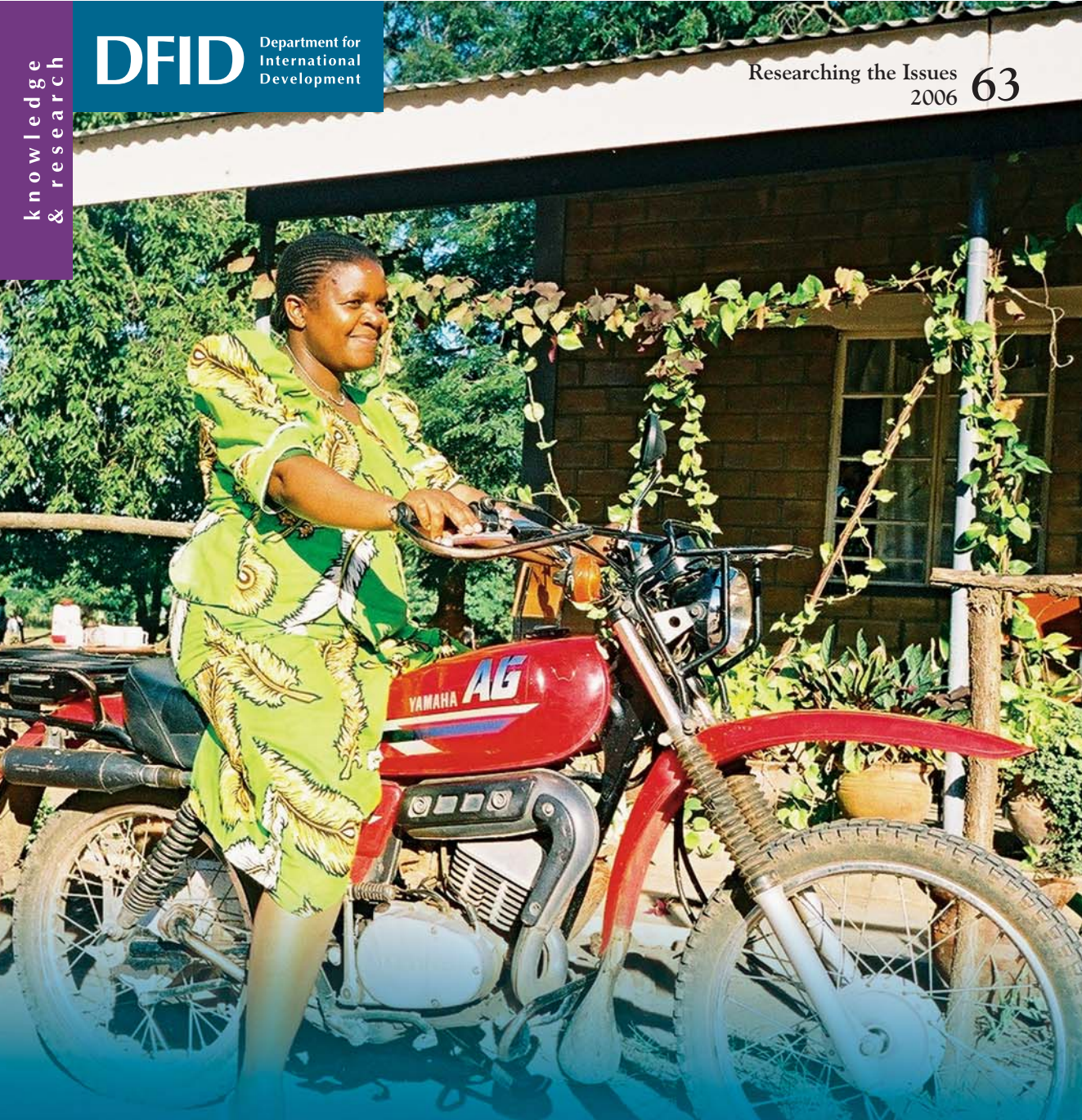


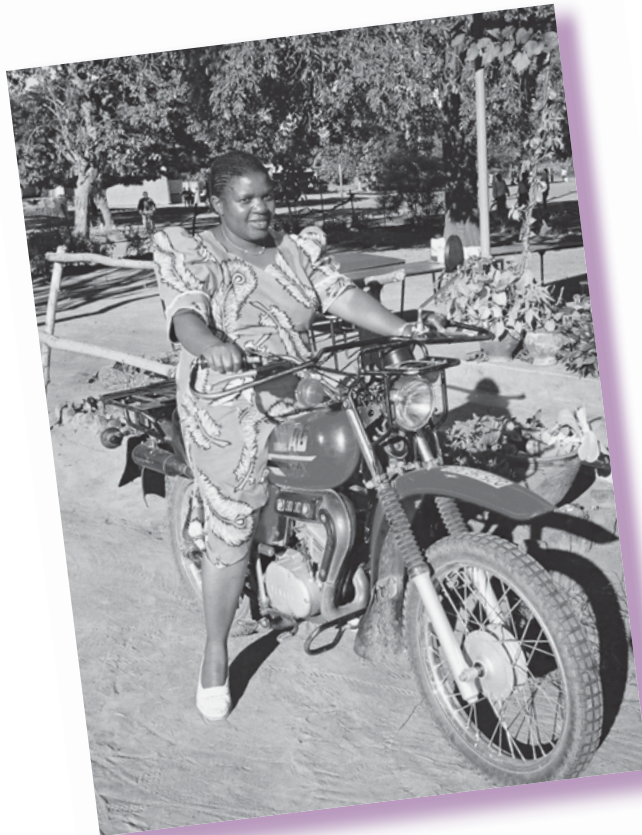


Field-Based Models of Primary Teacher Training. Case Studies of Student Support Systems from Sub-Saharan Africa

by Elizabeth Mattson

Field-Based Models of Primary Teacher Training

**Case Studies of Student Support Systems
from Sub-Saharan Africa**



*Elizabeth Mattson
International Research Foundation for
Open Learning (IRFOL)*

2006

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Acronyms

CPD	<i>Continuing Professional Development</i>
DE	<i>Distance education</i>
DEB	<i>District Education Board (Zambia)</i>
DEPE	<i>Diploma in Education, Primary, External (Uganda)</i>
EFA	<i>Education for All</i>
ICT	<i>Information and Communication Technology</i>
INSET	<i>In-service Education and Training</i>
NITEP	<i>Northern Integrated Teacher Education Programme (Uganda)</i>
MIITEP	<i>Malawi Integrated In-service Teacher Education Programme</i>
MiET	<i>Media in Education Trust (South Africa)</i>
MMRI	<i>Multi-Media Rural Initiative (South Africa)</i>
MSSSP	<i>Malawi Schools Support System Programme</i>
NGO	<i>Non-governmental organisation</i>
NPDE	<i>National Professional Diploma in Education (South Africa)</i>
ODL	<i>Open and distance learning</i>
OU	<i>Open University</i>
PRESET	<i>Pre-service Education and Training</i>
RAIN	<i>Resources and Information Network (South Africa)</i>
SADC	<i>Southern African Development Community</i>
SAIDE	<i>South African Institute for Distance Education</i>
SbTD	<i>School-based Teacher Development programme (Kenya)</i>
SSA	<i>Sub-Saharan Africa</i>
SPRINT	<i>School Programme of In-service for the Term (Zambia)</i>
TAC	<i>Teacher Advisory Centre (Kenya)</i>
TDC	<i>Teacher Development Centre (Malawi)</i>
TED	<i>Teacher Education Directorate (Zambia)</i>
TRC	<i>Teacher Resource Centre</i>
PEA	<i>Primary Education Adviser (Malawi)</i>
PTDDL	<i>Primary Teachers Diploma by Distance Learning (Zambia)</i>
PTSA	<i>Parent Teacher Student Association</i>
UPE	<i>Universal Primary Education</i>
ZATEC	<i>Zambia Teacher Education Course</i>
ZATERP	<i>Zambia Teacher Education Reform Programme</i>

Executive Summary

Recent IRFOL research on the use of distance education for teacher education^{*} reveals a lack of detailed information and guidance for policy makers on three aspects of distance education for teachers: models of decentralised management; student support and assessment of classroom practice; and technology choice.

The present study narrows the focus to these three aspects of teacher training in sub-Saharan Africa and investigates the variety of new training programmes aiming to meet the growing demand for teachers due to Universal Primary Education announcements, expanding enrolments and AIDS attrition. Trends are examined in light of the literature on political economy, decentralisation, the Education For All (EFA) campaign and donor activities.

The study finds evidence of an emerging new model of teacher education in the region, referred to here as the field-based model, of which distance education is merely one varying component. The field-based model sees the convergence of previously disparate strands of teacher education – namely, ministries, colleges, donor-funded projects, decentralised ministry functions, teacher resource centres and schools.

The field-based model is outlined with reference to three sets of data:

- a literature review of teacher education in Anglophone sub-Saharan Africa from the last ten years;
- case studies and reports commissioned from and/or supported by local researchers in Zambia, South Africa, Kenya, Ghana, Uganda and Malawi (see Appendix A: Research Methodology);
- ‘grey literature’ provided by local researchers – e.g. project proposals, promotional literature, college prospectuses, course handbooks, evaluation reports, back-to-office project reports, etc.

The data reveals that decentralised systems of student support and assessment for school-based students are undoubtedly the weakest aspect of the field-based model, reflecting the findings of international research. Themes drawn from earlier research are applied in context, with research partners investigating evidence of, and strategic responses to, the following well-documented problems:

- political pressure to go to scale ahead of capacity to support students at the local level
- a strong transmission view of education, which underestimates the importance of student support;
- the difficulty of shifting from a tradition of centralised control and the tendency to underestimate the organisational demands of decentralised delivery, administration and support;
- the complexity of managing partnerships with geographically dispersed agents and the training demands of new support cadres.

^{*} These publications are available on the IRFOL web site:

Creed, C. (2001) The use of distance education for teachers. Report presented to DFID.

Perraton, H., Robinson, B. and Creed, C. (2002) Teacher Education Through Distance Learning: Technology, Curriculum, Cost, Evaluation (Paris: UNESCO).

Perraton, H., Creed, C. and Robinson, B. (2002) Teacher Education Guidelines: Using ODL - Technology, Curriculum, Cost, Evaluation (Paris: UNESCO).

While wide-scale use of technology in teacher education is rare in the region, a few innovative, technology-based programmes are yielding useful evidence on the appropriateness of ICTs for teacher education, and these are briefly discussed.

