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Re-profiling the Teacher and Teacher Educators

Pai Obanya

Introduction

For reforms in education to be effective in the real sense, they should address fundamental issues and not just tinker with the mere surface manifestations of educational challenges. Teachers are key actors in the education process and every meaningful reform of education should always pay due attention to the teacher factor. This discussion takes on the issue of the teacher factor as a fundamental one in education reform. It is concerned mainly with looking at fundamental reforms in teacher education from the very first principle of determining who a teacher is, or, to put it in question form : What type of person should engage in teaching?

A more fundamental issue deals with the making of (or educating) the teachers, for teachers are a product of a professional socialization system that, to a large extent, determines their effectiveness. The discussion, therefore, combines two related fundamental reform areas in education: that of determining who should teach, and more particularly, who should teach the teacher.

Paradigm Shifts

The Real Teacher

The prevailing profile sees the teacher as the professional with a minimum of 6+3+3+3 years of general education and professional training in education, that is, in the Nigerian case, someone with a minimum qualification of NCE (Nigerian Certificate in Education). Such a person is usually described as a qualified teacher.

There are three problems with this viewpoint, namely :

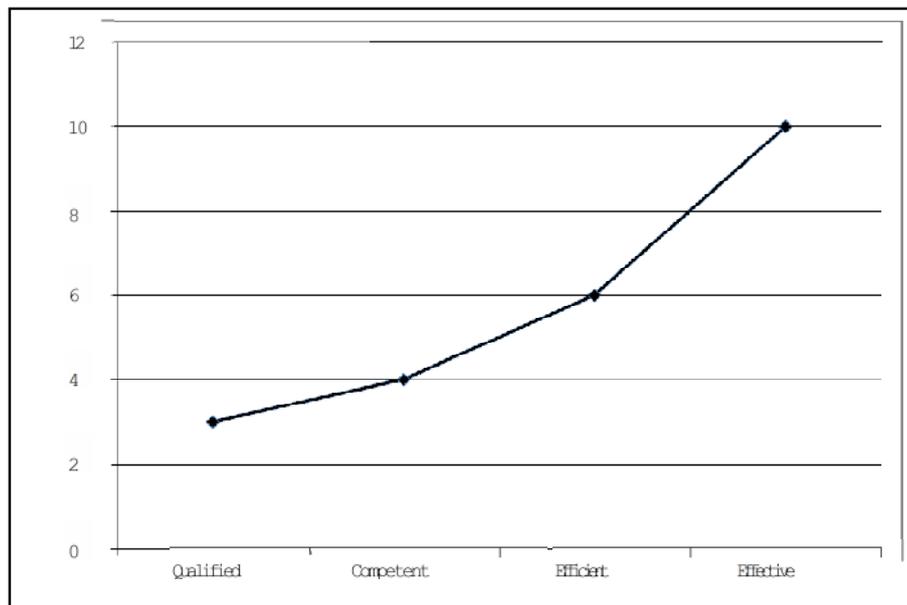
- A qualified teacher is not necessarily a competent teacher ;

- A competent teacher is not necessarily an efficient teacher ;
- An efficient teacher is not necessarily an effective teacher.

A qualified teacher is one with the requisite or prescribed minimum general and professional qualifications. Here, the emphasis is on undergoing prescribed courses and being crowned with an approved certificate that confers an approved qualification. A competent teacher is one who, in addition to being qualified, is also knowledgeable in methods and principles of promoting learning in students. Higher on the scale is the efficient teacher. The efficient teacher is able to apply the prescribed teaching methods as directed. The effective teacher, on the other hand, has mastered the prescribed methods but applies them creatively and, as a result, ensures quality learning in students.

The real deciding factor is the promotion of quality learning in students. Teaching can be said to have taken place only when the learner has learned something that can transform intellect, emotions, perceptions, and skills. The teacher's qualifications, knowledge and application of pedagogy therefore become significant only when they are creatively applied to ensure positive transformation in learners. Figure 2.1 below illustrates the relative gains of the use of various types of teachers.

