Teaching in a globalised African context: reflections from the 45th World Assembly on Education for Teaching

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Global economic integration is a reality that has increasingly materialised across the world over the past number of years. The prime question is whether A frica can become a worthy participant in an increasingly globalised economy and in what way. As business enterprises locate their operations in countries with potential for economic growth, they impact on the expectations for quality education and training. New sources of skilled, cost-effective labour are constantly sought. Against this background, education for teaching in a globalised economic environment presupposes a number of new expectations and immediate challenges. In particular, to train teachers in Africa amidst increasing globalisation implies idiosyncratic characteristics that pose a major challenge to higher education institutions. This article extrapolates, in a post hoc, reflective fashion, a recent international conference on education for teaching held in Namibia, southern Africa. Trends and perspectives from conference papers, discussions and resolutions are highlighted. In particular, dialogue at the African Education Forum meeting is interpreted to point out possible needs concerning future education for teaching professionals in the African context. Conclusions are drawn and strategies are suggested to assist (southern) African teacher education providers to comply with the expectations and challenges generated by the trend of globalisation on the one hand and the realities of teaching in Africa on the other. The challenge lies in finding a compromise between these two extremes. Higher education is to take the lead as it is the converging point of knowledge, ideas, research and training.

Introduction

The 45th World Assembly of the International Council on Education for Teaching (ICET) took place in Windhoek, Namibia in July 2000. The conference constituted the first meeting of its kind to be held in southern Africa and the most recent in Africa. One question that kept emerging from the papers and discussions at the conference, and rightly so, was what education for teaching in Africa might gain from the trend of increased globalisation amidst the realities it faces in the twenty-first century.

Often internationalisation and globalisation are used interchangeably, with the latter term tending to displace the former. One line of thought has it that there seems to be little difference between the two terms, except perhaps in their scale and intensity. Others (Gibbons, Limoges, Nowotny, Shwartzman, Scott and Trow, 1994; Middlehurst, 2000; Scott, 1998; Scott, 2000) argue that, not only are internationalisation and globalisation different, they are actually opposing terms. Scott (1998) maintains there are three main reasons why globalisation cannot simply be regarded as a higher form of internationalisation. The first is that internationalisation presupposes the existence of established nation states. Globalisation is either agnostic about or hostile to nation states. Secondly, internationalisation is most strongly expressed through the "worlds" of diplomacy and culture, while globalisation is found in the "worlds" of mass consumerism and global capitalism. The third reason is that internationalisation, because of its dependence on the existing (and unequal) pattern of nation states, tends to reproduce hierarchy and hegemony. Globalisation, on the other hand, is a major force in addressing new agendas such as global warming, global pollution, sustainable technologies, inequalities between North and South and, lately, large-scale terrorism.

National governments are increasingly proclaiming education and training as the key to success or survival in the global economy (Spring, 1998) and in this respect the goals of schooling are directly related to the world's economic needs. In 1997, for instance, the then elected prime minister in Britain, Tony Blair, declared that "... in today's world there is no more valuable an asset than knowledge. The more you learn, the more you earn. It's as simple as that. Education is an economic imperative" (Blair, in Spring, 1998:6). In 1996, USA economist, Lester Thurow asked: "Who wants the marginalized economic losers of the world, (say Africa south of the Sahara) on their team?" (Thurow, in Spring, 1998:7).

African leaders are mindful of these challenges. At the 1990 World Conference on Education for All, President Moi of Kenya said:

"We must increasingly look towards education to help solve such problems as unemployment, population growth, declining agricultural production, and the damage caused to our environment" (Moi, in Spring, 1998:193). Namibia's Sam Nujoma, in his opening remarks in Windhoek, reiterated his confidence in education to rectify the situation: "While I am mindful of the fact that there can be no single solution to all the problems with which we are faced, I do agree that there exists some universal consensus for a single common foundation upon which the building of that future must be based. That single common foundation must be qualitative education. In other words, education must be the enabling catalyst for the process of finding solutions to socio-economic challenges that continuously face and confront humanity" (ICET, 2000a:2).

With the current domination of the free market in the economic systems of the world, prominent leaders are focusing on two broad themes when it comes to education as a solution to unemployment and income inequalities: technology and lifelong learning.

As early as 1994, the Clinton administration in the USA supported the School-to-Work Opportunities Act which legislated funding to school programmes that involve a combination of school and work-based learning (Olson, 1994). At the signing of the Act, Secretary of Labour, Richard Reich stated: "There should not be a barrier between education and work. We're talking about a new economy in which lifelong learning is a necessity for every single member of the American workforce" (Reich, in Olson, 1994:21).

