

How Do We Recruit and Train 10 Million Teachers?



ICET Conference, Oman, 14-17 December 2009

By Sir John Daniel, President, Commonwealth of Learning

Abstract

Developing countries have been striving to achieve Education for All for the last 20 years. Because there is now good progress towards the goal of Universal Primary Education (UPE) a massive surge of children is heading for secondary education. UNESCO estimates that countries across the world will need to recruit and train at least ten million new teachers over the coming decade. How will this be done?

Drawing on his new book *Mega-Schools, Technology and Teachers: Achieving Education for All*, Sir John Daniel will show that open and distance learning (ODL), which has a long and successful record in teacher education, is an important part of the answer to the teacher shortage. However, it is not enough to put the old wine of outdated teacher education curricula into the new bottle of ODL. A new approach to teacher education that focuses on classroom-based in-service education rather than theory-based pre-service education is needed. Successful examples of this transformation will be given.

Introduction

President of the State Council, Ministers, Highnesses, Honorary members of the State Council and Shura Council, Your Excellencies, Representatives of the Government, fellow teachers, colleagues, Ladies and Gentlemen.

It is a great pleasure to be here and an honour to give a keynote address at the opening of this important ICET conference.

Let me first bring you greetings from my organisation, the Commonwealth of Learning.

We are a small intergovernmental agency of the Commonwealth, based in Vancouver, Canada and New Delhi, India. Our motto and purpose is 'learning for development' and our mission is to help the developing countries of the Commonwealth to use technology to expand and enhance learning, both formal and informal.

Part of our work is aimed at strengthening the formal sector of education in four areas: open schooling; teacher education; higher education and a programme called the Virtual University for Small States of the

Commonwealth. The other part strives to improve informal learning. It addresses skills development in general and improving the livelihoods of farmers in particular. Another initiative is trying to put the 'community' back into community media so that they can be used to promote health in particular.

We also try to respond to the insatiable demand for training in eLearning and our little operation in New Delhi has become skilled at using freely available software and inexpensive hardware to develop remarkable educational applications.

My remarks this morning are about the formal education sector and my title is *How do we recruit and train 10 million teachers?* My starting point is the global campaign to achieve Education for All and I have laid out the context in detail in a book that will be published early in the New Year. Its title is *Mega-Schools, Technology and Teachers: Achieving Education for All* and its focus is the new challenges posed by both the successes and failures of the campaign for Education for All, or EFA.

Education for All

The aspiration of ensuring that all people have access to education goes back to 1948 and the Universal Declaration of Human Rights.

It is worth recalling the ideals that inspired world leaders after World War II:

Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.

Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.

Parents have a prior right to choose the kind of education that shall be given to their children.

The following half century saw an accelerating process of decolonisation around the world and newly independent nations tried, in the spirit of this declaration, to expand access to education well beyond what it had been in colonial times.

Progress was slow however and in 1990, when there were still 105 million children not attending primary school a major conference was held in Jomtien, Thailand to chart a course for the achievement of Education for All. The major intergovernmental bodies such as UNESCO, UNICEF, UNDP and the World Bank were joined by 115 governments and many non-governmental organisations in setting a series of objectives for the expansion and improvement of education at all levels.

In the event the 1990s proved to be a period of geopolitical upheavals and for various reasons, which I explore in the book but will not go into today, the world actually went backwards in the following decade. By 2000 there were even more children not in primary school – 125 million of them.

In that year another World Forum on Education for All convened in Dakar, Senegal at which international organisations and governments tried to learn the lessons of failure and chart a more determined course.

This time they were more successful.

They followed up the Dakar Forum by placing most of the emphasis on achieving Universal Primary Education and by 2006 the number of children not in primary school had dropped by 40 million. Good progress continues, although present forecasts suggest that there will be still be 29 million children out of school by the target date of 2015 set in Dakar. Most of these children will be in sub-Saharan Africa and south Asia, with especially large numbers in Nigeria and Pakistan.

Nevertheless, we should celebrate the success of the EFA campaign. In expanding primary education many developing countries have achieved in a decade what took richer countries close to a century (Clemens, 2004). But success brings its own challenges. Primary education provides a basis for the development of individuals and societies, but children and their parents realise that the real advantages in life will be reaped through secondary and tertiary education.

Aspiring to Universal Secondary Education

Furthermore, in this week of the Copenhagen conference on climate change I should recall the importance of secondary education in limiting climate change. Women with secondary education have, on average, 1.5 fewer children than those with only primary schooling (Cohen et al., 2007). A one-child difference per woman represents 3 billion more or fewer people on the planet by the middle of this century. Current rates of growth project to a population of 12 billion by then. Universalising secondary education would make a population of less than 8 billion more likely, massively reducing the demand for the earth's resources and the stress on our environment.

However, the challenge of achieving Universal Secondary Education is daunting for several reasons.

First, the numbers are very large. Nearly 400 million children in developing countries between the ages of 12 and 17 do not attend secondary school (Binder, 2006). Second, many developing countries have inefficient secondary school systems. In the OECD countries the unit costs of secondary schooling are less than twice those of primary schooling, with an average ratio of around 1.5. Yet in sub-Saharan Africa the ratio ranges from 3 to 6 and over. Keith Lewin, who has researched the costs of schooling for many years, holds that a country will never achieve universal secondary education by conventional means if the ratio is more than two (Lewin, 2008).