The study concludes with a set of guidelines for planners of distance education programmes, stressing the importance of serious investment and planning for local-level student support and assessment. These are summarised as follows:

1. Adopt a planning continuum and plan for the judicious, integrated use of distance education and face-to-face delivery in a flexible model.
2. Make use of feasibility studies, audits and baseline studies to gauge existing capacity and identify development inputs.
3. Take political dynamics into account – Encourage transparency about the budget, consult all stakeholders and negotiate the rational distribution of responsibilities, resources and incentives.
4. Build the capacity of the entire delivery system and support network in a way that links the key stakeholders with one another.
5. Prioritise student support as the key ingredient of success and take time to consolidate effective delivery. Devolve resources, capacity building and incentives to those responsible for support and assessment.
6. Institute ongoing quality assurance, monitoring and evaluation.

Chapter 1: Trends in Primary Teacher Education Reform in Anglophone Sub-Saharan Africa: The Emergence of the Field-based Model

A UNESCO evaluation of national progress towards EFA finds “a real sense of retrogression in the African case” with twenty countries in the region at serious risk of failure¹. Increasing the numbers and quality of the teaching force is crucial to achieving reasonable pupil-teacher ratios in UPE. But high teacher attrition rates attributable to HIV/AIDS, and the profession’s low status and poor conditions of service in many countries, are threatening trained teacher supply. In countries like Ghana, Malawi and Zambia, untrained and underqualified teachers make up a significant percentage of the primary teaching force. In the drive towards EFA, almost every country in the region is reforming its teacher education service with a view to reaching greater numbers faster. (Appendix A shows an overview of teacher supply and demand, and teacher education initiatives in eleven Anglophone sub-Saharan African countries.)

In response to EFA challenges, there is a great deal of World Bank, UNESCO and other donor activity in the region. The general donor shift to pooled funding, sector-wide reform and direct budget support sees a high investment in technical assistance on policy development. Characterised as ‘edlib policy’ for its neo-liberal economic principles of decreased expenditure and increased efficiency, the central aim of much donor assistance is to find ways of improving school effectiveness within the existing education budget. This sees the formulation of ministry-led teacher education strategies which aim to contain salary expenditure (currently averaging around 90% of the primary education recurrent budget in sub-Saharan Africa) and the unit costs of training, while increasing teacher performance.

In many countries, legislation for UPE has introduced a ‘fire brigade approach’ to teacher training and deployment with entry requirements and minimum qualifications being lowered and training time reduced in order to meet the growing demand², with the inevitable result of declining teacher quality. A strategy recommended by donors for filling posts and improving teacher performance without inflating the teacher education budget or the salary bill is to institute different combinations of training and experience to produce the same teaching proficiency at lower levels of the salary scale. This usually includes extended internships for student teachers and discrete in-service schemes that have no bearing on salary or careers³.

With external funders working at different levels of teacher education (policy, curriculum, infrastructure development), we also see the promotion of approaches developed in industrialised countries, such as distance education models, Teacher Resource Centres and school-based training. These developments are accompanied by an international view of ‘best practice’ espousing principles such as applied competence, on-site assessment, reflective practice, action research, lifelong learning, etc. which all argue for the greater value and relevance of extended school internships during initial training followed by ongoing school-based continuing professional development (CPD). Externally-funded distance-education projects, often supported by complementary teacher management, whole school development and ICT connectivity projects, have worked towards the integration of education services and strengthened the capacity of intermediate structures and schools to induct and support trainee teachers and to facilitate continuing professional development.

¹ UNESCO (2002).

² For example, the introduction of free UPE in Malawi in 1994 led to the recruitment of 18 000 untrained teachers who were posted to schools after a 2 week orientation, so that by 1997, 42% of the teaching force was untrained. In Tanzania, four-year training was shortened to two years after the announcement of UPE in order to double annual capacity, and then halved again in 2002 with entry qualifications waived to meet continuing shortages. The plan is now to follow up the one-year qualification with school-based training to “fill the gaps”.

³ See Welmond (2002) for a discussion of edlib policies and teacher education in Africa. Welmond notes that, along with other recommendations such as de-linking teachers from other civil servants and abolishing their guaranteed employment, the policy of integrating experience and training for teachers has been widely accepted in Africa.

These trends indicate a clear shift away from the traditional ‘bricks and mortar’ institutions of primary teacher education towards more flexible school-based provision. International experience of distance education (DE) for teachers strengthens the argument for the importance of local, individualised support and assessment for students. Research-based recommendations suggest that adequate support and effective assessment are achieved through strong partnerships with local agents, and this is the growing trend in developing countries. In sub-Saharan Africa, this translates into new integrated systems which create and/or co-opt new support cadres in a decentralised network linking ministry, providers, intermediate structures such as District Offices and Teacher Resource Centres, and schools in order to facilitate a shift towards the school-based model. Many programmes now have a local support agent responsible for a zone or cluster of schools and/or a mentor within the school guiding and assessing the trainee’s practice. This is particularly the case in ministry-led programmes where trainees are already on the teacher payroll and working towards an initial or upgrading qualification.

As a result, decentralised networks for delivering training at all levels have been strengthened. Ministries such as Zambia, Kenya, Malawi and Ghana have in recent years established internal departments and units with their own budget lines, which work through their decentralised local offices to monitor and support school-based programmes. Through various donor-funded projects, usually involving some form of distance education, Teacher Resource Centres are now commonplace in the region and often serve as pivotal agents in student support and assessment. A number of externally funded projects in the past decade have focused on management training in order to strengthen the capacity of local agents to provide ongoing professional development for teachers.

The recommendation that ministries lead reform with a clear policy framework and widespread stakeholder consultation is an accepted principle in these countries, backed by donor influence and technical assistance.

For the purposes of this study, this emerging integrated network model in its various forms will be referred to as the field-based model. In Anglophone sub-Saharan Africa, we find examples of the field-based model in Zimbabwe, Namibia, South Africa, Botswana, Lesotho, Zambia, Malawi, Kenya, Uganda, Tanzania, Nigeria, Ghana and Sudan. These models are adapted for a variety of different purposes and audiences, but can be divided into three broad categories, as follows⁴:

Table 1.1: Examples of the Field-based Model in Sub-Saharan Africa

Audience/purpose		Examples
1. Initial Training for Inexperienced Teachers	Trainee teachers completing initial residential training with a school-based internship. Possible models: In-Out; In-In-Out; In-Out-In; In-Out-Out.	Zambia Teacher Education Course school-based year; Zimbabwe Diploma in Education school internship; Gambia College Distance Education Programme; Nigeria National Certificate in Education.

⁴ Perraton (2000) introduces these three categories as the most useful way of distinguishing between the wide variety of models and audiences.

2. Initial Training for Practising Teachers	Untrained practising teachers studying for an initial qualification.	Malawi Integrated In-service Teacher Education Programme.
	Refugee and displaced community teachers studying for an initial qualification.	Sudan Open Learning Organisation Teacher Assistance Course.
	Nomadic teachers studying for an initial qualification.	Community Education Programme in Northern states of Nigeria.
3. Continuing Professional Development	Teachers studying for a Diploma in Primary Education.	National Professional Diploma in Education in South Africa; Primary Teachers Diploma by Distance Learning in Zambia; Diploma in Primary Education Programme in Botswana; Basic Education Teaching Diploma In-service Course in Namibia; Diploma in Primary Education, External in Uganda.
	Teachers studying for a Degree or Higher Degree in Primary Education.	Egerton University School-based Programme in Kenya; Bachelor of Primary Education, Fort Hare, South Africa; Various B Ed and B Ed Honours degrees in South Africa (e.g. University of Natal and UNISA programmes).
	Teachers engaged in national development programmes following policy change (e.g. introduction of UPE or a new curriculum).	School Empowerment Programme in Kenya; Revised Curriculum orientation in South Africa; Primary Reading Programme in Zambia; Whole School Development in Ghana.
	Specific cadres of teachers – e.g. Head teachers, science teachers, teachers responsible for in-service training in their schools.	School-based Teacher Development programme in Kenya; National Professional Certificate in Headship in Malawi; Aga Khan Foundation School Improvement Projects in East Africa.

The variety of applications in the list above shows that field-based teacher training is delivered along a continuum that spans a teacher's career from initial training to retirement.

A closer look at the various programmes suggests that it is useful to move away from 'mode of delivery' as a form of categorisation and to think instead in terms of a planning continuum of educational provision with two poles. At one pole is contact-based provision, and at the other, provision that is solely at a distance. All programmes exist somewhere on this continuum, but

few can be placed strictly at either pole⁵. Studies of DE for teachers find growing evidence of a more carefully rationalised use of distance education that is increasing its coherence in terms of purpose, as well as a greater diversity of purposes, models and programmes – all pointing towards the complementarity between distance and regular education.

Greater collaboration between networks of decentralised providers and the resulting marriages of convenience, cross-fertilisation and hybridisation between previously parallel systems has created a wide range of programme designs in sub-Saharan Africa. Each formulates and adapts its own combination of face-to-face and resource-based delivery and its own strategy for school-based support and supervision. It is for this reason that ‘the field-based model’ is proposed as an alternative term for describing current teacher education practices in Sub-Saharan Africa. ‘Distance education’ is simply one element of the field-based model and is no longer an accurate description of the overall process.

Reforming one element of teacher education inevitably places new demands on other areas and triggers new needs, which need to be covered by ministry-led strategy. For example, in the field-based model, decentralised delivery systems need ongoing decentralised monitoring and evaluation; and new integrated career pathways for teachers require an accreditation framework and a system of quality assurance. Different countries are at different stages of the process, but the emergence of the field-based model indicates a clearly recognisable trend towards the development of more integrated and flexible national systems.

The first finding of this study then, is that in sub-Saharan Africa there is an emerging new pattern of teacher education reform with a number of common trends. Most importantly, these include:

- the formulation of coherent ministry-led national teacher education strategies in the context of sector-wide reform;
- the establishment of Teacher Education Directorates, In-Service Training Units and other ministry bodies as separate cost centres responsible for central policy development and management;
- the gradual integration and rationalisation of teacher education systems, linking the ministry, universities, colleges, districts, resource centres, local support cadres, schools and communities in the provision of standardised, accredited training along a pre-service/in-service continuum;
- the adoption of flexible open and distance (ODL) methods, creating new roles and responsibilities among existing providers and devolving training and support functions to district, zone and school levels;
- reliance on print-based materials and, despite the ambitions and rhetoric of some donors and ministries, very little use of ICT-enhanced programmes.