Where does all of this leave education in Africa, and more particularly southern Africa, in terms of a global perspective? What are the challenges faced in terms of global education?

In this review article I shall take a reflective and critical stance at the 45th World Assembly by firstly highlighting a number of key contributions that constitute perspectives on education in developing regions of the world. Then I shall make some observations for future strategies that emerged from the conference with potentially useful implications for education and for teaching in Africa.

Perspectives from the 45th World Assembly Opening perspectives

According to Nujoma (ICET, 2000a) global challenges demand that countries need to work together to find solutions that are sustainable, cost-effective and practically achievable. The ever-widening gap between the haves and the have-nots, the expanding web of poverty, escalating incidences of violence towards women and children, the unabated spread of HIV/AIDS, increasing unemployment, and the

156 Bitzer

threat posed by growing numbers of unemployed and disillusioned youths are challenges that demand innovative solutions. He believes that such solutions must be sought in both joint and multi-sectoral approaches. Forums such as the World Assembly are invaluable to the process of searching and implementing such solutions.

What we must understand as citizens of the global village, according to Nujoma (ICET, 2000) is that no one will be excluded from the consequences of the collective failure to address modern-day challenges. The collective global future is at stake and it is of vital importance that it is realized and accepted that the future is not something that happens automatically. It is an individual and collective responsibility to build a future that will ensure an equitable and fair distribution of resources. To this one might add: a future that will ensure that due attention is paid to spiritual growth and human goodwill.

Nujoma also believes (ICET, 2000) that education must be sensitive to the cultural dimensions of society, but above all, it must be education of quality and relevance. He is equally convinced that the single most important factor which will determine the quality of education is the quality of the teacher. In addition to developing teacher education programmes aimed at producing top-class professionals for the teaching fraternity, Namibia has also introduced a salary structure which makes the Namibian teacher the most highly-paid teacher on the African continent, with salaries comparable to those anywhere in the world. But if this highly-trained, well-paid teacher is not inspired, demonstrating his/her dependence on a strength ex-ceeding that of humankind, serving a higher goal than that of econo-my, no education can truly gain in quality.

The president of Namibia (Nujoma, in ICET, 2000) finds few things more saddening than reports which inform him from time to time that one of the main reasons for under-achievement by learners is the lack of commitment and professionalism on the part of some teachers. He views this as a serious dereliction of duty on the part of teachers, especially in view of the stated belief that children are a most precious resource and the custodians of the future. It is thus imperative that teachers recommit themselves to the values of their profession and rededicate themselves to their main function, which is to prepare learners for the future and adulthood. This is a noble function which entails much more than acting as a conduit for the transfer of facts and receiving a salary. By meeting the standards of quality and integrity, teachers will earn respect from learners and the community, which will in turn ease their task of teaching, guiding and stimulating.

On a keynote

Richard Kraft shared his personal experiences on Zeichner and Liston's (Kraft, in ICET, 2000a:23) four traditions of teacher education. He explained why he is still looking for a possible 'fifth tradition' to assist teacher educators in many of the poorer countries of the world in which he works.

The Academic Tradition of teacher training is based on a liberal arts education, with all teachers having an academic disciplinary major, followed by an apprenticeship in the school setting. The University of Colorado abandoned the major in Education more than 20 years ago, and all students, including those preparing to be primary teachers, major in Mathematics, English, or one of the social, physical or natural sciences. Over the years, however, Kraft's own faith in this approach has been weakened as he was able to find few indications that even PhDs in an academic discipline were any better at helping children and young people to learn either basic or more advanced skills and knowledge. Sadly, they were far too often found to be the worse. Apparently academic prowess is not the final key to successful teaching.

The Social Efficiency Tradition, with its faith in the scientific study of teaching, has had at least two iterations at the University of Colorado. In the 1970s the university was one of five awardees of multimillion-dollar grants to develop a competency-based program, where through microteaching and other interventions future teachers

would master $1\,000-5\,000$ separate competences. Disillusionment set in, however, when it was discovered that many future teachers could exhibit hundreds or even thousands of discrete competences in microteaching or the regular classroom and yet, when holistically judged on their competence, they proved to be less than adequate teachers.

The Developmentalist Tradition, with its emphasis on learner-centred classrooms, active learning, and creative and imaginative teachers, fits comfortably with Kraft's own Deweyan progressive learnings. In the 1980s, the Faculty of Education at Boulder developed one of the first experiential, school-based, student-centred teacher education programmes in the United States, known as PROBE, for Problem-Based Education. Despite its overwhelming popularity with future teachers and positive results from internal and external evaluations, it was stopped after nine years for being too expensive, and for being a threat to teacher educators who felt that knowledge must be mediated by experts, rather than discovered by adult learners.

