

# Teaching the teachers

## Assessing the effectiveness of using distance education to train teachers in Africa

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This is an abbreviated version of a paper developed for the African Council on Distance Education conference in Nigeria in 2008. The paper explores the current and future potential of the use of distance education methods for teacher development in Africa. It argues that it is appropriate and desirable for distance education methods to be used in teacher development programmes but suggests that many current practices need to be questioned. The use of distance education for teacher development in the context of a developing country should not be dictated by economic arguments alone. It should also, or perhaps rather, be informed by concerns about the nature and quality of the education and training provided and how this manifests itself in improved quality of practice, and hence learning, in 21st century African classrooms.

In general, Africa is struggling to give effect to the Education For All (EFA) mandate and the achievement of the educational Millennium Development Goals (MDGs). The EFA Global Monitoring Report 2005 (UNESCO) emphasises the centrality of teacher development to this endeavour. Not surprisingly, the African Union has prioritised teacher education in its Second Decade of Education.

### What is the role of distance education in the context of teacher education?

Extensive and increasing use is made of distance education for teacher development globally and in Africa in particular, in pursuit of EFA goals and in response to a global shortage of teachers in general and primary level teachers in particular.

*Two mature female students*



In South Africa, distance education has long played a far greater role in teacher education – at least in respect of numbers enrolled and graduating – than face-to-face education. This phenomenon may well be repeated in other African countries like Kenya, Nigeria and Malawi, which have seen large scale development of distance teacher education provision. Distance education may well be moving centre-stage in teacher education.

## Why use distance education for teacher development?

It is clear that the conventional system of full-time, contact-based colleges of education and education departments in universities is unable to meet the growing need for teacher development. The numbers required often exceed the physical capacity of institutions to accommodate them; such institutions tend not to be situated in the rural areas where the need is often greatest; curricula often do not speak to the diverse contexts of practice; and, increasingly, potential and current teachers need to be able to continue to work while they learn, especially in a context in which more of the cost burden for higher education has shifted to student fees in light of declining real state subsidies. Too often, however, the motivation for the use of distance education methods is purely economic. Of particular concern, where finance alone is the motivation, is the tendency to omit or cut back on any activities that relate to the formative assessment and decentralised support of students. Such short-term savings will usually result in increasing the cost per successful graduate because of low retention, low pass rates and throughput.

It should be noted that distance education provision is especially difficult and costly in the rural areas where the need is greatest.

## Does distance education deliver?

Research suggests that distance education programmes have a positive impact on teachers' general and subject-specific knowledge gains, as well as their self-esteem; but that effecting improvements in classroom practice may require additional strategies (Robinson, 2003, pp.195–96; Jeeroburkhanet al., 2006, p.5).

It is important to understand that teacher education involves a complex integration of at least three components: subject content knowledge (or what to teach); pedagogic content knowledge and skills (or how to teach); and education or professional studies (including addressing questions about why we teach) (Lewin, 2004, pp. 7–11).

Increasing emphasis is being placed on pedagogic content knowledge and skills. This is the area where distance education often does not demonstrate success. In fact, developing the practice of teaching has been labelled by some as distance education's Achilles' heel.

## What are the challenges of changing practices?

Novice teachers are often expected to engage in practices which have not been modelled in their own experiences as learners; and experienced teachers often find that the 'new' practices being

encouraged contradict and undermine the assumptions and values that they hold about the nature of teaching. This can lead to paralysis and even a decline in performance. Changing practice takes time and is influenced by both the explicit and implicit experiences afforded by the curriculum.

Teaching and learning approaches may be changing quite dramatically, but teachers' subject knowledge remains important in all curriculum approaches. However, while teachers' own mastery of their discipline is considered essential, an extensive study in South Africa (Taylor and Vinjevold, 1999), which involved observation of many teachers in many different classrooms, discovered that many teachers were making basic errors in the curriculum they were required to teach. Often these were teachers who had passed subject-content modules in a teacher development programme at a much higher level than that of the classroom curriculum they were required to mediate. How can we address this disparity?