⁵ See SAIDE, (2001:25) and ADEA, (2002:24). Both documents encourage the use of a planning continuum for education in general, arguing that traditional contact-based providers are trying to expand and diversify with more flexible delivery models, while traditional DE providers are trying to improve retention and success rates by offering more face-to-face student support.

We can compare the field-based model to the traditional college-based model of primary teacher education as follows:

Table 1.2: Comparing College and Field-based Models of Teacher Training

	College model of teacher education	Field-based models of teacher education
Mode of delivery	Face-to-face lectures. Practical experience in demonstration schools and a separate, short practicum in school.	Usually involves a combination of: • Face-to-face residential periods in college; • Face-to-face tutorials in TRCs; • School-based training, support and on-site assessment; • Self-study materials.
Site of training	College – full-time enrolments. School links only for teaching practice.	Training sites include: • College (full/part time/ blocks); • TRCs and satellite centres; • Schools; • Self-study.
Providers	Colleges (sometimes accredited by a university).	Networks of providers include: • Ministry (usually in leadership role); • Colleges shifting to ODL methods; • Provincial, district, zonal ministry officials; • TRCs and their tutors; • Schools – head teachers, mentors.
Pedagogy and assessment	Transmission model/ technical rationality dominates. Summative assessment, exams, short practicum.	Added aspect of on-site ‘performance learning’, action research, reflection, dialogue. Continuous assessment, portfolio work and observation more evident.
Costs, scope and capacity	Colleges are widely criticised for offering little more than a repetition of secondary education at several times the costs of both secondary and even higher education. Colleges provide only initial training to students with the appropriate academic entry requirements. Colleges alone are unable to meet the demand for teachers created by UPE.	Distance education programmes can cost between one-third and two-thirds of college-based equivalents. Well-designed programmes with over 3000 students can achieve significant economies of scale. The field-based model can be adapted to reach large numbers and a diverse range of teachers (see Table 2). The field-based model delivers training opportunities to teachers who can study on the job, and trainee teachers can fill vacancies in schools with staff shortages.

Inertia/ dynamism/ relevance	Long established colleges with a traditional conservative approach create a self-perpetuating system. Colleges have little administrative or financial autonomy and are subject to bureaucratic inefficiencies. They have little scope for innovation.	Field-based models offer an opportunity to reform and re-conceptualise teacher education. ‘Projectised’ field-based models are able to bypass the inertia of the college system. Successful models build ownership and lead to the establishment of a Ministry-based Teacher Education Department (e.g. in Zambia) or INSET Unit (e.g. in Kenya).
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There is a wide variety of providers involved in the field-based model, usually working in collaboration with one another. The National Teachers Institute in Nigeria (NTI) is the only example in Africa of a single institution devoted entirely to initial teacher education at a distance (NTI employs a correspondence model with some face-to-face support). Most other institutions integrate DE materials and correspondence methods into mainstream programmes with a combination of residential, tutorial and school-based face-to-face contact. As we have seen, most providers are not so much incorporating DE modalities as being incorporated themselves into larger ministry-led DE initiatives.

For example in Zambia, Primary Teacher Training Colleges are the main providers of ZATEC - a national ministry-led mixed-mode programme and the only route to qualification as a primary school teacher. Also in Zambia, the National In-service Teachers College (NISTCOL) has been charged with responsibility for a national upgrading programme (the Primary Teachers Diploma by Distance Learning), working in collaboration with Primary Teacher Colleges and Teacher Resource Centres. In Uganda, Kyambogo University is responsible for all teacher training on behalf of the ministry, and relies on colleges as co-ordinating centres for delivery of the mixed-mode education diploma (DEPE). In Ghana, Teacher Training Colleges are expected to ‘buy in’ more strongly to distance education and decentralisation processes, and expand their school-based provision under the new strategy for teacher education reform. In South Africa, policy guidelines on teacher education require teachers to demonstrate their competence “in an authentic setting” so that all training courses must include a substantial school-based component.

Few providers in sub-Saharan Africa have a long history of distance education and most are in the process of adjusting both their bureaucratic and teaching practices to manage the new demands of mixed-mode, field-based delivery.

Chapter 2: The Convergence of Parallel Teacher Education Systems to form the Field-based Model

The shift to field-based delivery entails the rationalisation and convergence of five previously distinct strands of teacher education and development:

- colleges and other mainstream national teacher education institutions;
- donor-funded distance education projects for teachers;
- decentralised ministry offices serving school districts and zones;
- networks of Teacher Resource Centres developed under donor-funded projects;
- head teachers, mentors and other staff responsible for in-service training in schools.

What follows is a discussion of how each of these strands is being incorporated into a new field-based model of teacher education.

2.1 Colleges

In most African countries, primary teacher education has been the preserve of colleges providing initial 2/3-year residential training. For decades, colleges have been widely criticised for offering little more than a repetition of secondary school education at several times the costs of both secondary and even higher education. Furthermore, their physical and intellectual isolation from schools, along with conservative and inflexible practices, has made it difficult for them to reach the many untrained and under-qualified teachers already in schools, or to provide the in-service training and continuing professional development required by new national teacher education strategies. As a result, colleges in many countries are facing a serious credibility crisis.

Recent research⁶ suggests that colleges in sub-Saharan Africa are barely functional institutions, “held down by the weight of tradition, by lack of vision and poor management”, instead of the “powerhouses of change” they could be, capitalising on their geographical distribution across school systems to become centres of support and innovation. But few colleges in the region have the administrative or financial autonomy to develop their own aims or mission statements. Most are administered through divisional ministry offices and are subject to bureaucratic regulations and inefficiencies. With new school-based models of teacher education, colleges need clearly redefined roles, if indeed they have a role to play at all. Most colleges need a strategy of ‘whole college development’, which would include the introduction of new forms of governance promoting greater autonomy and professionalism, as well as stronger affiliations with universities for access to expertise and academic development, and with schools to foster contextually relevant, research-based curriculum development and training. Capacity building in the various aspects of distance education (course design, materials development, delivery structures, student support and assessment) is also crucial.

Largely without the benefit of this kind of institutional development, many colleges are anyway adjusting to new roles and functions in order to reach trainees and teachers in schools. For example, colleges in Zimbabwe, Zambia, Malawi, Ghana and Gambia now have substantial school-based components attached to their residential training. Students enrol for a period of residential study, followed by a school internship, during which the college provides distance

⁶ See Lewin and Stuart (2003: xviii) for a discussion of the role of colleges.

education materials, assesses assignments through correspondence, and sends tutors on school visits to assess classroom practice. Different models provide different sequencing and balancing of time spent in and out of the college, usually in periods of a year. For example:

Table 2.1: Different Models of College and School-based Course Components

In-Out	Zambia Teacher Education Course; New system proposed in Malawi 2004
In-In-Out	Ghana colleges
In-Out-In	Zimbabwe Integrated Teacher Education Course
In-Out-Out	Gambia College Distance Education Programme

Some colleges are taking on new support roles in partnership with ministry or university school-based programmes. For example, in Uganda, nine colleges act as Co-ordinating Centres in Kyambogo University's DEPE upgrading course for practising teachers, and are responsible for providing residential contact sessions during the vacations. In Botswana, the facilities of the four Colleges of Education are all at the disposal of the University of Botswana's mixed-mode Diploma in Primary Education. In South Africa, following a national audit, a number of colleges have closed down or merged with university education departments as primary teacher education now falls under the remit of higher education. The mixed-mode upgrading programme for practising teachers (NPDE) is delivered by eleven regional university consortia, most of them probably relying on the primary teaching backgrounds of ex-college staff members following mergers.

2.2 Donor-funded distance education projects

Most African countries now have at least a decade of experience with distance education for teachers through various donor-funded projects, the most successful of which are those that have achieved a high degree of ministry ownership and become institutionalised within national structures.

Surveys⁷ of DE for teachers in developing countries find that historically it has been used largely for one-cycle 'emergency' or 'crash' programmes to solve short-term problems. The strength of these discrete, temporary, small-scale, donor-funded DE projects was their flexibility and scope to innovate, bypassing the inertia of traditional systems. Importantly, they have also tested and demonstrated the feasibility of DE for teachers. However, they have generally made little impact on national policy systems, and the transfer and continuity of organisational learning within participating institutions has therefore been limited.

⁷ Robinson (1997); Creed (2001).

With the donor shift away from projects and towards the sector-wide approach⁸, there is some evidence that more recently, donors and policy-makers have begun to recognise the potential of DE as a strategic tool for innovation within national teacher training systems. Where previous studies found the dual-mode model of teacher education (running a DE programme parallel to a mainstream programme) prevalent, in sub-Saharan Africa it is now more common to find the mixed-mode model, which integrates DE delivery methods into large national mainstream programmes. And new trends in teacher education, such as decentralisation and an increase in school-based training, have brought about the more complex organisational structures required for the greater institutionalisation and improved sustainability of DE programmes. In 2004, DE for teachers in sub-Saharan Africa is well on its way to becoming institutionalised, albeit in a variety of guises. It is now a significant aspect of the long-term transformation of national systems in many countries, drawing on the experience of previous donor-funded pilots and strengthening the chances of institutional continuity and sharing.

Many short-term, externally funded distance education projects have evolved over time into ongoing national programmes directed by the Ministry. For example, in Kenya, the SbTD programme, which began under the DFID-funded Strengthening Primary Education (SPRED) programme, has become firmly institutionalised. It led to the creation of an In-service Unit in the Ministry and has strengthened local support structures. In particular, the Teacher Advisory Centre tutors who provided the main support and the 45,000 Key Resource Teachers in 17,500 schools who were students on the programme now represent a decentralised foundation for continued school-based professional development. As a result, the programme is entering a new phase under the Free Primary Education Support Programme (supported by DFID and the World Bank) and the Ministry is developing three new school-based programmes. In Uganda, it is on the strength of experience with two short-term, regional donor-funded projects in the 1990's (MITEP and NITEP) that Kyambogo University, which now co-ordinates teacher education for the whole country, has embarked on a mixed-mode Diploma in Primary Education (DPE). The success of NITEP boosted national interest in DE and created a pool of local DE experts through extensive training of support staff⁹. The concurrent Teacher Development and Management System (TDMS) strengthened the NITEP delivery model by setting up a network of core Primary Teacher Colleges, Co-ordinating Centres and Outreach Primary Schools. NITEP and TDMS structures and practices now provide the basis for Kyambogo University's External DPE, which is run by a new Department of Distance Education headed by an ex-NITEP project leader.