The fourth tradition is what became labelled as Social-Reconstructionist. As a professor of the social foundations of education, Kraft first began a theoretical involvement with Liberation Education in the late 1960s, when he came across the works of Illich, Reimer and Freire. As he began his international work in Nicaragua, he saw the power of Freire's ideas as a tool for social change, but developed a growing suspicion that it was more powerful as a political tool in the developing world, and an ivory tower indulgence in the United States. Political fervour appeared to have little efficacy in teaching children to read and write, and while it appeared to have relevance for adult illiterates, it apparently lacked pedagogical power for children.

Kraft reiterated that he no longer believes there is ONE best way to educate teachers, and that each pre-service and in-service training system must seek out that model or models which best meet the needs of that particular country or locale. Kraft also remains suspicious of attempts at forcing programmes into models that don't work in other cultural settings with their own historical realities. Thus a number of questions emerged from Kraft's presentation:

- What does an "academic"-based teacher-training programme look like in a country where many of the teachers are only educated up through grades 8 or 10?
- Can teacher competences be carefully defined in a social efficiency tradition when teachers are faced with 100 or more children, no desks, no chairs, no books and often no classroom?
- How many teachers are really capable of managing an active, experiential, student-centred learning environment in a basic survival setting?
- Finally, after liberation, how many teachers are prepared for the hard work and tenacity of bringing about a just society and competent workers and citizens?

While Kraft (ICET, 2000a) finds great merit in the basic teacher education traditions in his own country (the USA), he constantly holds them up to the lens and reality of poor and dispossessed teachers in the countries around the world in which he has worked. He poses a few questions with the idea to provoke meaningful discussion:

- 1. When will university-based educational researchers turn their attention from replicating meaningless research from the wealthy nations of the world and turn their attention to the very real needs in their own cities and rural areas?
- Why do we waste millions of teacher hours and tens of millions of dollars reinventing standards and assessments, when there is very little difference between what we find in most countries and little evidence that the whole movement has done much good anywhere in the world?
- 3. When will policy makers recognize that both automatic social promotion and repetition of grades are failed systems and move towards flexible promotion policies and new remedial instructional methods?
- Which teacher training institutions and universities in Africa and Latin America will abandon failed models from the West and

North, and develop training systems that better meet the needs of their own societies, cultures and people? Who is to assist them in implementing these systems?

- 5. Why do so few universities or teacher training institutions actually practise the educational and philosophical ideologies they preach? Is it because they don't really work or perhaps they are not well understood?
- 6. While mother tongue education is often necessary and critical for primary school children, who is going to write and produce the children's books and other materials not currently found in many languages around the world?
- 7. When an international language is chosen as the means of instruction in the upper primary, secondary, teacher training and higher education institutions, how can we assure sufficient mastery of that language, so that teachers can impart a high level of solid conceptual understanding of subject matter?
- 8. Is it not realistic to demand that teachers have mastered the learning outcomes they are facilitating with their students? If so, what measures should be used to assure this mastery?

These questions cannot be sufficiently addressed in a review article of this kind. What might be worthwhile for teacher educators is to consider and learn from the experience of researchers and practitioners in developing contexts. One such a source is a book co-authored by Kraft (Craig, Kraft & Du Plessis, 1998) in which strategies are listed that were generally more effective and less effective for the education of teachers in developing countries. Table 1 provides a number of examples.

 Table 1
 Teacher education strategies in developing countries

More effective strategies

- Grass-roots, bottom-up, teachercentred reforms
- Teacher centres and teacher circles focus
- Teacher designed and written curriculum materials developed from ministry of education guidelines
- Major expenditure of time and money on in-service training
- Training primarily in school settings
- 6. Emphasis on actual classroom teaching behaviours
- Long-term in-service programmes with extensive follow-up
- 8. Teacher training as a life-long continuum
- Classroom teachers as textbook, workbook, and curriculum guide writers
- Appropriate technology and training based on the needs and economic level of the country
- 11. Teacher as community leader
- 12. Pre-service and in-service education co-ordinated and integrated
- 13. Teachers are given a chance to visit and observe other classrooms
- Teacher training begins with expressed teacher needs and demands
- Teachers are given a chance to upgrade their formal education, not just their pedagogical skills
- Self-study and self-learning are seen as critical