Figure 2.1: Gains (mainly in terms of student quality) of Learning with Different Categories of Teachers



Generally speaking, the gains become higher as one moves from the merely qualified to the fully effective teacher. For this reason, investments in teacher education should be with the ultimate aim of optimally focussing on effective teachers.

From Teacher Trainer to Teacher Educator

This is in itself dictated by the paradigm shift from ‘Teacher Training’ to ‘Teacher Education’. As illustrated in Table 2.1, while teacher training merely focuses on pedagogical skills acquisition and updating, teacher education is a much broader concept. The focus here is on the all-round education of the teacher. The training component is simply a subset of the more all-embracing education of the teacher.

Table 2.1: Teacher Training vs. Teacher Education

Focus of Teacher Education	Focus of Teacher Training
Operates at a variety of hierarchical levels	Operates at a single level
<ul style="list-style-type: none"> o Concerned with the overall development of the person, like any genuine education programme o Learning to learn skills o A broad, general education base o In-depth, specialized knowledge o Theoretical foundations of professional practice o Reflective, research-oriented professional skills development o Career-long self-development potentials o A CONTINUUM – from pre-career all the way throughout career 	<ul style="list-style-type: none"> o Teaching skills acquisition o Updating of previously acquired skills o Re-skilling limited to ‘how-to-do-it’ demonstration techniques o Usually a once-in-a-while affair o At best, a periodic/occasional affair

This is the logic for moving beyond the ‘teacher trainer’ to the more all-embracing concept of ‘teacher educator’. The former is now outdated, as he or she is concerned with the more routine engagements of hands-on training (what to do and how to do it, demonstrating how things are to be done, all this resulting in the production of artisanal teachers, i.e. a teacher who merely does what the books say. A teacher educator, on the other hand, is more concerned with mind-on experience, dwelling on analysis and reflective pedagogical action, with a view to producing the creative teacher who is more likely to become an effective teacher.

The Changing World

The rapid changes witnessed presently are three major phenomena – Globalization, the ICT (Information and Communication Technologies) Revolution, and the Knowledge Economy.

Globalization is seen in the process of the world getting smaller. Products, designs, funds, ideas, services now move fast from one point of the globe to another, facilitated by developments in Information and Communication Technologies (ICT). This is a development with enormous potentials for breaking geographical, economic and cultural barriers among nations. It also poses a great challenge to countries that are yet to organize themselves politically, socially and economically. Thus, well organized countries are more likely to reap the benefits of globalization; while the not-so-well-organized are likely going to risk further marginalization.

The ICT Revolution can be seen and felt everywhere around us. Its potential for making life easier is enormous, and even in poor countries, its spread has been quite breath-taking. The computer is penetrating all spheres of activity; there has been an overwhelming rate of penetration of the cell phone, the use of which has become entrenched (in less than a decade) as an integral part of today's global culture. The internet and the worldwide web are now part of our active vocabulary, even if we are yet to generalize access to these wonders of the modern world. Satellite communication has improved our access, through wireless radio and cable television, to news and information from an increasingly globalizing world. Tele-conferencing is gradually becoming a medium of learning and exchanging ideas. We also live in a world of 'e-everything' (e-learning, e-banking, e-governance, etc). The scratch culture is also spreading, as we now register for examinations, university courses, etc., 'online' (another expression that has become part of our active vocabulary). Today's world has also gone 'virtual', as we begin to operate from virtual offices, and establish virtual institutions like the African Virtual University. Finally, online testing and examinations are already catching up with our institutions.

The Knowledge Economy is yet another revolution in our thinking of what constitutes wealth and power and the attitudes, values and skills needed to create and sustain these. Box 2.1 shows the characteristics of the Knowledge Economy. In our context, what is perhaps the most important message here is that 'natural resources are less important (in considering the wealth of a nation) than human endowments'.

Box 2.1: Seven Major Characteristics of the Knowledge Economy

1. Unlike physical goods, information is non-rivalled – not destroyed in consumption. Its value in consumption can be enjoyed again and again.
2. Bridges are being built between various areas of competence, as codification tends to reduce knowledge dispersion.
3. Learning is increasingly becoming central to both people and organizations.
4. Learning involves education and learning-by-doing, learning-by-using, and learning-by-interacting.
5. Initiative, creativity, problem-solving and openness to change are increasingly important skills.
6. Flexible organizations are becoming the norm. They integrate ‘thinking’ and ‘doing’ and avoid excessive specialization and compartmentalization, by emphasizing multi-task job responsibilities.
7. Whereas machines replaced labour in the industrial era, information technology has become the source of codified knowledge in the knowledge economy, demanding uniquely human skills such as conceptual, interpersonal and communication skills.