⁸ Since the 1970's projects (discrete, time-bound interventions with clearly specified objectives) have been the dominant mode of agency support to education. Well-documented criticisms of this approach show that projects lead to the construction of enclaves and are seldom sustained after the agency withdraws and often bypass the relevant ministries, causing policy fragmentation and distorting attempts to plan for the rational use of resources. Projects were often used to circumvent weak ministry commitment, budgeting and management. The sector-wide approach provides general budgetary support with less earmarking of funds, and sees a greater emphasis on co-ordination between funders, and increased trust and capacity-building with the partner government in order to promote productive policy dialogue and strategic frameworks for education development (see Bentall et al, 2001). Evidence suggests that basic education (and therefore primary teacher education) is favoured more by policy-based support and programme aid than project aid (see Mercer et al, 2002).

⁹ Aguti (2002).

2.3 Decentralised (province/ district/ zone) ministry functions

Decentralisation has made a significant impact on educational planning in the last fifteen years, supported by arguments for increased governmental responsiveness, greater community participation, more flexible planning and implementation, and more efficient and less expensive provision. In sub-Saharan Africa, the increased emphasis on democratisation in the 1990s has added to the impetus for decentralisation¹⁰.

With debt and austerity measures in the 1980's, the World Bank began to urge ministries to decentralise in order to reduce the central bureaucracy and encourage cost sharing. Doubling and tripling enrolments strained the capacity of central ministries to maintain efficiency, while donor emphasis on participation and representation in public decision-making added to the pressure to shift decision-making to local groups. By the late 1980's, bilateral agency spending on teacher education had increased, but had also moved against infrastructural investment in moribund institutions such as colleges and aimed at promoting quality closer to schools. Agencies with a notable interest in local-level teacher support are SIDA, DANIDA, DFID, GTZ, the Commonwealth Secretariat and The Netherlands. The World Education Conference at Jomtien in 1990 saw a further donor commitment to programmes that strengthen the intermediate structures for teacher education, management and development, as well as a renewed interest in school-based professional support.

With the shift to sector-wide approaches, agencies such as DFID are grappling with new ways of channelling funds and technical assistance to provincial, regional and district government levels. The solution is seen to lie in negotiated agreements between central and local authorities using poverty- and needs-linked resources allocation formulae, and the early design of financial tracking systems to channel and monitor funds earmarked for the local level.¹¹ Necessary conditions for effective decentralisation are political support and local capacity to carry out the proposed changes. A locally-evolved model combining different strategies (geographical devolution of responsibility with varying degrees of autonomy; dispersion of control to stakeholders; public-private partnerships) is deemed preferable to a single 'best practice' approach.¹² The most common model is one which devolves responsibility for administrative functions, along with some financial autonomy, to the provincial and district level, with districts then divided into school zones.

The role of decentralised ministry offices, such as Provincial and District Education Offices, is largely regulatory and administrative. Local officials play a mostly supervisory role in relation to teachers, but are also sometimes responsible for facilitating and supporting teacher development initiatives, such as in-service workshops, donor-funded distance education programmes and the development and support of local Teacher Resource Centres (TRCs). For example, in Zimbabwe and Namibia, regional, district and circuit teams co-ordinate in-service training through TRCs serving a cluster system. In a number of countries, these local officials are now being assigned formal administration, monitoring and support roles in national school-based teacher education programmes.

¹⁰ See Davies et al (2003).

¹¹ Ratcliffe and Macrae (1999).

¹² McGinn and Welsh (1999).

For example, in Zambia, Provincial and District Education Office staff and District Standards Officers are responsible for monitoring the ZATEC school-based year. In Kenya, Provincial Officers are responsible for monitoring the SbTD and providing a ministry-district link, while District Office staff are responsible for material delivery, assessment and moderation, finances, training and support of Teacher Advisory Centre tutors and head teachers, and general monitoring and evaluation. In Malawi, District Education Officers are responsible for monitoring the level and quality of support provided to MIITEP students by zonal Primary Education Advisers. In Ghana, District Education Offices are responsible for the Whole School Development programme, which includes a teacher development component that is likely to be integrated into a larger in-service training system delivered by colleges, circuit supervisors and school mentors.

2.4 Teacher Resource Centres

Teacher Resource Centres¹³ play an important role in in-service training and professional support for teachers in each of the case study countries. Usually established under donor projects, TRCs and their staff are now generally employed by and accountable to the Ministry of Education. As such, their functions sometimes overlap with those of Provincial and District Offices but theirs is a more developmental and supportive role in comparison to the administrative and supervisory role of the Ministry officials.

In most African countries, the TRC exists strongly as a concept if not always a physical facility. It can be anything from a permanent building with full-time staff, a library and computer lab to a meeting venue in a classroom after school hours. TRCs are often housed in a larger school at the nucleus of a school zone or a cluster of smaller neighbouring schools, sometimes enabling the cluster to pool and share resources, experience and expertise among staff, and to facilitate in-service activities. For example, in Zambia we find nine Provincial Resource Centres, each serving eight districts, and 72 District Resource Centres, each serving about ten zones, each of which comprises about six schools. The ministry is working on a strategy to establish 600 more TRCs so that each of the 800 zones in Zambia will be served by a Resource Centre (which might be a separate building or a useable space in a school). Kenya has a similar system, where every primary school has access to a nearby Teacher Advisory Centre, which is in turn supported by zonal, district and regional Education Offices. In Malawi there are 33 districts and 315 zones, each with a Teacher Development Centre servicing 10-15 schools.

The TRC model was developed in the UK and promoted abroad in the 1980's and 1990's as a strategy for reaching isolated rural schools and enabling a more flexible, responsive and contextually relevant approach to school improvement and teacher training and support. In the UK, TRCs have since declined as in-service training has become more school-focused, but in many African countries they continue to operate, often as key agents of successive donor-aided projects. The history of TRCs in Africa is closely associated with changing philosophies and policies on school and teacher development. After starting out with the original UK emphasis on local autonomy and teacher creativity, TRCs have more recently responded to pressures for centralised (ministry or project) control over school improvement strategies combined with

¹³ Teacher Resource Centres go by different names, such as Teacher Development Centres in Malawi, Teacher Advisory Centres in Kenya and Co-ordinating Centres in Uganda.

decentralised delivery of support services¹⁴. The resulting model of centrally developed in-service programmes delivered through cascade training, with TRCs at the end of the cascade, has well-documented limitations (dilution of quality, transmission of largely theoretical and abstract ideas, lack of local relevance, limited practical application in classrooms)¹⁵ and is now quite widely discredited. Nevertheless, there is some evidence that the TRC tutors who delivered the training have benefited from the experience and that teachers still have a positive attitude towards TRCs.

In the sub-Saharan Africa region, TRCs are usually staffed by a teacher seconded from a local school¹⁶ with very little specialised training, other than cascaded 'training of trainers' under various projects. On the whole, they have little status or autonomy and are often severely constrained by lack of resources and lack of transport to the more remote schools within their zone. Because their salaries and resources have been attached to the life-cycle of donor projects, the flow of funds to TRCs has been unreliable and frequently interrupted. Attempts to make TRCs more self-sufficient (e.g. through school levies) have not been successful. Their reliance on donor projects, and uncertainty about government commitment to the funding and maintenance of TRCs, means that the TRC tutor cadre has a tenuous existence with a great deal of job insecurity.

As formal teacher training becomes more school-based, TRCs have to adjust their roles and purposes. In some cases, they are proving to be an invaluable support cadre, sometimes challenging the privileged position of their more qualified but remote colleagues in colleges, and setting up competition for student support roles and the allowances and resources attached. In some cases, new training and support responsibilities are simply placed on already over-burdened staff, while in other cases, TRC staff might be empowered by the extra training and well-defined job description introduced by a school-based programme.

For example, in Zambia, Provincial, District and Zonal In-service Providers in TRCs play key support and assessment roles in the PTDDL, on top of co-ordinating a number of other donor and ministry projects, and after staff cuts, are unable to manage their workloads. In Malawi, Primary Education Advisers were responsible for providing MIITEP contact sessions in their zone and for school-based support and assessment of MIITEP students, on top of a number of other responsibilities (school supervision and inspection, Resource Centre management and in-service seminars). However, the Ministry has invested in this cadre by building a national network of 315 Teacher Development Centres, providing accommodation and motorbikes to Primary Education Advisers, and offering training through the Malawi Schools Support System Programme (MSSSP). In Kenya, Teacher Advisory Centre tutors have welcomed the SbTD programme for protecting their jobs, which had been under threat, and for providing their work with a formal focus.

Zimbabwe provides an interesting account of the evolution of TRCs. In the 1990's, teachers in Zimbabwe set up their own informal school clusters and in-service activities. The introduction

¹⁴ Hoppers (1998).

¹⁵ See Knamiller et al (1999).

¹⁶ Resource Centre staff have various titles such as Primary Education Adviser in Malawi, Teacher Advisory Centre tutor in Kenya, Provincial, District and Zonal In-service Providers (PIPs, DIPs and ZIPs) in Zambia, and District Resource Teachers in Lesotho.

of the Zimbabwe Integrated Teacher Education Course (ZINTEC) then clarified their focus and purpose. Better provided schools began to function as host schools and developed small resource centres for cluster meetings and resource work. In 1996 the Ministry of Education counted 54 such informal resource centres nation-wide. These TRCs were then able to attract more systematic development and investment from both the Ministry and donors, including headship, management, whole school development and in-service teacher development programmes.

2.5 Schools as training sites

With regard to school-based experience, guidelines¹⁷ on distance education for teachers outline the following options:

- (i) No practicum offered at all;
- (ii) College-based micro-teaching;
- (iii) Classroom-based practicum as a separate block in a course, supervised by visiting staff from college or ministry;
- (iv) Classroom-based teaching integrated throughout the self-study learning modules, under the guidance of a mentor.

The model seen as most appropriate and realistic is the third – the school-based practicum as a separate block, usually supervised by visiting college or ministry staff. The fourth model of appointing experienced teachers as school-based mentors is common in industrialised countries and is now attracting interest in low-income countries, though possibly for different reasons. In industrialised countries, the extended school-based internship is promoted as an innovative approach to best practice, encouraging greater integration of theory and practice and allowing for reflective action research. In low-income countries, the same rationale might be put forward in policy statements and orientation workshops, but the decisive factor is more likely to be the need to fill vacancies in rural schools, and to increase teacher performance without inflating training costs or the salary bill.