Less effective strategies

Ministry of education designed and implemented reforms

University or normal school focus

Ministry of education designed and written curriculum

Major expenditure of time and money on pre-service training

Training primarily at universities, normal schools or ministries of education

Emphasis on certificates and diplomas Short-term in-service workshops with little or no follow-up

Teacher training as a one-time preservice phenomenon

University professors, with little or no school experience as authors

Inappropriate technology and training for the needs and economic level of the country

Teacher as outsider, with little or no community involvement Pre-service and in-service education separate and unconnected

Teachers are isolated and never given a chance to learn from other

classroom settings Teacher training begins with theoretical considerations, possibly connected to teacher needs and demands

Teachers are given little or no chance to further their education

Only knowledge mediated by the ministry or universities is acceptable

(Source: Craig, Kraft & Du Plessis, 1998)

From Table 1 and Kraft's inputs it could be concluded that since there might be no universal way to educate teachers, strategies for a particular era in a particular context are needed. The choice of these strategies needs a multi-perspectivist stance. One might query in particular whether developing countries focus on the right priorities in their education of teachers and in their educational research. On the one hand it is imperative to take advantage of what was learnt through the hard experience of mistakes made in developed countries. Of equal importance, however, is the reality of creating indigenous learning environments and experiences for student teachers in developing countries. To adapt and transform models of teacher education to suit the developing needs of the African subcontinent seems to be of particular importance.

A plenary address

In a plenary address Townsend stressed that the scope of education has shifted globally. Governments and education systems argued that all students needed to succeed, but the evidence from national literacy testing programmes in Australia and from projects such as Goals 2000 in the United States indicates that even the so-called developed countries are still falling short of that goal. However, as the new millennium has emerged, it is reasonably safe to say that in the developed world all people get some education and that most of them have received a fairly effective education. Most students now complete school and many of them are either enrolled in higher education or employed fairly soon after school is completed (Townsend, 2000).

Some of the changes from second to third millennium thinking are controversial, such as learner-controlled learning processes, a move from government funding of education to a mixture of government and private funding, as well as the move that sees the curriculum narrow its focus to skill-based areas (cf. Table 2).

Table 2 Comparison of second to third millennium thinking about education

Second Millennium thinking	Third Millennium thinking
Important learning can only occur in formal learning facilities	People can learn things from many sources
Everyone must learn a common 'core' of content	Everyone must understand the learning process and have basic learning skills
The learning process is controlled by the teacher. What is to be taught, when	The learning process is controlled by the learner. What is to be taught, when
it should be taught and how it should be taught should all be determined by a professional person	it should be taught and how it should be taught will all be determined by the
Education and learning are individual	Education and learning are highly
activities. Success is based on how well learners learn as individuals	interactive activities. Success is based on how well learners work together as a team
Formal education prepares people for	Formal education is the basis for
life. Learners regard qualifications as	lifelong learning. Learners accept
complete and final.	qualifications as a starting point for learning.
The terms 'education' and 'school' mean almost the same thing	'School' is only one of a multitude of steps in the education journey
Once you leave formal education, you	Formal education provides a range of
enter the 'real world'	interactions between learners and the
enter the rear world	world of business, commerce and politics
The more formal qualifications you	The more capability and adaptability
have, the more successful you will be	you have, the more successful you will be

(Source: Townsend, 2000)

Basic education is funded by

Townsend (2000) argues that if the changes have in fact taken place over the second millennium as indicated above, the next major shift becomes obvious. At this very moment, technology, the global economy, rapid international communication and the environment, all impact globally. Economic problems in Asia create problems for farmers and manufacturers in Australia and America. The polluted

Basic education is funded by both

government and private sources

158 Bitzer

skies of Eastern Europe have created an ozone hole over Australia. Environmental decisions of the large industrialized countries threaten to flood entire countries in the South Pacific, while conflicts in Europe, Africa and the Middle East become headline news in other countries

Over the course of the previous millennium, according to Townsend (2000), the focus of education has changed from individual goals through local goals to national goals. The scope of education has moved from few people with no education at all to most people with quite an effective education (cf. Table 2). The question to be asked is, what challenges lie ahead?

Literature (Townsend, Clarke & Ainscow, 1999) points towards the challenge of moving from having a quality education system for a few people to implementing a quality education system for most people, and from there to a quality education system for all people.

It is also obvious that the next major focus for education is the move from the national, where each country defines its own education goals and how it offers them to its students, to an international or global focus. With such a focus, issues that affect all, such as literacy, health, the environment, welfare and wealth are tackled at the global level (*cf.* Table 3).