Implications of Contemporary Trends for Education

Developments require the participation of a different type of human being, who will have to be developed by the education system. Developments have also revolutionized our concept of the educated person and the type of knowledge, skills, values and attitudes that education should inculcate in all citizens. In summary, the implications are as follows:

- Education no longer prepares an individual for specific jobs
- The principal goal of education is no longer the terminal certificate or diploma but the inculcation of learning-to-unlearn skills.
- Education now combines the inculcation of ‘knowing yourself’ or ‘developing the best in you’ (intra-personal skills) with ‘knowing and getting along with others’ (inter-personal skills).
- In addition to developing mental (or cognitive) intelligence – brain power – the knowledge economy has brought to the fore a complementary type of human power – Emotional Intelligence (the ability to manage one’s emotional and psychological dispositions).

Creativity (lack of rigidity, a willingness to explore new paths and new ways) is now the hallmark of the educated person.

Persons who have benefited from education are now expected to have acquired a combination of ‘hard’ and ‘soft’ skills.

Of particular importance here is the need for education to emphasize both the ‘hard’ and the ‘soft’ skills – as further illustrated in Table 2.2 below.

Table 2.2: Hard versus Soft Skills in Education

Conventional (Hard) Skills	Contemporary (Soft) Skills
Cognitive Intelligence	Emotional Intelligence
Self expression skills (oral, written, etc.)	Character Formation Skills (for strengthening the total person)
Logical Reasoning Skills (for analysis and problem solving)	Intra-personal Skills (for the individual to understand his/her personal strengths and weaknesses, as well as possibilities/potentialities)
Computational Skills (for quantitative reasoning)	Inter-personal Skills (for understanding and ‘teaming’ with others)
Design/Manipulative Skills (for purely technical reasoning and action)	Lifelong Learning Skills (knowledge-seeking skills)
Conceptual Skills (for generating ideas and translating them into ‘action maps’)	Perseverance Skills (for seeing ideas and projects through to fruition)

It is necessary here to draw special attention to the soft skills in the right hand column of Table 2.2. They are the ones that really make the person. They are the skills that today’s world of work require. They are the skills that sustain a life of continuous learning. They are the skills that should be consciously promoted in all types and at all levels of education.

Profiling Today's Teacher?

In view of the foregoing discussions, re-profiling the 'teacher' would require efforts at three levels – the person who should teach, the skills package required of such a person, and the pedagogical skills needed to respond adequately to the demands of rapidly changing times.

The Person Who Should Teach

Selection for teacher education has so far tended to dwell on some minimum educational qualifications, while teacher education has emphasized 'content and methods' with insufficient attention to the person. There has therefore been a neglect of the 'soft' skills that can promote a 'teaching personality'. Listed below are such key soft/personality skills that contribute to making someone a successful teacher (someone who has attained self-fulfilment through teaching and one who can be turned into an effective teacher):

1. Love of learning and knowledge – an important trait for persons in the frontline of promoting learning and the knowledge profession,
2. Love of learners – the work of every teacher centres on facilitating learner development; thus, love of learning should be mainly for the interest of learners,
3. An eye (as well as an ear) for community signals – the ability to follow the evolution of society as a means to ensuring that school work derives from societal dictates as much as possible,
4. Grooming (in appearance, dressing, talking, relating to others, etc.) – a means through which the teacher teaches by personal example,
5. Gender-responsiveness – with particular emphasis on the ability to remediate obstacles to full participation of girls in schooling,
6. Acceptance of differences (racial, ethnic, gender, religious, political/ideological, etc) – implying the avoidance of prejudice and stereotyping,
7. Team play, as school work is team activity among teachers while helping the child to grow involves team work with parents and communities,
8. Professionalism – familiarity with education policy, curricula, examination requirements, commitment to continued professional development, maintenance of high standards, etc.
9. Role model for integrity, morality, work habits, etc.
10. Key emotional and social intelligence competences – self-control, patience, temperance, empathy, etc.