This means that developing countries have two options. The first is to find alternative methods of secondary schooling that are less expensive. A major part of my book is devoted, with examples, to the

trend to open schooling, which uses a combination of distance learning and local support to scale up schooling at much lower costs.

The second option is to reduce the cost of secondary schooling in conventional classrooms. However, the policies that might achieve this, such as reducing teachers' salaries, increasing pupil-teacher ratios, and having teachers teach a fuller timetable are, to say the least, difficult to implement.

I shall not say anything more about expanding secondary education today, but turn to the other imperative associated with the successes and failures of the EFA campaign, namely the need to recruit and train more teachers.

Expanding Teacher Education

Expanding secondary schooling is primarily a challenge for developing countries but recruiting and educating large numbers of teachers is a necessity for rich and poor countries alike. Earlier in this decade, for example, California was employing 30,000 untrained teachers in its schools.

The worldwide shortage of teachers has several causes. First, completing the drive to Universal Primary Education and beginning to expand secondary education will require large number of new teachers. Second, some developed countries will see a significant proportion of their teaching force retire in the next decade. Finally, the ravages of AIDS have been particularly severe for teachers in Africa. Earlier in this decade, in both Kenya and Zambia, the annual deaths of teacher from AIDS were greater than the output of the teacher training colleges.

Putting all this together UNESCO estimates that at least 10 million additional teachers will be needed worldwide by 2015 if Universal Primary Education is to be achieved and a serious start made on expanding secondary education (UNESCO, 2008a, p. 22). This is a substantial proportion of the current global teaching force of around 75 million (UIS, 2009). Fortunately progress is being made because the number of teachers worldwide has increased by some 1.5 million annually since 2000. However, many of these teachers have little or no training before they join their schools.

For the rest of this address I shall focus on two related aspects of teacher education. First, how can we recruit and train more teachers more rapidly? Second, what kind of training is best suited to the needs of the second decade of the 21st century?

Teacher recruitment

I start with a few comments on teacher recruitment. As we might expect, there is a three-way correlation between the status of the teaching profession in a country, the performance of its schools and children, and the ease of recruiting able people as teachers. In countries like Austria, Canada, Finland, France, Germany and Ireland teacher recruitment and retention is not a major issue. Teaching is a high status profession and most of these countries score highly on international surveys of pupil performance such as PISA.

Sadly, however, the status of teaching is declining in most countries and the blame for this lies with both teachers and governments. Where teacher absenteeism is a constant problem the public cannot be expected to admire teachers. Where governments have eroded teachers' salaries and the deployment of teachers is infested with corruption good people will not be attracted to the profession.

A century ago the Irish playwright George Bernard Shaw (1903) made the oft-repeated remark that 'those who can do; those who can't teach' to which Laurence Peter (1977) later added 'and those who can't teach, teach the teachers'. But today's knowledge economy has stood at least the first of these catty comments on its head. The training and skills that teachers acquire are highly valued in the contemporary labour market. Indeed, the UK's Secret Intelligence Service, MI5, advertised for teachers this year, seeking their 'relationship-building skills' (*The Week*, 2009, p. 13).

The combination of the low status of the profession and the attractiveness of teachers' skills in the wider labour market no doubt explains why 50% of teachers in the US leave the profession within five years of completing their training (UNESCO, 2007b, p. 130).

Faced with the problem of teacher shortage and the necessity of putting an adult in front of each class of children, at least in primary school, many governments have had to resort to employing untrained teachers, as in the example of the 30,000 untrained teachers in California that we noted earlier.

This approach can be a cynical ploy as well as a hard necessity. The Global Campaign for Education railed against:

'(Large expansion) para-teacher schemes where pre-service training is compressed or abandoned completely, wages are lowered, working conditions are poorer and career paths are limited. They are being used by many governments to cut the costs associated with expanding educational access to all children. The price such governments are forced to pay is the quality of training (Nock, 2006:27).

Such a strategy is not going to lead a country towards a viable and sustainable education system. However, sending people into the classroom with minimal initial training can be a very good strategy for our times if they are then provided with appropriate on-the-job training.

Two interesting examples of this from developed countries are the Teach for America programme in the US and the Teach First programme in the UK.

There are differences of detail between the programmes but essentially they recruit the best graduates they can find, ask them to make a two-year commitment to teaching, and send them into the classroom, often in the toughest schools, with just a minimal orientation beforehand. In the UK they are given the opportunity to acquire Qualified Teacher Status during their first year and to engage in training for management jobs once they leave teaching. In fact almost three-fifths of the Teach First graduates elect to stay in teaching once their two year commitment is over (Hutchings et al., 2006).

What is also revealing is that these highly qualified graduates are positively attracted by the description of teaching, in the Teach First advertisements, as 'tough and demanding'. The obverse of the coin is that they are put off by the standard one-year postgraduate route into teaching as 'too slow', 'too theoretical'

and ‘too boring’ (*The Economist*, 2009, p. 49). Importantly, however, they did value this training once they had experience of the classroom.