Table 3 Shifts in focus of educational delivery

Period	Focus of delivery	Those effectively educated
1000-1870 AD	Individual	Few people
1870-1980 AD	Local	Some people
1980-2000 AD	National	Many people
From 2000 AD	Global	All people

(Source: Townsend, 2000)

To have a global focus, according to Townsend (2000), every person on the globe must have the skills and attitudes necessary to take communities to the next level of development. Thus to really embrace a global perspective, the focus must once again be on the individual, and the scope now must be all people rather than just a few. In the 1970s the community education movement exhorted that we "think globally and act locally", but it is now obvious that such a narrow focus can no longer be taken. Perhaps the catchphrase for third millennium schools will be to "think and act both locally and globally". Each of these issues puts challenges such as the following to schools of the future:

- Developing a curriculum that is appropriate to a rapidly changing, increasingly complex, highly technological, highly multicultural and diverse society;
- Engaging every student in their learning;
- Trying to make every person in the school community (teachers, students and parents) a learner, a teacher and a leader, and
- Involving both parents and the wider community in the ongoing improvement of public education.

Townsend (2000) points out that a new charter for education is needed: a charter that is global, but can be implemented locally in every community. The starting point for any charter is what it hopes to attain for people, and perhaps the best starting point for this is to consider the skills and attitudes that are needed in communities in the third millennium. He argues that a global curriculum will focus primarily on what makes us human, will spend some time on what makes us a member of a particular community and much less time on specific content, which seems to change continually these days. Care should be taken, however, that learners are not alienated from local communities and content. A sound basis should be laid for the appreciation of the local — which might seem inferior or insignificant from a global perspective.

Townsend finally suggests that an education charter for the Third Millennium could be based upon four pillars:

1. Education for survival (once the whole curriculum, now the

- building block for everything else);
- 2. Understanding our place in the world (how my own particular talents can be developed and used; how assets, traditions and culture add to the richness of the global tapestry);
- Understanding community (how others and myself are connected); and
- Understanding our personal responsibility (understanding that being a member of the world community carries responsibilities as well as rights).

A South African perspective

One of the few South African perspectives at the World Assembly (Baxen, 2000) supported the replacement of the "old order" of education in South Africa with a theoretical discourse in which a more pluralistic conception of knowledge construction and production is accepted. In this pluralistic perspective efforts have been made to foreground in the teaching encounter "multiple and contradictory positions of the learners" (Carrim, in Baxen, 2000:493). The previous autocratic curriculum, teacher authoritarianism in schools and classrooms and lived ideological conflicts are being replaced by a new kind of democratic social contract that will be recognisable to people from different ideological sectors of society (Department of Education, in Baxen, 2000). A favourable contract, by implication, restructures classroom relationships from an authoritarian milieu to a democratic kind.

Current debates in South Africa include improving the quality of teaching and learning (given the level of breakdown in the culture of teaching and learning in many South African schools) and the vehicles by which this can be achieved (Shalem, in Baxen, 2000). What and how to teach and how best learners learn have become central points around which consensus on the new curriculum are being sought. More specifically, consensus is being sought about what learners should know and be able to do; what is worth knowing and what the role of the teacher is in all this (Department of Education, 1997). These debates are not isolated from deliberations within the international educational arena and are based on at least two principles underlying the approach to the curriculum: Learner-centeredness and access.

The principles underpinning OBE are focused on learner-centred orientations. Epistemologically, the progressive agreement is constructivist and is underpinned by the notion that "learning must begin in the life experience of the learners and classroom activities must consequently be learner-centred and equip learners for applying knowledge to real world problems" (Taylor, in Baxen, 2000:495). This suggests that all learners must have equal access to the high status, intellectually challenging knowledge rooted in school curricula. Darling-Hammond (1997:12) describes the curriculum challenge as one which revolves around the question of "how to fashion work that [is] rigorous as well as relevant, how to employ variable student based strategies and also teach for high levels of disciplined understanding in content areas".

Following on mixed success elsewhere in the world it is expected, according to Baxen (2000), that the South African OBE route will provide learners with equal opportunities to become full participants in local, national and international social and economic development. To this notion, however, Waghid (2001) has argued elsewhere that OBE is being conceptually trapped in an instrumental view of education which might not achieve this idealistic goal.