The Skills Package of Today's Teacher

The prevailing paradigm is that the teacher has to possess 'both the CONTENT (knowledge of specific areas) and METHOD (education principles and their practical applications). This paradigm has guided the development of teacher education programmes for years. However, with the demands made on education by contemporary global developments, teacher education will have to shift its gear and break its skills package to embrace the areas illustrated in Figure 2.2 below.

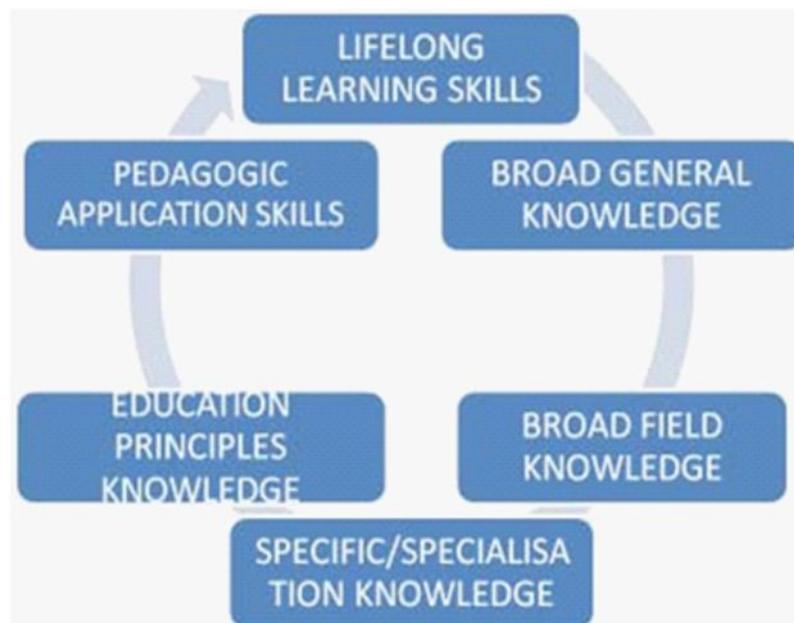


Figure 2.2: The Skills Package of Today's Teacher

The six areas of the skills package require the following of today's teacher:

1. The education foundation skill of 'learning how to learn',
2. Broad general knowledge as a foundation on which more specialized learning should be built,
3. Specific area knowledge, predicated on sound broad-based knowledge,
4. Specialized discipline knowledge, where appropriate,
5. Knowledge of education and pedagogy principles,
6. The ability to apply education/pedagogy principles in creative teaching.

Lifelong learning skills are paramount, as they provide the skills for the teacher's continuous development. Broad general knowledge would be needed to ensure

versatility and flexibility (including openness to new ideas) in the teacher. Broadfield area knowledge would form the bedrock for more specialized area study, to ensure the development of system thinking in the future teacher. Mastery of educational principles and their applications would be predicated on a solid base of lifelong learning skills and would form an integral element of broad-based, general knowledge.

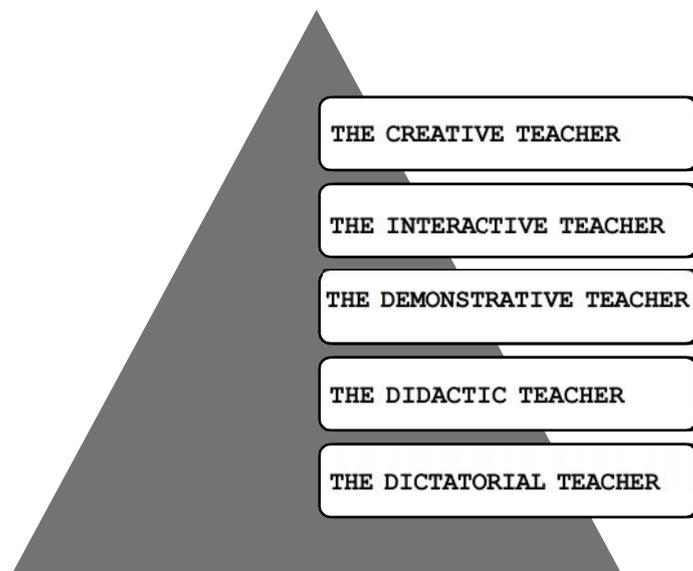
Today's Teacher's Pedagogical Profile

Observations and experience show that teaching can be done at different levels:

- Level 1 Teacher (Dictatorial): the all-knowing, stuffing the empty heads of students
- Level 2 Teacher (Didactic): has learnt the formal pedagogical rules and follows them blindly
- Level 3 Teacher (Demonstrative): allows student input but only of the 'say/do after me' type
- Level 4 Teacher (Interactive): encourages student participation, but still 'in-the-box thinking' bound
- Level 5 Teacher (Creative): creates responsiveness to specific teaching-learning challenges

These five levels form a pedagogic profile pyramid, as illustrated in Figure 2.3 below.

Figure 2.3: Teachers' Pedagogical Profile Pyramid



The qualified teacher of our discussion would tend to function at Level 1, the efficient teacher at Levels 3 and 4, while the effective teacher would function mainly at Level 5, even though with elements of Levels 2, 3, and 4.

Teachers functioning at Level 5 fall in the realm of 'Transformational Pedagogy' (see Box 2.2)

Box 2.2: Paradigm Shift Directions for the Transformational Teacher

**THE TRANSFORMATIONAL TEACHER WILL
OPERATIONALIZE A PARADIGM SHIFT**

- a. From the 'know-all' to the 'seeking to know how to know';
- b. From the talker to the listener;
- c. From the purveyor of knowledge and information to the co-seeker of awareness and insight;
- d. From the conductor of learning to the joint organizer of learning;
- e. From 'this is the answer' to 'there are multiple ways of looking at the issue at hand';
- f. From dictating to encouraging the search for solutions;
- g. From promoting the solo learner to building up the team-player.

In practical terms, Transformational Pedagogy is concerned with:

1. A complete re-conceptualization of the roles and functions of the teacher. The orthodox perception of the teacher is the all-knowing master whose authority must never be questioned (Level 1). Related to this is the specialist knowledge dispenser performing in front of a class according to rigid pedagogical rules (Level 2). An improved variant is the one who allows some talk and some action from students, but strictly of the 'say or do after me' type (Level 3). The paradigm is gradually shifting to the teacher who accepts that the learner is not a 'tabula rassa' and who encourages varying degrees of student participation (Level 4). The effective teacher is likely to be the one whose major approach is creating responsive approaches to match specific teaching-learning challenges (Level 5);
2. Situation which
 - a. Minimizes the lecture approach to teaching;
 - b. Capitalizes on the knowledge/experience/values and attitudes that students bring to the programme;

- c. Practices resourcefulness by sourcing materials beyond conventional textbooks, including mobilizing students to source materials;
- d. Discourages dictation in favour of discovery;
- e. Makes activities (mental/practical) by teacher and learner, and particularly among learners, the dominant teaching method;
- f. Accepts that the learner is central and so plans and executes teaching activities with the learner in mind;
- g. Accepts that a teaching-learning situation is one in which both teacher and student are learning;
- h. Accepts that teaching can be considered successful only after the learner has learnt;
- i. Realizes that successful learning means a positive and lasting change in behaviour, outlook, and ways of going about life;
- j. Realizes that successful learning begins when the student's capacity for continuous self-improvement has become a fully ingrained habit.

Transformational pedagogy aims at transforming the student at various levels: intellectually – enhanced creative thinking; attitudinally – enhanced capacity to explore, to take strategic initiatives; in terms of value orientation – enhanced commitment to converting obstacles to challenges; emotionally – enhanced self-awareness, self-management, and social awareness for improved social action and team membership.

A New Profile of the Teacher Educator

Most people tend to teach the way they were taught rather than the way they had been taught to teach. It is for this reason that teacher educators have to be exemplars of teaching method. Furthermore, every person employed to teach in institutions of teacher education must be a professional teacher with the following attributes:

- a. Exposure to the basics of educational studies and pedagogy;
- b. Practical school and classroom experience;
- c. Acquaintance with developments in education nationally and internationally;
- d. Personal involvement in educational leadership and development work-school management, guidance and counselling, curriculum and material development, etc.;
- e. Participatory action research.