In concluding a detailed study of an in-service programme – in an evaluation process that required detailed and multiple observations and interviews, which explored both theoretical knowledge and classroom practice – Adler et al. (2002, p.149) suggest:

*... that the task that lies ahead is to characterise and articulate 'subject knowledge for teaching' and to clarify how its acquisition by teachers lies in the co-ordination of subject, pedagogic and conceptual knowledge – or what can be renamed teachers' conceptual knowledge-in-practice.*

(Adler, Slonimsky and Reed, 2002, p.151)

As Adler et al. propose, it means getting teacher-students to engage with carefully scaffolded problem-based activities. Activities like this, which focus on the expected practice in the classroom, help to revise teacher-students' own subject-specific conceptual understanding in ways that make a logical and integrated link with both methodology and understandings of learners and learning. That is, it allows for the meaningful integration of theory and practice as opposed to the atomistic, decontextualised learning that characterises many teacher development programmes.

Lewin (2004), in his overview of a multi-site study of six countries' pre-service training, highlights the well-developed images that trainees have of good primary teachers. These often resonate with essentially transmission-based modes of teaching, hierarchical learning of knowledge, and conventional teacher-centred classroom organisation. He observes that 'these images can be contrasted with those found in recent curriculum literature which promotes more reflective and child-centred (rather than knowledge-centred) methods of teaching'.

As Tabulawa (1997) notes, however, educators are unlikely to be prepared to engage with changes in practice that 'would have a destabilising effect on their taken-for-granted classroom world, possibly leading to deskilling and cognitive dissonance' (Bertram et al., 2000, pp. 297–309).

Thus if the intention is to prepare teachers adequately to embrace and implement changed practices in their classrooms, then it is necessary to help them explore not only their own underlying values and beliefs, but also those of their learners and the community and society of which the school forms a part. In short, as Tabulawa says: 'teaching is not just a technical activity whose



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solutions require technical solutions'. A teacher development programme also needs to speak to the educators' beliefs and values and these are likely to reflect those of the broader society of which the teacher is a part.

## What is needed for effective teacher education through distance education?

Based on the previous discussion, we suggest that distance education for teachers should involve:

- A clear vision of the kind of teacher needed
- A clear understanding of the contexts in which teachers work and a commitment to developing appropriate teaching and learning environments and providing ongoing support
- A purpose-driven programme design, which is informed by postmodern perspectives, the reality of a globalised society and informed decisions about media and roles
- A method of programme delivery that models appropriate practice
- A system of ongoing evaluation and impact analysis to inform programme reviews, which is budgeted for
- Greater collaboration.

### A clear vision of the kind of teacher needed

Academic staff need to engage in a process of imagining the kind of teacher they need to develop. They need to reflect upon the kind of teaching practices they themselves exemplify in the materials they write, in the assessment tasks they set and the ways in which they engage with teacher-students in person or via technology.

### A clear understanding of, and support for, the contexts in which teachers work

The environments in which many teachers have to work and learners have to learn are often not optimal for learning. Some things can be addressed through an appropriately designed distance education intervention, but a certain minimum level of school infrastructure also needs to be in place to make it possible for teachers to perform better.

Often classroom resources for teachers and learners are very limited. This is an area in which a well-designed distance education programme can be very beneficial. It can make sure that the teacher, at least, has a copy of the syllabus, sufficient resources to cover the school-based curriculum (even if suggested activities need to be written on a chalkboard, for example, because the school has no duplication facilities) and, perhaps most importantly, is helped to identify and adapt everyday resources available in the community.