The African Forum

During the World Assembly, more than 80 delegates from African countries joined a discussion of the African Education Forum to articulate the need for a joint effort to promote teacher education in Africa. The Forum agreed that the following issues should be seriously considered in order to enhance action and functionality in education:

 The Forum should refrain from becoming another "talk shop" (one of many in Africa) where much is said but little done to

- enhance the position of teachers and education in Africa.
- The rich sources of knowledge and experience regarding teaching and learning on the continent have not been tapped and knowledge in Africa should be shared in this regard.
- Policy documents on education in Africa mostly stay policy documents, while the will and funding to execute them do not exist.
- The building of communication networks about education in Africa does not materialise, mostly because of communication technology that is not up to standard.
- Traditional tribal thinking, naive conventions and quasi-western influences inhibit the implementation of successful education in Africa.
- An over-optimistic view of what can be accomplished through education in Africa exists. The view that education is a subsystem of larger socio-economic systems is sometimes lost, creating unrealistic expectations.
- Educational practitioners should get a more prominent voice in the determining of education policies and affairs on national levels

The Forum ended with the election of a small task team chaired by the deputy minister of Education in Namibia to investigate possibilities of taking the issues that had been raised further in practical terms. No mention was made of individual commitment to explore issues further and as to date, I could find no confirmation that any proposals or actions emerged from the discussions in 2000.

Discussion

Thus far I have highlighted a number of issues from the 45th World Assembly held in Namibia:

- There are important differences between the concepts of globalisation and internationalisation. Each of these realities has different implications for education in Africa.
- There is confidence amongst African leaders that education can make a major contribution to put Africa back on the global agenda. Some of these views might be over-optimistic given the hard realities of developing countries.
- World-class educationists are in serious doubt as to whether there
 is a best universal teacher education model. It seems as if teacher
 education models should fit the needs and the realities of the
 regions and countries in which they are applied without losing
 sight of global issues and challenges.
- Schools of the third millennium might require new approaches and thinking. Definitions of third millennium schools might differ from developed to developing environments. It seems obvious that a compromise is needed in this regard, since third millennium schools do not make provision for schooling in developing countries.
- South African schooling has adopted the outcomes-based approach as an education and teacher training model. The full effects of this choice are in many respects not clear and there are voices cautioning towards over-optimism of what an outcomes-based approach could achieve.
- Deliberations at the African Education Forum at the World Assembly revealed a number of realities that African educationists and education planners will have to take into account. No firm proposals and action plans, have, however, come from the Forum as yet.

From these issues at least two questions emerge. Firstly whether it is possible as teachers and teacher educators, to comply with the expectations and challenges put forward by the trend of globalisation on the one hand and the realities of teaching in Africa on the other. The second question refers to priorities. What are the immediate challenges faced by teacher educators and how might they attempt to address these challenges as a matter of urgency? I shall try to highlight a number of possible strategies in an attempt to address these two

questions as they appeared to have emerged from discussions at the 45th World Assembly.

Emphasising Maths, Science and Technology

If Africa, and south(ern) Africa in particular, wants to regain any position on the global agenda, the urgency and need for an increased importance of education in Maths, Science and Technology cannot be overemphasised (also see Dickenson, Rogerson & Azarov, 2000). The advancement of information technology and the provision of support structures in schools and learning institutions in general should form part of this challenge. A lack of resources will unfortunately not allow for mistakes or delays. Concerted efforts and close partnerships are needed to advance both quality and quantity in these critical areas of learning in Africa. This will have to include both the will power and dedication from teachers, teacher educators, learners and other partners like politicians and business people to succeed amidst the rapid global developments currently taking place. Major efforts will be needed in order to attract excellent teachers and student teachers to these areas of learning.

Confronting and handling change

Teachers and teacher educators should be equipped with the skills to handle change and renewal. Basic and continuous professional development programmes will have to provide teachers and teacher educators with flexibility to perform in new learning environments. Teachers should be provided with the opportunities and access to knowledge and skills to prepare them for the possibility that by the time they enter or re-enter the workforce, their task will be nothing like the task of their own teachers when they finished school. Professional development programmes, for both teachers and teacher educators, will need to be introduced and continuously updated for this purpose. Quality in professional preparation will also have to include an awareness amongst teachers and student teachers as to the most effective teaching practices in any given circumstances, encouraging an attitude of reflection, innovation and professionalism. Fafunwa (1993) is of the opinion that you cannot use yesterday's tool for today's job and expect to remain in business tomorrow. We need to upgrade staff regularly with new knowledge, skills and perspectives if we want them to remain on the job in future. Education and training is the key to sustainable human development in any country in the world.