What is most important is the development in teacher educators of the 'twin skills' illustrated in Table 2.3 below. Teacher educators have to be models (in their professional performance) that student teachers can copy, both consciously and

unconsciously. Consciously, students will ‘master the teaching model’ (as explicitly) conveyed by the teacher educator. Unconsciously, they will ‘model the master teacher’ (as implicitly conveyed by the tutor’s teaching behaviour).

Table 2.3: The Twin Skills Required of Teacher Educators

Mastering the Teaching Model	Modelling the Master Teacher
Excellent grasp of learning-promotion principles, techniques and technologies, and more importantly, the capacity to inculcate these in students	Internalization of learning promotion techniques and technologies, and more importantly, radiating these in the classroom, school, and work place interactions with students

Implications of the New Profiles for Teacher Education

Initial Teacher Education

To meet the requirements of the skills package of today’s teacher (see Figure 2.4), a broad- scope curriculum would be necessary. The essential elements of this are outlined in Table 2.4. It allows for exposure to lifelong learning skill. It also builds on a foundation of broad-based general education. These are meant to ensure that the teacher has the same level and type of skills acquired by other educated persons and members of other liberal professions.

The soft skills (discussed under the ‘teacher’s person’) earlier should also have a place in a broad-scope curriculum. They are best inculcated through applications of transformational pedagogy, as highlighted in Box 2.2.

Table 2.4: A Broad-scope Curriculum for Initial Teacher Education

Elements of the Skills Package	Appropriate Field of Study	Main Areas of Emphasis
1. Lifelong Learning Skills	<ul style="list-style-type: none"> ▪ Study skills ▪ ICT-fluency 	<ul style="list-style-type: none"> ▪ Efficient reading ▪ Writing for different purposes ▪ Effective verbal and written communication ▪ Team work and team play ▪ Computer basics ▪ ICT as learning and communications tool
2. Broad General Knowledge and Culture	<ul style="list-style-type: none"> ▪ National and world affairs ▪ Major challenges to human survival ▪ Civic awareness 	<ul style="list-style-type: none"> ▪ Information gathering and analysis ▪ Climate change, HIV/AIDS, population issues, etc ▪ Gender sensitivity ▪ Self-empowerment ▪ Civic responsibility
3. Broad Field Knowledge	<ul style="list-style-type: none"> ▪ Language and literature ▪ Mathematics and its applications ▪ Social science ▪ Natural/experimental science ▪ Creative/performing arts ▪ Vocational/practical arts 	<ul style="list-style-type: none"> ▪ Concentration on at least one of the broad fields, as foundation for Layer 4 below ▪ Basic education teachers may not require Layer 4
4. Specific Fields Knowledge	<ul style="list-style-type: none"> ▪ Any one of the broad areas in Layer 3 above 	<ul style="list-style-type: none"> ▪ In-depth study of any specialized areas of Layer 3
5. Knowledge of Foundations and Principles of Learning	<ul style="list-style-type: none"> ▪ Foundations of educational practice ▪ Management and organization of educational systems ▪ Curriculum studies 	<ul style="list-style-type: none"> ▪ Integrated 'foundations and principles' for basic education teachers (plus practical work in 'student guidance and counselling' AND the national curriculum and 'school organization') ▪ More detailed/separate subject studies for senior secondary teachers <ul style="list-style-type: none"> ○ Historical/philosophical/psychological foundations/sociological foundations ○ Management of education ○ Curriculum principles/analysis of the national curriculum – philosophy, orientation, organization and content
6. Educational Principles Application	<ul style="list-style-type: none"> ▪ General pedagogy ▪ Practical guides to teaching and learning specific subject disciplines ▪ ICT applications ▪ Supervised school and classroom practice 	<ul style="list-style-type: none"> ▪ Practice-oriented activities in a variety of forms <ul style="list-style-type: none"> ○ Lesson/syllabus planning ○ Textbook/educational materials analysis ○ Learner needs assessment ○ Classroom organization/interaction methods ○ School and classroom organization ○ Design of teacher-made pedagogical materials ○ Practical work with children in school and classroom settings