Donor project emphasis on whole school development, along with the growing number of school-based continuing professional development programmes, means that schools are developing their capacity to provide in-service support and advisory services to student teachers and/or those upgrading their qualifications. For example, in Malawi, one head teacher and two other senior teachers per school hold National Certificates in Headship, which include major components on student support. In Kenya, students completing the SbTD Programme qualify as Key Resource Teachers, responsible for in-service training in their schools. In Ghana, school-based mentors are trained by college tutors in the skills required to support trainee teachers in their school-based year of study. In Zambia, teachers appointed as School In-service Providers are trained in the implementation of the ministry-led School Programme of In-service for the Term (SPRINT).

¹⁷ The four options are adapted from Perraton, Creed & Robinson (2002).

Chapter 3: Decentralised Student Support, Assessment and Quality Assurance in the Field-based Model

What distinguishes the field-based model from both college-based and distance-education approaches to teacher education, is the provision of decentralised student support, where face-to-face teaching and classroom-based guidance, supervision and assessment is provided by local-level support agents. It has long been acknowledged that distance education is highly limited in its capacity to deliver crucial aspects of teacher training. The literature¹⁸ clearly identifies those elements that require local support agents providing some form of face-to-face assistance:

Table 3.1: Providing Elements of Effective In-service Training (INSET)

<i>Elements of effective Inset</i>	<i>Distance education's capability to provide them</i>
1. Exposure to new theory or techniques.	Can provide materials for wide and rapid dissemination. Can create good quality learning materials, drawing on expert advice, to explain new approaches and illustrate them using print and other media.
2. Demonstration of their application.	Can demonstrate through print (case studies, examples of best practice) and through audio and video. Can show a wider range of practices and contexts than teachers would otherwise have access to.
3. Practice by the teacher.	Can support a teacher's practice by structuring teaching activities in self-study texts and guiding the teacher through them. Offers some support for reflective practice if linked to peer-group meetings and tutor support . Can set course assignments which link theory to practice and give students feedback on them. Can organise practical sessions at local centres with other teachers, in partnership with local agents . Can only negotiate access to schools and observe individual teachers' practice with local partners .
4. Feedback to the teacher.	Can provide feedback on written work and reports of practice. Can only provide feedback on actual practice to individual teachers if local agents are involved.
5. Coaching over time.	Can assist coaching activities by providing support materials to develop concepts, theory and attitude changes. Can provide support materials and guidance in good practice for local support agents (tutors, mentors) . Can only provide individual diagnosis, feedback, coaching or counselling with local agents .

Table 3.1 reflects the components of teacher training identified in a well-known study by Joyce and Showers¹⁹. This study demonstrates that ongoing coaching involving a combination of theory, demonstration, practice and feedback over a significant period of time, is by far the most effective way to change the actual performance of teachers in the classroom. Without a coaching

¹⁸ The table is adapted from Robinson (1997:130), who draws the five elements from a World Bank analysis of effective INSET, which in turn drew on the work of Joyce and Showers.

¹⁹ Joyce and Showers (1988).

element, teachers make only superficial changes to their practice, which seldom last beyond the duration of the course. The table shows that three of the five elements of effective in-service training, including those aspects most proven to change practice, can only be effectively provided in collaboration with local partners. Without a well-organised and highly-trained network of local support agents, distance education for teachers cannot achieve any significant transfer of training, and after completing their studies teachers will quickly revert to their tried and tested routines. For programmes seeking to make a long-term impact on teacher practice, distance education can effectively provide all the necessary elements, but only in partnership with local support agents.

Similarly, when it comes to assessment, distance education can be effective in assessing knowledge and understanding, but practice and performance require first-hand observation and authentication as Table 3.2 illustrates:

Table 3.2: Assessing Teachers' Knowledge and Practice²⁰

<i>Teachers' knowledge and practice</i>	<i>Nature of assessment</i>	<i>Implications for delivery and support</i>
<u>Level 1: Knowledge and understanding</u> of subject content knowledge, of pedagogical concepts, ideas and theory.	Written work – assignments, essays, portfolios, test and exams.	Can assess and give written feedback on a large scale through correspondence. Assignments may be too theoretical/ unrelated to the realities of local classrooms.
<u>Level 2: Knowledge applied to practice</u> in teacher's own context; testing and interpreting ideas about pedagogy; evaluating practical activities and reflecting on them.	Written reports and accounts of classroom activities; portfolios.	Good learning materials can structure this process for the teacher and strengthen the link between theory and practice. This kind of assignment is more expensive and time-consuming to assess (non-standardised, greater individual differences). Not possible to authenticate the student's accounts.
<u>Level 3: Practice and performance</u> Demonstration of competence and skills.	Direct observation and authentication of individual teacher performance.	Local partners are essential. Much more complex to organise, more labour-intensive and more expensive than level 1. Requires support staff in a variety of roles , which in turn requires more training of staff, more support materials, more management and monitoring.

²⁰ Table 4 adapted from Robinson (1997:132)

It is clear from Tables 3.1 and 3.2 that if support and assessment practices are to assist in the alteration of classroom practice, they must include opportunities for an

experiential cycle of trial, feedback and evaluation, coaching, reflection and replanning, and retrieval. This process can be structured by learning materials but also needs on-the-spot interaction with others, such as tutors or mentors. The assessment of outcomes from this learning, in terms of what teachers can do, cannot easily be done through distance education.²¹

The convergence of parallel teacher education systems and the emergence of field-based programmes in sub-Saharan Africa can perhaps be seen as an attempt to provide the support agents (indicated in bold in the tables above) so often missing from distance-education programmes, as teacher training becomes more school-based. The agents providing this on-the-spot interaction at the level of practice and performance are drawn from a number of sources, with each programme developing its own support networks depending on what structures and capacity already exist in the education system.

Examples of local-level support staff follow, with descriptions of their official roles (i.e. the roles they are expected to play according to the programme design, not the roles they actually do play):

- **School-based mentors**

In Zambia, each student in the school-based year of ZATEC is partnered with a more experienced teacher as a mentor, who provides guidance, counselling and assessment in liaison with the head teachers and the college.

In Ghana, students in the ‘out’ year of their initial qualification are supported by a lead mentor and other appointed mentors in the school, who have received training for their role, given by college tutors. Mentors observe and assess students, and facilitate a ‘study circle’ every afternoon after school hours.

- **Head teachers**

In the ZATEC school-based year, the head teacher assists the student with accommodation, introduction and orientation to the community and school, supervision and assessment of both the student and the mentor, and liaison with the college.

In Kenya, Key Resource Teachers enrolled in the SbTD programme rely on the head teacher for advice, counselling and facilitating fortnightly Self Help Group meetings. The head teacher is also responsible for a number of administrative tasks, such as nominating and enrolling teachers, collecting fees, keeping records, receiving and forwarding assignments, etc.

²¹ Robinson (1997: 131).

In Malawi, teachers enrolled in MIITEP are monitored by their head teacher, who is responsible for supervision (twice a week) and assessment (three times a term) of their teaching practice.

- **Teacher Resource Centre tutors**

In Zambia, teachers enrolled in the Ministry's PTDDL programme receive most of their support from Provincial and District Resource Centres, where the Provincial and District In-service Providers are responsible for learner support (contact sessions and school visits), monitoring of school-based mentoring, and assessment. They also have a number of more administrative tasks such as of student records, delivering learning materials, and arranging exams.

In Kenya, Teacher Advisory Centre tutors provide the main support to Key Resource Teachers enrolled in the SbTD. TAC tutors hold monthly tutorials, mark assignments and carry out classroom observations. Administrative tasks include enrolling students, collecting fees and keeping records.

In Malawi, school-based MIITEP students attend three workshops a term held by a Primary Education Advisor (PEA) connected to a Teacher Development Centre. The PEA also visits each student twice a month for classroom observation.

- **Visiting college tutors**

In the ZATEC (Zambia) school-based year, students are visited once a term by college tutors who observe and supervise their teaching practice and liaise with their school-based mentors and head teachers.

In South Africa, some NPDE students are visited by university tutors (depending on the provider) who observe and assess their teaching practice.

In Ghana, students in the school-based year of initial training are visited by college tutors, one of whom is identified as a 'link tutor'.

- **Contracted field workers**

In South Africa, some NPDE providers hire field workers (usually teachers) to visit students and report on their progress.

In South Africa, the University of Fort Hare employs local teachers, known as 'abakhwezeli' (the ones who keep the fire burning) to provide tutorial support for Bachelor in Primary Education students. The role of the 'abakhwezeli' is not to teach or provide any input but to facilitate discussion and reflection.

In Zambia, district teams providing support to PTDDL students are made up of district officials and community members such as retired professionals, local businessmen and Parent/Teacher School Association members.

Other forms of support include peer-group meetings and tutoring or teaching at local, regional or national events, ranging from a few hours to several weeks' residential attendance. Another important source of support is correspondence tuition where students receive written feedback and grades on their course work. This is usually provided by college and/or TRC tutors.

Local support cadres need to be monitored, which necessitates another layer of structures and agents responsible for monitoring and evaluation. In government-led programmes, this role is usually played by ministry officials, such as Provincial and District Education Officers. For example, in Zambia, Provincial and District Education Office teams and District Standards Officers are responsible for monitoring the ZATEC school-based year. Similarly, in Malawi, District Education Officers are responsible for monitoring the level and quality of support provided to MIITEP students by zone-level Primary Education Advisers. In Kenya, ministry staff play an important role in the SbTD. Provincial Officers are responsible for monitoring the province and providing a ministry-district link, while District Office staff are responsible for material delivery, assessment and moderation, finances, training and support of Teacher Advisory Centre tutors and head teachers, and general monitoring and evaluation at district level. The Ministry INSET Unit is responsible for overall monitoring and evaluation at national level. In South Africa, where the NPDE programme is delivered by a range of providers, monitoring is carried out by external consultants to the Ministry (the South African Institute for Distance Education and the Witwatersrand University Centre for Education Policy Development).

Chapter 4: Challenges facing Student Support in Field-based Training for Teachers

According to much of the literature, student support and assessment of teaching practice is the weakest point of distance education for teachers:

By nature, distance education has a dispersed organisational structure and delegates responsibilities for the programme – administrative, academic content, production and student support – among a variety of personnel and institutions at different central, regional, district and local levels. [...] This dispersal can crucially affect both the coherence and cohesion of a programme. The supervision of a teaching practice component, among a geographically wide range of sites, is a particularly challenging logistical complication and has been described elsewhere as the ‘Achilles’ heel’ of teacher education by distance²².