Teacher education

Combining these examples of putting unqualified teachers straight into the classroom in developing countries and doing the same with good graduates in developed countries we propose that the concept of teacher education needs radical revision. It has been said that ‘more policy attention was given to teacher education in the 1990s than in all the hundreds of years of history that preceded it. And most of the activity has focused around quality’ (Moon, 2008). Unfortunately this policy-making has little relevance to today’s world because it failed to address the crisis of teacher recruitment, it was poorly coordinated with school systems, and it did not take account of the potential of technology to do things differently.

1990s policy focused on long programmes of pre-service training whereas today’s emphasis must be on shorter and recurring programmes of continuous professional learning.

Lewin (2002) argued that because the continuing professional development or upgrading of primary teachers is carried out without reference to school needs – often without the knowledge of the school head – it encourages them to move to other jobs rather than improving their effectiveness in their schools.

Third, policy usually ignored the gathering momentum of distance learning and its enhancement by ICT and open educational resources. Today distance learning cannot be ignored because it provides the only way of addressing the two central requirements of teacher education just identified: the emphasis on continuing professional development and the focus on the teacher in the classroom. These requirements complement each other. Any form of continuous professional development that involves bringing teachers regularly to institutions in the towns is inherently expensive and inconvenient.

More importantly, to judge by a report on continuous professional development in teacher resource centres in Africa (DFID, 1999); it seems to have little impact on their performance as teachers.

The locus of continuous professional learning must be the school and its focus must be the classroom. This has always been the strength of distance learning systems for teacher education.

Distance learning in teacher education

Information and communications technologies – and the possibility of open educational resources that they have created – have significantly increased the power of distance learning in teacher education. However it is not new.

In my book I give profiles of eight successful applications, going back to PERMAMA, an in-service programme for Quebec Mathematics Teachers that I worked on in the early 1970s. The impact of this programme is still being felt in the very high performance of Quebec pupils in the PISA mathematical literacy surveys.

But this programme, just like its much more recent California equivalent, CalStateTEACH –and to some extent the teacher education programmes of the UK Open University – had to face the hostility of teacher educator colleagues who were so heavily invested in long, theoretical pre-service programmes that they felt threatened by programmes that reached teachers on the job and taught them on the job. Yet these programmes are rated as positively by employers as other university programmes and more positively than most. External independent evaluation is giving the programmes very high ratings (Moon, 2007, p. 14).

One of the great contributions of information and communications technologies to in-service programmes has been to make it possible to gather the teacher learners into a community of practice through computer conferencing (Leach, 2002). This virtual environment provides a secure setting in which novices can gain experience through contact with veteran practitioners.

Open educational resources, which are an Internet empowered worldwide community effort to create an education commons, are already making a powerful contribution to teacher education in Africa. My book includes a profile of a programme of Teacher Education in Sub-Saharan Africa abbreviated as TESSA. TESSA is a consortium of 13 African universities, the UK Open University and five international organisations. It works across nine African countries – with more participating informally – by creating teacher education materials in Arabic, English, French and Kiswahili. Last year nearly half a million African teachers worked with materials and resources produced through the TESSA community. Since these are classroom-based in-service materials they have a direct impact on millions of children through their use in the classroom.

Because they are open educational resources, institutions and schools can adapt them to their needs. For example, Nigeria's National Teachers' Institute, one of the world's largest programmes of teacher education at a distance, uses the materials differently from the University of Fort Hare in South Africa, which has developed a distance learning programme for teacher education alongside its campus offerings because it could see that the campus programmes were not reaching most of the teachers who needed continuous professional development.

Devereux and Amos (2005) have written a moving account of the Fort Hare programme and the enthusiastic response that it has evoked from female teachers in a poor rural region of South Africa.

Conclusion

The aims of a keynote address are to put discussions in context and to lay out an agenda for action, not to explore in detail the items on that agenda.

This morning I have placed our debates on teacher education in the context of the increasingly successful campaign to achieve Universal Primary Education. The success of that campaign has generated the imperative of a massive expansion of secondary education. That expansion, and serving the 40 million children projected not have access to primary school by 2015, generate a requirement for many more teachers, which UNESCO estimates conservatively at 10 million.

We have proposed that teacher education needs radical rethinking to meet these challenges – and not just in the developing countries. Henceforward the policy should be to put teachers into schools with the minimum training necessary for them to function, and then to concentrate the major resources of teacher education on recurrent in-service programmes of professional learning that are resolutely based on school practice and the classroom experience.

Once that paradigm shift is made all teacher education institutions will have to give themselves the capability to offer distance learning programmes in order to reach teachers in their schools. Today information and communications technology can make distance learning a richer experience than learning in a university classroom. Furthermore, drawing on the growing body of open educational resources allows institutions to take materials of world-class quality and adapt them to local conditions in a thoroughly authentic manner.

Finally, and most importantly, the evidence suggests that this approach of classroom-based in-service education is successful where it most counts: that is to say in the learning and performance of the children.

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