Continuing Professional Education and Development

Transformational pedagogy is also required in ensuring the continuous professional development of teachers. The following are some practical guides for that purpose:

1. Systematically building continuous self-improvement into teacher management, and making this mandatory for continued professional recognition and career progress;
2. Going beyond teacher updating (acquiring new knowledge and techniques) and teacher upgrading (acquiring higher qualifications) to include 'teacher development' in a more comprehensive sense;
3. Supervising and inspecting schools and teachers beyond mere fault-finding to becoming a 'clinical process' of (a) diagnosing challenges that teachers face in trying to promote learning; (b) working out with teachers appropriate strategies for addressing such challenges; (c) monitoring the processes and the results of applying the strategies; and (d) drawing appropriate lessons from the experience for the continuous improvement of the teacher, the individual institution, and the entire system;
4. Meeting teachers' learning needs at different career points. This is simply a way of acknowledging the fact that teachers' learning needs would likely witness shifts at different points in their careers. For that reason, in planning teachers' continuing development programmes, teachers in the early years of their career will concentrate more on professional (task skills) and academic improvement (up-dating knowledge). Middle and top career teachers will have opportunities for general education, with introduction to management-related programmes, while teachers in supervisory and management positions will have adequate exposure to management skills development (process and strategic thinking skills);
5. Preparing the teacher for educational leadership roles. Teachers are often deployed to a variety of leadership functions in national education systems without appropriate induction or adequate preparation, in terms of re-skilling. That situation should change and teachers identified for higher roles (both at the institutional and at the systems levels) should be given adequate preparation in terms of theoretical knowledge and opportunities for hands-on/minds-on experiential knowledge.

Professional Preparation of the Teacher Educator

It is important that all teacher educators familiarize themselves with the concept of the Learning Pyramid (see Figure 4). Their training would benefit from practical activities on classroom observation technique, in peer-reviewed teaching, and activities geared towards the application of the learning pyramid to maximize student learning.

In the process, the emphasis should be on 'teach-me-the-way-you'd-like-to-be-taught'. Prior qualifications and experience would not be sufficient preparation for the function of the teacher educator. Specific grooming would always be needed.

Figure 2.4: Learning the Concept of the Pyramid



The implications of the applications of the learning principles are as follows:

1. When a teacher teaches material that can be put to immediate use (e.g. linking educational theory immediately to practice), learner retention rate can be as high as 90 per cent.
2. When people learn by doing, they can retain up to 75 per cent.
3. Learning in discussion groups can yield a retention rate of up to 50 per cent.
4. With the teacher merely demonstrating, retention rate can drop to around 30 per cent.
5. With mere exhibition and flashing of audio-visual materials, retention can further drop to 20 per cent.
6. Merely reading to students can reduce retention to a bare 10 per cent.
7. Finally, and worst of it all, the lecture as major teaching method reduces retention drastically to just 5 per cent.

Conclusion

Teacher education in the digital age must deal with fundamental issues if it is to make meaningful and lasting impact. Teacher issues are of fundamental importance in education reforms, as no national education system can rise above the level of its teachers. The level of teachers is dependent largely on (a) the person of the teacher; (b) the education that the teacher gets; and (c) the pedagogical skills of the teacher. This discussion has dealt with ways in which these three dependent variables of 'teacher level' can be enhanced by re-profiling both the teacher and the teacher educator.

Re-profiling the teacher is also a response to the demands of today's world, characterized by globalization, the ICT revolution, and the emergence of the knowledge economy. This new world has revolutionized thinking on the goals of education and on how it should be delivered. Teaching has also been revolutionized to emphasize creative teaching methodologies in the overall context of transformational pedagogy. Teachers and teacher educators therefore have to be 'revolutionized' to fit appropriately into this new world.

Reference

Houghton, J. and Sheeben, P., 2000, *A Primer on the Knowledge Economy*, Center for Strategic Economic Studies, Victoria University, Australia, pp. 1-58.