The dispersed organisational structure described above is clearly evident in the field-based model we see operating in sub-Saharan Africa. Coherence and cohesion are often lacking in these programmes, and the supervision of teaching practice in the region is definitely the Achilles’ heel – in a recent review of teacher education in the region, assessment of teaching practice is described as “often a ritual, sometimes a farce”.²³

The well-documented difficulties and weaknesses of student support and assessment practices were taken as a starting point for the present study, and the research methodology was designed to accumulate more detailed evidence about the challenges involved, as well as examples of effective strategic responses to these challenges. (See Appendix B: Research Methodology).

The literature²⁴ puts forward a number of possible reasons for weak student support and assessment practices. First, there is the generous interpretation, which focuses on the tendency of planners to expect too much from, and plan too little for, distance education. These reasons include:

- overambitious blanket-coverage aims accompanied by unrealistic expectations of the promise of distance education in solving problems of quality, quantity, access and cost;
- the tendency to underestimate the infrastructural and organisational demands, and the high costs, of decentralised delivery, administration and support;
- inadequate organisational planning and lack of coherence within the dispersed organisational structure (central, regional, district, local) and among the variety of institutions and personnel involved;
- a common transmission view of education which fosters the view that all that is missing in educationally deprived areas is the means for depositing ready-made instructional materials and underestimates the importance of student-tutor contact.

The second, less generous interpretation focuses on the political pressure on education ministries to meet the growing demand for education without incurring new costs or diverting resources away from elite patronage networks. These reasons include:

- ministries’ need for “an efficient but cheap way of containing educational demand without

²² Creed (2001:17).

²³ Lewin and Stuart (2003: xvi).

²⁴ See Creed (2001:17-18).

meeting it” along with their need to “insulate the elite system from pressures that might otherwise threaten its status or ways of working”²⁵;

- political pressure to go to scale ahead of capacity to support students at the local level;
- the concentration of resources at the centre and the lack of incentives for more peripheral support agents at the local level.

It is likely that both sets of reasons – the generous and less generous interpretations – are contributing factors leading to weak support systems. Certainly, all of these reasons are evident in the case studies. Discussion and examples follow.

4.1 Overambitious aims and unrealistic expectations of the promise of distance education

One of the consequences of globalisation is the aggressive advocacy of the neo-liberal economic paradigm by international development agencies during the 1980s and 1990s, particularly in Africa. As a result, development initiatives such as Education for All (EFA), which aim to expand educational access and equity, exist alongside finance-driven reforms, which aim to contain the unit cost of education and increase its efficiency.²⁶ In this context, the basic premise of distance education – that it can reach greater numbers of remote students at lower costs – is compelling.

Costs and efficiency are almost always the reason for introducing distance education to teacher training. While it is acknowledged in the literature that teacher education by distance has high initial costs, it is argued that lower recurrent costs make it more cost-effective than traditional teacher education in the long run²⁷. Where enrolments are high enough, costs per successful student can be as low as one half to two thirds of the cost of conventional teacher education in sub-Saharan Africa. Reasons most frequently given in the literature for cost-effectiveness are summarised here:

- large programmes have brought economies of scale;
- in-service training of teachers, in initial training or continuing professional development, can provide the means to avoid the cost of replacing a teacher who has left for full-time education;
- head teachers can train in situ;
- carefully balanced mixed-mode teaching, which blends distance and regular face-to-face teaching within a course, can help to double and triple a college’s training throughput per year;
- distance education has lower opportunity costs to the learners than regular college approaches.

Yet a recent review of teacher education in sub-Saharan Africa²⁹ indicates that studies of comparative costs and benefits of different methods of training teachers in the region are not readily available and have little influence on policy decisions. Similarly, a *Prospective Stocktaking Review on Education in Africa*³⁰, presenting case studies of successful education initiatives in 26 African countries, finds that there is a ‘blind spot’ when it comes to concrete evidence on the

²⁵ Perraton (2000:199).

²⁶ See Welmond (2002).

²⁷ Creed (2001); Perraton (2000); Robinson (199.9).

²⁸ Creed (2001:14).

²⁹ Lewin (1999:4).

³⁰ ADEA (2001:95).

cost-effectiveness of these innovations. The study concludes that “financial analysis is still very weak and is not sufficiently integrated into the culture of education ministries”. Where financial information is available, it is often inaccurate, inconsistent and not readily comparable or reproducible. Institutions, districts and other sources provide incomplete information, differing on periodisation and the specification of expenditure categories (e.g. confusing budget and actual expenditure or recurrent and development expenditure). Available data is usually limited to government expenditure and does not include user, local government or external agency spending, and inflation, deflation and exchange rates are treated inconsistently. These problems mean that education planning and management is often “little more than wishful thinking”³¹. It is this same wishful thinking that drives African governments to “uncritically accept positivistic claims about distance education, such as its cost advantages ... and that it makes better use of scarce educational resources, despite the evidence which suggests that this is not always the case”³².

Perhaps an example of wishful thinking based on inadequate data is the South African government’s proposal in 2001 to fund DE provision at 50 percent of the input subsidy granted to more traditional face-to-face institutions. By contrast, funding in the UK and Australia is standard regardless of mode, while in Canada DE providers sometimes receive higher subsidies³³. The element of teaching practice supervision will always make DE for teachers a more expensive and complex endeavour than other forms of DE, yet South African funding policy fails to take this into account. This is despite the 1995 National Teacher Education Audit finding that teacher education offered at a distance was of a particularly poor quality, with a few small-scale high-quality ventures threatened by the expansion of large-scale, low-cost programmes with inadequate support or assessment practices and high drop-out rates. This policy leaves South African providers with “little financial incentive to establish school-based assessment or adequate support for teachers to learn from the places in which they work or will work in future... In many instances, the quality of provision is sacrificed in order to make a profit”³⁴.

A 1998 study³⁵ found that two factors determine the cost effectiveness of distance programmes – the number of students enrolled and the level of support provided to students. The higher the enrolments, the lower the per-student costs, while the ratio is reversed for providing instructional support for students, a figure that increases with larger enrolments. Where basic facilities and infrastructure for contact, communication and transport need first to be put in place, the costs can quickly exceed those of college-based training.

Measuring cost-effectiveness requires an assessment of essential quality indicators, such as levels of student support, retention rates, pass rates and assessment practices, as well as spending. But good evaluations of DE programmes in Sub-Saharan Africa are hard to find, tending to be “strong on description but weak on evaluative data, both quantitative and qualitative, on which to make judgements about effectiveness, costs and impact”³⁶. Most calculations based on per-student costs fail to take into account the drop-out rates of those initially enrolled and, since drop-out rates run as high as 90% in some DE programmes in developing countries, counting

³¹ Samoff (1999).

³² Guy in Hellman (2003:16).

³³ Komane and Mays (2001).

³⁴ Welch and Gultig (2002:12).

³⁵ Potashnik and Capper (1998) cited in Hellman (2003).

³⁶ Creed (2001:15).

the cost per student who graduates could dramatically alter the unit cost of a programme.³⁷ Economies of scale can undoubtedly be achieved in largely centralised systems, but the decentralised delivery and support structures required for school-based initiatives generally lead to a rapid escalation of costs. It is also difficult to accurately cost a field-based model of teacher education because of the variety of agents and facilities involved and the number of hidden or private costs carried by local agents and by students themselves³⁸. Where programmes rely on existing structures such as District Offices and TRCs, or on support networks established by other projects, the level of investment in these systems is often not reflected in programme budgets. In the end, there seems to be very little reliable evidence to support the general belief that DE programmes with strong student support at the local level can be much less expensive than full-time residential study.

What we do know is that funding, whether it is external or government funding, is often blamed for inadequate student support. Donor funding crises within MIITEP, for example, accounted for many of its early student support problems. In Ghana, weak government budgeting means that no self-study materials or handbooks are available to the current cohort of students in the school-based year of initial training, although previous cohorts have found these materials very valuable. In Zambia, Kenya and Malawi, college tutors, District Office staff, TRC tutors, head teachers and other staff responsible for student support, supervision and assessment, frequently give inadequate and unreliable funding as the reason why they are unable to perform their duties.

It is common for ministries to develop impressive plans for educational programmes that are not followed through because budgets simply do not reflect the good ideas. When cutbacks and compromises are inevitably made, they are most likely to affect the ‘non-essential’ elements of a programme, and where local cultural values favour a transmission-content model, student support is seldom seen as essential. Another factor is the ‘multiplier effect’, as described by a South African NGO with years of experience in delivering training and support services to rural schools:

Providing support where students are is prohibitively expensive because of the multiplier effect. This is a factor affecting all devolved services: Even a relatively small unit cost at end-user level becomes prohibitive once you start multiplying. It is very appealing to instead spend large amounts centrally on the development of programmes, systems etc, or even at intermediate levels (provincially, regionally or in districts), because this seems so much more cost-effective. When cost savings are necessary, programme planners will tend to look at where budget cuts can be made at the local level, because even small cuts at this level can have a dramatic effect on budgets.

Unfortunately the reasoning behind doing this is as faulty as designing and constructing a highly sophisticated irrigation system, but cutting costs by not taking the pipes right to each plant: By not investing in the necessary last step, the entire expensive infrastructure is then wasted³⁹.

³⁷ Hellman (2003).

³⁸ see Robinson (1997: 133).

³⁹ Media in Education Trust (2004:12).

It is clear in sub-Saharan Africa that most field-based programmes for teachers require far greater investment at the local end-user level, so that each individual learner receives support, and that this will inevitably push up costs. The literature on DE for teachers emphasises that “the economic challenge is to provide enough face-to-face support to gain all its benefits while not allowing it on such a generous scale that the costs become unsupportable”⁴⁰. But as long as teacher education by distance is promoted in sub-Saharan Africa as an inexpensive, quick-fix solution, governments are unlikely to realistically budget for the high costs of student support and assessment in school-based programmes.

4.2 Underestimating the demands and costs of decentralised management; inadequate planning for delivery and support

According to the literature, the greatest challenge to DE teacher education projects in sub-Saharan Africa, and the first condition for success is “to set in place effective arrangements to support students and, in particular, to supervise their classroom practice”⁴¹.

Tables 3.1 and 3.2 in Chapter 3, showing the elements of local-level support required for good in-service training, indicate that adequate support and assessment can easily push up costs to approximate those of conventional delivery. The tables clearly illustrate how the organisational complexity and costs rise as programmes move away from mass standardised assessment practices to more individualised and developmental performance-based assessment.

As we have seen, more advanced support and assessment practices cannot be carried out by any central provider, but require complex contracts, partnerships, collaboration and delegation with district education authorities, head teachers, schools, tutors and local colleges. “The complexity, time and cost of managing these crucial relationships with partners tend to be underestimated at the outset, especially when several colleges and regional or district authorities are involved”⁴².