Leadership

Leadership is a critical factor in facilitating change in schools (Harber, 1997; Hood, 1998; Hughes, 1999) and beyond. It appears that change is more likely to occur successfully in situations where the leadership is focused on facilitating change, promoting teamwork in inquiry and problem solving, fostering the development of a community of learners and engaging people in setting academic achievement goals and participating in school governance. Leadership training and development opportunities for educational leaders are thus of immense importance. This includes opportunities to experience educational leadership programmes in other countries and contexts, which should become the rule, not the exception.

Role modelling

According to Swarts (1997) studies in Uganda, Botswana, Zimbabwe and Namibia have shown that there are huge differences between what teacher educators expect their students to do and what they themselves do (the "do as I say" rather than the "do as I do" syndrome). Teacher educators may talk about the use of learner-centred education and the use of participatory and inquiry-based classroom methods, but rarely use them themselves.

Teacher educators and their institutions should therefore pay urgent attention to items such as the following:

• In the same way that teachers are expected to be agents,

160 Bitzer

facilitators and implementers of change, teacher educators should be expected to fulfil these roles in order to be role models and to foster the necessary attitudes.

- Teacher education institutions should be able to produce highly adaptable graduates for an ever-changing educational and economic landscape. In a world of instant communication and knowledge expansion, information has become less of an end in itself than a means to an end. The learning of facts is becoming increasingly less important than the ability to effectively access and utilize information in order to learn.
- Teacher educators need to integrate learning, not fragment it, and need to concentrate more on "how" and "why" rather than on "what".
- For teacher educators and their institutions to stay ahead and to
 fulfil their mission, they will need to develop a new generation
 of teachers: teachers who are articulate, industrious, not afraid to
 be challenged, able to make decisions about what to teach and
 how to teach it and then to evaluate the outcome of the learning
 and teaching interaction; teachers who can work co-operatively,
 can fit into team situations or work confidently on their own and
 have a range of teaching styles underpinned by theory and knowledge.
- The responsibility for school improvement lies primarily with teacher educators and their institutions, as they have to adequately prepare school managers and teachers for their tasks in schools. If they themselves are not in possession of the required knowledge, skills, understanding and attitudes, they will not be in a position to facilitate and implement measures to help improve schools (Swarts, 1997). Institutions of teacher education should make use of excellent teachers in the geographical area to offer continuous training and assistance to new, older or less informed or less motivated teachers.

An integrated approach

The socio-economic conditions in most of Africa are characterized by a vicious circle of underdevelopment embodying poverty, unemployment, crime and hopelessness (Angula, 1997). Social disintegration is evident in many African countries. Education and training therefore have to respond to these challenges. Higher education policy development has to address the national challenges of economic development, wealth creation and the general improvement of quality of life in development of human potential. Higher Education has a leading role to play in the development of education. This is particularly so in the area of quality improvement, quality control and assurance.

Education should promote greater equality between racial, gender, rural and urban population groups. Access to education for women, rural populations, disadvantaged social groups and the poor should be part of the social responsibility. At the same time, education should help citizens to realise their responsibilities towards global, national and local issues.

Institutions and programmes are expected to contribute to the understanding of issues confronting society. Research is crucial to make teaching relevant and meaningful. Research should enhance the national capacity for problem solving, while creating institutional capacity for excellence and effective learning and teaching. Higher education is expected to be part of a collaborative partnership with the public sector and industry and should create for itself a high profile as a community of leaders, thinkers and innovators.

Funding

Governments are major sources of funding for education in Africa today. The funding structures of African universities in particular should be broadened to include contributions from all beneficiaries comprising of, but not limited to, students, government, parents, communities, research, consultancy, professional bodies, alumni, gifts, business, private sector and donors. African education institutions should, therefore, manage the limited resources effectively and find

alternative ways of raising revenues in order to break away from the dependency syndrome.

Democratization

Democratization in decision-making is regarded as the process whereby all role players are empowered to become involved in all phases of planning, acting and reflecting (see also Konrad Adenhauer Foundation, 2001). Fundamental to the process of democratization is an adherence to the basic belief that people have the right to participate actively in the decisions that affect their lives. The empowerment of those involved is, however, a necessary prerequisite for the democratization process. Teachers should be empowered to teach in and help to maintain a democratic society.

Research collaboration

There is an urgent need for continued, relevant and high level research and academic collaboration among teacher educators. The education profession has fallen into disarray in Africa in particular and there is a serious need to restore teaching as a specialised, responsible and respectable profession. This will involve a massive action to motivate potential students to choose a career in education, embodying a commitment to human development and a service to the future of a country.

