed aspects of the challenges South Africa faces in the supply, recruitment and retention of an adequate number of qualified and skilled teachers and the efforts being made in response to those challenges with a view to achieving the national education goals. This review of the current state of teacher education capacity in the country has also tried to demonstrate how crucial it is for education reform to be preceded and/or accompanied by careful planning and availability of resources in order to have the desired effects and outcomes. Instances where reform appears to have been introduced on the basis of political expediency rather than on more careful planning, problems of inefficiency and ineffectiveness tend to rear their ugly heads. There is no doubt that serious challenges and indeed problems, hopefully surmountable ones, still remain because of an ever expanding education system needing increasing resources. For this reason there is a need for greater stakeholder consultations within a sector-wide framework to ensure greater coherence and consensus in setting priorities. For example, much more needs to be done to integrate teacher education into wider poverty reduction strategies. Besides, improved teacher salaries and incentives are necessary in order to provide teachers with a comparable and reasonable standard of living, and job satisfaction.

In concluding, there are a number of sub-issues which we have highlighted, the interplay of which would be important for policy formulation and implementation for addressing some of the challenges of teacher supply, teacher demand and teacher retention. These include the need:

- to retain qualified teachers and reduce the attrition rate;
- for strategies to improve the provision of quality teacher education;
- for increased subject specialization of teachers;
- for gender and racial balance for mother tongue education particularly at the Foundation phase;
- to address migration of teachers to more economically advantageous areas or places;
- to attract qualified teachers to the rural community areas.

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