Because so many donor-funded distance education projects were designed hastily to meet urgent demand, they have seldom begun with the necessary initial investment in developing infrastructure or building capacity through the system. Many have operated in crisis mode rather than according to systematically evolved plans. As a result, delivery, administration and support systems have faltered, highlighting the necessity of complementary infrastructure, training and capacity-building programmes for the intermediate field-based structures. A good example is the Malawian programme, MIITEP, which was devised to meet a crisis and had no time to develop the necessary administrative infrastructure:

Capacity was stretched to the point where many trainees’ records were incomplete and it was not known where they were; colleges kept no continuous records of student performance, zonal activities were constantly re-scheduled at short notice or cancelled, and learning materials were late in production and delivery. There clearly were considerable problems with the disbursement of funds arising both from time-scale and accountability attached to external funding, and complex and inefficient internal allocation procedures⁴³.

⁴⁰ Perraton (2000:9).

⁴¹ Perraton (2000:9).

⁴² Robinson (1997:126).

⁴³ Kunje, Lewin and Stuart (2003 xi).

It was intended that MIITEP would run alongside the Malawi School Support System Programme (MSSSP), which would establish a national network of Teacher Development Centres. However the pressing need for training drove MIITEP ahead first, leaving college staff, Primary Education Advisers and head teachers unprepared for their new responsibilities and without the skills or resources to carry them out. As a result, the system of field-based support was found to be “over-ambitious and demonstrably ineffective” with classroom assessment little more than a ritual⁴⁴.

Similarly, in Zambia the DANIDA-funded ZATERP project (an In-Out model piloted in three colleges) was implemented in too much of a hurry, “driven by political expediency and a donor agenda”, and without preparing schools or TRCs for the field-based component⁴⁵. A review study found that ZATERP had no system for distributing and collecting study materials, assignments and feedback, and that district support teams and head teachers had little understanding of the programme⁴⁶. But before there was time to rectify these problems, ZATERP was taken over by the Ministry and rolled out as a national programme in all colleges (renamed ZATEC). The Zambian PTDDL is another example of a programme that, despite a critical pilot evaluation, went too quickly to scale without addressing the existing problems and ended up with an administration and support system that was “chaotic and unreliable”⁴⁷.

In Namibia, in 1996, the Basic Education Teacher Diploma in-service component for under-qualified teachers was developed in partnership with the Universities of Manchester and East Anglia, but met with limited success due to the “minimal and rudimentary support systems available for part-time students”⁴⁸.

When it comes to decentralised management, where innovations are imported from industrialised countries, there is often a lack of understanding of the difficulties of working in African rural contexts, and a tendency to overestimate what can be achieved with limited time and resources. The South African NGO, the Media in Education Trust, describes its experience of implementing school-based programmes in rural areas:

The cost of delivery/support in deep rural areas is much higher than that of delivery or support to urban schools. There are many facets of this: travel to these areas is costly; there is usually not any accommodation close by for support staff; distribution and installation of equipment is expensive; and if anything goes wrong with equipment, premiums must be paid to get technicians to service the equipment. ... Things simply do not happen as quickly or effectively in rural areas as they do elsewhere. Because of transport difficulties or poor communication, for example, teachers may not turn up for training sessions, which then have to be rescheduled. In other instances, some teachers may arrive late, while others leave early because of transport difficulties. This may mean that support workshops or meetings have to be cut short, and that objectives cannot be met. These factors also push up the costs of programmes in rural areas⁴⁹.

⁴⁴ Kunje et al (2003: xviii).

⁴⁵ Musonda (1999).

⁴⁶ Ndhlovu et al (2000).

⁴⁷ Personal communication with distance education adviser, Bernard Broche, June 2003.

⁴⁸ Ebbutt and Elliott (1998).

⁴⁹ Media in Education Trust (2004:14-15), from a report commissioned especially for this study.

The same NGO describes how their quest to provide effective support to teachers in disadvantaged rural schools moved from a theoretical vision to a practical reality, and in the process, “virtually every attempt to solve one of the problems related to effective delivery has uncovered another layer of difficulty”. As a result, “the way we do things has kept changing organically as we have tried out, built on and at times discarded, new ways of reaching our goal”. This hard-won experience supports the view that, in distance education, “while research can and should inform practice, providing services for learners is most often a pragmatic, problem-solving activity enacted in a particular context”⁵⁰. Theory, research, imported blueprints and technical expertise acquired in other contexts are all valuable when it comes to planning, but they must go hand-in-hand with in-depth understanding of the local context in rural schools, rooted in the lessons of experience.

Many projects have learned the hard way, from low retention and pass rates and evidence of minimal impact on classroom practice, that student support, and capacity building for those who provide it, should not be left to chance. But there is evidence that this hard-won lesson has had an impact, particularly on programmes with project or piloting experience behind them.

For example, the dismal performance of ad-hoc MIITEP student support and assessment systems reinforced donor and ministry commitment to invest heavily in local-level capacity building through the MSSSP programme. As a result, the successor to MIITEP will now have the benefit of a network of well-equipped Teacher Development Centres staffed by full-time Primary Education Advisers provided with motorbikes for school visits and trained in advisory services, as well as head teachers trained in supporting professional development.

In Zambia, the evolution of the ZATERP pilot into the national ZATEC programme, housed in the Teacher Education Directorate, has seen a growing commitment to the gradual development of local-level support structures. The ministry is now investing in 600 new TRCs at the zone level, accompanied by a new capacity building programme for Provincial, District, Zone and School In-service Providers, who make up Provincial, District and Zone Education Support Teams.

Other examples of complementary management and support programmes are the Teacher Development, Support and Management System (TDMS) in Uganda and the Netherlands-funded Better Schools Programme in Zimbabwe, which appointed Regional and District Co-ordinators to support in-service training in TRCs serving school clusters. TRCs and cluster systems have been established and strengthened by various donor-funded initiatives in South Africa, Lesotho, Botswana, Namibia, Zimbabwe, Zambia, Malawi, Tanzania, Kenya, and Uganda. In many cases they are now playing crucial roles in the delivery of distance education programmes.

Decentralised management, organisation and support requires sound advance planning and the development of clear job descriptions, lines of communication and accountability and a shared understanding of the different roles and responsibilities carried out at each level. One programme that has developed a successful model of decentralised management and support is the SbTD programme in Kenya. This programme had the advantage of involving a single donor,

⁵⁰ Robinson (1995:221).

which made for more efficient disbursement of funds, and of being implemented one province at a time for the five-month duration programme cycle, over a period of several years. Nevertheless, it involved months of careful planning and consultation with all stakeholders, on the understanding that “if one group is excluded from planning, it can bring the whole programme down, so don’t miss anyone out!” The SbTD management, administrative and support structure is regulated by a very efficient system of form-filling and record-keeping based on the UK Open University model⁵¹.

Very often, unreliable systems can be put down to the lack of communication infrastructure – for example, central management is often severely complicated by unreliable phone lines, particularly in countries with a rainy season, which make effective communication with provincial and district teams impossible. There is important potential for ICTs to improve the systems and networks of student administration and support – for example, in keeping student records, maintaining databases, and establishing communication networks between the central provider and local support structures. Most countries are a long way away from connecting regional learning centres or TRCs to the internet (few have electricity or phone lines), but innovations such as earth-satellite links and mobile phone technology could make this possible in the future. In teacher education by distance, even at the UK Open University, ICTs are generally not widely used for formal content delivery or for their interactive potential, but are indispensable to the smooth operation of administration and support systems for school-based students. It is probable, therefore that the potential of ICTs lies largely in managing and facilitating, rather than enhancing or replacing, face-to-face interaction and one-to-one correspondence and support. But at present, it is only in South Africa that we see the common use of ICTs in the administration and management of DE programmes.

As a minimum, effective delivery and support requires an existing network or ‘footprint’ of nodes (agreed distribution points, TRCs, nodal schools serving clusters) across rural areas. Once this has been established, there is potential to use the network in different ways to link rural schools with the providers who can help meet their needs (the ministry, universities, colleges, donors, NGOs, in-service projects).

One example of such a network is the Resources and Information Network (RAIN) in KwaZulu Natal, South Africa. RAIN was established following tracer studies tracking the delivery of materials intended for schools from source to end-user. The research showed that of the materials distributed through official ministry channels, only 20% made it into the hands of teachers. Under-resourced rural schools, who need resources the most, were the least likely to receive the materials. RAIN is managed by the Media in Education Trust, on behalf of the KwaZulu Natal Department of Education and Culture, and has set up a system linking a network of 120 distribution nodes in schools across all districts of the province. A central management system co-ordinates and monitors all aspects of distribution, user support and cluster development in a centralised database. A central warehouse receives, records, packages and dispatches the resources and processes proofs of delivery. Primary distribution is to the 120 distribution nodes in each district of the province and secondary distribution is carried out by local contractors, chosen by school communities. One of RAIN’s most important achievements is:

⁵¹ Personal communication with DFID adviser, Caroline Pontefract, July 2003.

the creation of a cadre of 132 distribution contractors who are based in even the most far-flung rural areas of the province. The contractors know all the principals and schools in their distribution area well, and know how to get to the most inaccessible schools. Because of their numbers and because they live close to the schools, they can be deployed rapidly to distribute materials and other resources, or to disseminate and gather information about and from schools⁵².

Independent reviews have found the system to be efficient and cost-effective with 97% of resources delivered on time, confirmed by stamped proofs of delivery and high levels of user satisfaction. RAIN is also increasingly being used as a two-way information and communication system, with central agencies relying on the network to gather information from the schools. The project managers stress that the costs of RAIN must be compared with commercial providers offering the same services:

Potential users sometimes find RAIN expensive because they compare it with systems that are simply not comparable, such as delivery of materials to district offices in the belief that either district officials or principals will take responsibility for getting these to schools. It is precisely because of the consistent failure of such approaches that RAIN was established⁵³.

Other examples of potential distribution networks are those that link district offices with zone-level TRCs, for example in Zambia and Malawi. TRC networks have an important potential to serve as an artery into rural school communities, facilitating a two-way flow of information and the reliable distribution of resources. In Malawi, this is a visible trend as locally-resident Primary Education Advisers are responsible for collecting and updating data on the schools in their zones and are now equipped with motorbikes to ensure that they can reach every school. In Zambia, TRCs are still being established in the more remote zones and transport continues to be a problem for In-service Providers. There is not enough information to assess the effectiveness or reliability of these TRC systems as distribution, information and communication networks. But the South African experience suggests that official/ministry channels are not always efficient, and transport and communication are well-reported problems in each country, accounting for weak delivery, administration and support practices.