Conclusion

It seems that there might be at least two ways of thinking about Africa and global education. One way is to conceptualise how historical and current trends in the global economy affect education; for instance, how European colonial models of schooling spread around the world, what the effects thereof were and how countries (particularly in Africa) are responding to those models. Currently the response seems to be to aspire to taking the "high tech" road of linking education to Internet access and information technology. If the moral factor and the caring about people in honest ways are neglected in this process, there could be a danger here.

The second way of thinking is to relate education to the needs of the present and future global economy. This way of thinking has generated endless reports and statements about lifelong learning, the learning society, human capital accounting and the information highway. Education is supposed to solve the problems of environmental destruction, unemployment, major diseases such as HIV/AIDS, increasing inequality in wealth, and the social and personal disruption caused by constant technological change and so forth. The solutions seem to be sought in attempts to create measurable accreditation standards, teach people the value of technological developments, prepare learners for a lifetime of constant instruction in new skills and to create unity in a diverse workforce via peace and tolerance education. In all of these African leaders and forums seem to have high aspirations. The challenge is to make the words and plans work for Africa.

As was evident from the 45^{th} World Assembly, the challenges to teaching and teacher education in a globalised African context are vast. The harsh reality is that it is only Africa itself that can take them on. The 50^{th} World Assembly might be a good point in time to reflect on what has been achieved in five years' time and what has remained unresolved.

References

Angula N 1997. Higher Education Development in Namibia: The Cutting Edge in Nation Building. Paper presented at the National Colloquium on Higher Education Policy Development, Windhoek, 18 September.

Baxen J 2000. Outcomes-based education in South Africa: A learner-centered pedagogy and the role of the teacher. ICET 2000a, 528-537.

Craig H, Kraft R & Du Plessis J 1998. Teacher development: Making an impact. New York: USAID and the World Bank.

Darling-Hammond L 1997. The right to learn. San Francisco: Jossey- Bass. Department of Education 1997. Curriculum 2005, Specific outcomes assessment criteria, range statements: Grades 1 - 9. Pretoria.

Dickenson RP, Rogerson JH & Azarov VN 2000. Building an infrastructure for quality

- management in Russia. Quality Assurance in Education, 8:70-75.
- Fafunwa AB 1993. Education in Africa A comparative survey. London: George Allen Publishers.
- Gibbons M, Limoges C, Nowotny H, Shwartzman S, Scott P & Trow M 1994. The new production of knowledge: The dynamics of science and research in contemporary societies. London: Sage.
- Harber C 1997. Quality and effectiveness for what? Democratic change and teacher education in Africa. Paper presented at the Third Biennial Conference on Teacher Education, 26-29 August.
- Hood D 1998. Our secondary schools don't work anymore. Auckland: Profile Books.
- Hughes LW 1999. The principal as leader. Upper Saddle River, New Jersey: Merill. International Council on Education for Teaching (ICET) 2000. Teacher education in the new millennium: The quest for essence. 45th World Assembly programme and book of abstracts. Windhoek.
- International Council on Education for Teaching (ICET) 2000a. Teacher education in the new millennium: The quest for essence. 45th World Assembly proceedings on CD ROM, Windhoek.
- Konrad Adenhauer Foundation (Stiftung) 2001. Democratic transformation of education in South A frica. Seminar Report. Stellenbosch, 27 28 September.
- Middlehurst R 2000. The business of borderless education.. London: Committee of Vice Chancellors and Principals.

- Olson L 1994. President signs a school-to-work Act. Education Week. 11 May. Scott P 1998. Massification, internationalisation and globalization. In: Scott P (ed.). The globalization of higher education. Buckingham: Open University Press.
- Scott P 2000. Globalization and the university: Challenges for the twenty-first century. ACE/CHET Seminar on Globalisation. Durban.
- Shalem Y 1997. Epistemological labour: The way to significant pedagogical authority. In: Bak (ed.). Going for the gap. Cape Town: Juta.
- Spring J 1998. Education and the rise of the global economy. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Swarts P 1997. Teacher education and the education of teacher education. Paper presented at the National Colloquium on Higher Education Policy Development, Namibia.
- Townsend T 2000. Lifelong development and support of teachers and leaders in rapidly changing schools. In: ICET. Teacher education in the new millennium: The quest for essence. 45th World Assembly proceedings, CD ROM, 127-145.
- Townsend T, Clarke P & Ainscow M 1999. Third millennium schools: prospects and problems for school effectiveness and school improvement. In: Townsend T, Clarke P & Ainscow M. Third millennium schools: A world of difference in effectiveness and improvement. Lisse, Netherlands: Swets and Zeitlinger.
- Waghid Y 2001. Is outcomes-based education a sufficient justification for education? South African Journal of Education, 21:127-132.