Experience also suggests that teachers often work in isolation from one another instead of exploiting and sharing their joint strengths. So a distance education programme that recruits students in pairs, school teams or clusters; requires teamwork in in-text activities and assignments; provides guidelines and support for student-led study groups; and offers occasional face-to-face contact sessions at

which co-operative and collaborative teaching and learning are modelled, can go a long way towards breaking down the barriers between individual teachers, classrooms and schools.

Both pre- and in-service teacher-students often complain that authoritarian school leadership militates against innovation in the classroom. So perhaps a large-scale classroom teacher development programme should be complemented by a large-scale school- and district-leader development programme, which will make clear the need for innovation and the desirability of distributed leadership practices.

### Purpose-driven programme design informed by postmodern perspectives and the reality of a globalised society

As noted earlier, the planned curriculum (actually more often a planned 'syllabus') in many countries adopts a one-size-fits-all approach that seems to militate against improved classroom practices by over-emphasizing other issues, such as the take-up of post-school content knowledge (which is itself sometimes not assessed in ways that require conceptual mastery) or the production of some kind of formal research report or dissertation. Apart from the loss of focus on the quality of classroom practice, such programmes also tend to be much longer to complete – requiring at least 4–5 years of full-time study and 8–10 years of part-time study while working. Not surprisingly, throughput in such programmes tends to be very low (if tracked at all) and, of the few successful graduates, many will graduate only to leave the classroom and find a much better paid job and much better working conditions elsewhere. Four to ten years of teacher development then becomes a very expensive way of training an economist or laboratory assistant or an entrepreneur. Better student counselling on registration could result in more informed choices being made.

Furthermore, improving student-teachers' pedagogic content knowledge, 'conceptual knowledge-in-practice' and skills must be at the heart of any programme design.

### Programme delivery that models appropriate practice

A teacher development programme offered through distance education should 'practise what it preaches'.

If the programme argues for a blend of independent as well as co-operative and collaborative learning approaches in the classroom, then this is what should be valued in the programme: in the way that in-text activities and assessment tasks are set and in the ways in which face-to-face or technology mediated contact is conducted.

Other issues that need to be addressed include developing practices for meaningful resource-based learning, contextualised learning, the valuing of learners' own knowledge and experience, exposure to multiple perspectives, and the appropriate scaffolding of learning and teaching processes.

### Ongoing evaluation and impact analysis to inform programme review that is budgeted for

Robinson (2003, pp.196–7) notes that ongoing evaluation and impact analysis of teacher education programmes is generally weak and that these weaknesses are exacerbated by the complexities of distance education implementation.

We, the authors, would argue the need for site-based assessment and support (which may require decisions about sampling strategies in large-scale programmes); a focus on quality of teaching against agreed criteria; the dovetailing of programme assessment and Ministry developmental appraisal processes; and the use of data from such processes to lead to revision of programme design and delivery. This must be catered for in the programme budget. Also, ongoing critical reflection by the staff offering the programme needs to be encouraged and fora created for ‘talking about the programme’. Such fora would include, for example, online fora, video conferencing with decentralised staff, formal programme committee meetings (that go beyond the purely administrative) and regular informal coffee-break debriefings.

### Greater collaboration

Trainee teachers require ongoing supervision and support in the contexts in which they develop their practice. This suggests one of two things. Either, small scale programmes of a limited geographical scope that allow for the direct involvement of an institution’s academic staff. Or, more realistically, large scale teacher development in which the higher education institution provides a network of support services through formal collaborative agreements with schools, other higher education institutions, non-governmental organisations (NGOs) and department of education structures.

An additional area to be considered is a commitment to the development and use of Open Education Resources (OERs), as exemplified in the Teacher Education in Sub-Saharan Africa (TESSA) project and the OER Africa initiative ([www.tessafrica.net](http://www.tessafrica.net); [www.oerafrica.org](http://www.oerafrica.org)).

### Concluding remarks

Distance education can and should be used for teacher development, provided this is done in ways that add quality and result in improved learning in classrooms. Achieving this result will require critical examination of our own practices as teacher educators.

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