A reliable distribution and information system is something DE programmes can take for granted in industrialised countries, where transport, post and telecommunications infrastructures are reliable and affordable. In African countries, these systems have first to be put in place in order to facilitate the most basic and essential functions such as delivery of materials, correspondence with students and the submission and return of assignments. This requires significant up-front investment, careful planning and on-going problem-solving.

⁵² Media in Education Trust (2004:6).

⁵³ *Ibid.*

4.3 The transmission model underestimating the importance of student support

The literature on DE for teachers finds that it can introduce a clash of cultures between traditional mainstream practices and new open learning approaches:

Distance education approaches are not value free. Its goals often include active learning, learner-centred approaches, the growth and personal development of individual learners rather than the transmission of information alone. The model of teaching-learning and tutor-learner relationship may stem from a different tradition and set of values too. The goals of primary teachers' colleges, avowed and implicit, may be different and often are. Distance education also places new demands on educators who have to learn to do familiar things in new ways⁵⁴.

In sub-Saharan Africa, clear distinctions can be drawn between local, traditional educational views and practices (hybridised forms of colonial and indigenous traditions) and the general intentions of new education reform models, usually imported from industrialised countries and often incorporating elements of school-based training:

Table 4.1: Comparing African and Imported Models of Education⁵⁵

	African model	Imported models of reform and innovation
Political economy	<i>Colonialism</i> – domestication and control. <i>Independence</i> – manpower planning, utilitarianism.	<i>Late modernity</i> – globalisation, competition in post-fordist economy, technological innovation.
School/college culture and normative behaviour	<i>'Mechanical solidarity'</i> Simple division of labour; common belief system; custom; conformity; accepted roles within hierarchy; punitive law.	<i>'Organic solidarity'</i> Complex division of labour; differences are accepted; clear social contract defining rights and duties of individuals.
Teacher status and expected roles	<i>Civil servant</i> , curriculum receiver. Restricted professional.	<i>Professional</i> , curriculum designer, lifelong learner. Extended professional.
Teaching and learning	<i>Teacher-centred</i> , deductive, rote-learning.	<i>Learner-centred</i> , inductive, active learning.
Instructional discourse	'Mode 1' knowledge - canonised and 'given' by teacher as expert.	'Mode 2' knowledge – socially constructed and negotiated.
Regulative discourse	Values teacher's authority and positional control; sets limits on learner interaction.	Democratic, free communication; personalised classroom relations.
Epistemology	Objectivist, behaviourist, rationalist.	Constructivist.
Values	Conformity, obedience, respect for elders and seniors, gender divisions and inequality.	Innovation, participation, equality, self-reflexivity, etc.

⁵⁴ Robinson (1997:136).

⁵⁵ Adapted from Harley and Mattson (1999).

When the values of imported reform measures are superficially grafted onto the transmission model valued in African societies, the results can be disempowering for teachers. This has particular implications for the school-based model of teacher training. The international literature on school-based training, spanning industrialised and low-income countries, debates whether it is the key to professional development - providing access to practical problem-solving opportunities and advice, and socialisation into professional norms and standards - or whether it in fact reproduces and entrenches conservative and dysfunctional practices in schools. There is an expectation that school-based training will improve opportunities for integrating theory and practice through school-based critical reflection and action research, promising rapid change in the classroom. But this kind of activity depends on cultural values that are rare in most primary schools and it is more common to find trainee teachers simply adapting to the norms of the school.

In African countries, an added attraction of school-based training is its potential to cut training costs while alleviating teacher shortages. These might be good enough reasons in themselves to promote and retain the school-based model, but the pedagogical opportunities for which the model is designed are not likely to be exploited. The evidence suggests that concepts such as the integration of theory and practice, action research, reflective practice, on-site developmental assessment, and so on are generally alien to the college and school cultures in which the students are embedded. And where schools lack the resources and qualified staff to encourage the development of situated knowledge, “training reverts to mere apprenticeship, where students learn to survive by copying the strategies used around them”.⁵⁶

Some commentators believe school-based training is promoted in developing countries largely because it is cheap. In countries like Malawi, where unqualified teachers are deployed to meet shortages, school-based training is the only feasible option, whether or not there are enough schools to offer appropriate training environments or qualified teachers to act as mentors.

Evaluations of Malawi’s school-based MIITEP programme show that trainees were often treated like any other teacher, and allocated classes in ways that ignored the MIITEP guidelines. Where pairing occurred it was often not characterised by peer observation and support, but was used as a device to reduce teaching loads. MIITEP assessment activities tested subject content knowledge but did not use the students’ school-based experience to encourage reflection on practice or contextual problem-solving skills⁵⁷. In Zambia, ZATEC students placed in schools facing shortages, rather than schools offering a conducive environment for reflective practice (and meeting the official selection criteria), found that “the school-based year was to a large extent a teaching year rather than a training year”⁵⁸. In Ghana, student teachers are very concerned with correct and appropriate behaviour and “doing it right” and are not encouraged to reflect critically on their experience, to discuss real classroom problems, or to develop a sense of personal agency⁵⁹.

In countries like Malawi and Ghana, there is a far greater emphasis on the correct completion of technical procedures, such as lesson plans and schemes of work, than on dialogue with more

⁵⁶ Lewin and Stuart (2003:97).

⁵⁷ Kunje et al (2003).

⁵⁸ Ndhlovu (2004:11).

⁵⁹ Akyeampong (2003).

experienced teachers about solving real problems, such as lack of resources, mixed abilities and multi-grade classrooms. Support staff often find it difficult to shift from a strict, supervisory role to the more open, supportive and friendly role of an advisor or mentor. This makes it difficult for students to share any real problems and reinforces the tendency to focus on the symbols, rather than the substance, of 'correct' practice. In conditions such as these, the transformative potential of school-based training is lost and there is more chance that it will simply reproduce, rather than challenge, dysfunctional educational practices in both schools and colleges.

The competing imperatives to fill vacancies on the one hand and to provide a good training site on the other can lead to contradictory policies and practices. For example, in the school-based year of ZATEC in Zambia, government-sponsored trainee teachers posted to remote rural schools are at a distinct disadvantage, particularly in relation to support mechanisms, but are attracted to rural placements by an allowance not offered to self-sponsored students in urban schools. Policy criteria for placement schools (proximity to a District TRC, availability of a mentor, accessibility, accommodation) are often waived in order to place students in rural schools suffering shortages. The role of selecting placement schools lies with the District Education Board and these schools are verified by the college School Experience Co-ordinators, who seldom have the information they need to assess the school's appropriateness and who often disapprove of the District Education Board's choices. In the end, it seems that the selection of schools has more to do with filling shortages than providing students with good experience.

A common motivation for introducing school-based or distance-education approaches to teacher education is their ability to reach remote and 'marginalised' students – or in other words, students who live and work in rural poverty. Yet it is these very students who are least equipped to adjust to the demands of distance education and who require the most face-to-face support. The South African NGO, the Media in Education Trust (see Note 49), describes how rural isolation and the cost and difficulty of education delivery into rural areas, leaves rural teachers unprepared for teacher training programmes, due to weak language skills and conceptual understanding of subjects, lack of access to reference materials and resources and poor management infrastructure and support.

Several other accounts of teacher education by distance expand on these difficulties, and also note practical problems, for example students cannot study at night without electricity and home and village life makes it difficult for women students to engage in home study.

For all these reasons, the further a distance education or school-based programme reaches into poor and remote communities, the more crucial it becomes to provide good face-to-face student support. It is commonly reported that weaker students rely too heavily on face-to-face support because they are not able to do the necessary reading and preparation on their own. Contact sessions are then used to explain basic content, rather than for the stated purposes of group discussion, reflection and demonstration. For many students, the few contact sessions they have with a tutor constitute the only reliable learning experiences in a distance programme, and are indispensable for providing access to materials they might otherwise not understand. The DEPE programme run by Kyambogo University in Uganda has encountered this problem and is attempting to solve it through the introduction of audio cassettes:

There is evidence of a lack of reading of the materials when students attend the face-to-face sessions, and they are therefore unable to make maximum use of the precious contact time. Students are still unused to not having a “live” teacher and therefore rely on the face-to-face sessions - when they know they will have a full two weeks of what they think will be more traditional teaching – for most of their learning activity. Evidence from NITEP [an earlier teacher education programme in Uganda] suggests that the introduction of audio counteracted this tendency of students to rely on the face-to-face sessions. Kyambogo University are therefore hoping to use audio for the most difficult areas of the course, and will canvas students so that they can inform KU which areas they struggle with most and will therefore benefit most from conversion into audio materials⁶⁰.

Another common finding is that contact sessions are often used to compensate for weaknesses in the delivery, administration and materials of a DE programme. For example, tutors will spend their time doing basic administrative tasks such as registering students and tracking down lost assignments, or teaching the content of materials not delivered on time and explaining the requirements of poorly set assignments.

A well-designed DE programme does not need to allocate a great deal of time to contact sessions, if it can guarantee that they will be used to do things that cannot be done at a distance – answering questions, group discussions, reflection on practice and demonstration of teaching methods and resources. But few programmes can make this guarantee, particularly in contexts of rural poverty where students are often unprepared and administration and delivery systems are less reliable. For these reasons, programmes catering for rural students should anticipate difficulties and allocate more contact time and tutors should be prepared for administrative problem solving and, if necessary, for checking the understanding of basic content, as well as facilitating more reflective, learner-centred activities. This requires a far greater investment in local-level student support than is evident in many existing programmes.

But the idea that centralised systems can achieve economies of scale with high enrolments means that distance-education programmes prefer to invest everything in the ‘ready-made’. Programmes that are developed centrally by experts are seen as a way of assuring quality and standards through ‘teacher-proof’ texts, bypassing unpredictable and idiosyncratic teaching and support practices. As a result, student support is “perceived as a less glamorous activity than others in distance education ... peripheral to the ‘real business’ of developing materials”⁶¹. Even in industrialised country contexts, such as the UK Open University, the primary investment is in the materials while tutor support and mentoring are seen as secondary. Combined with the persistence of the transmission model, this reinforces “the simplistic idea that all that is missing in educationally deprived areas is adequate means for depositing ready-made instructional materials” and the view that “local-level capacity will naturally follow when a course is made available to them”.⁶² It is for these reasons that support staff generally have less power, status and pay, and that student support is the element most vulnerable to financial cuts.

⁶⁰ Notes on the DEPE by Kate Greany, IEC.

⁶¹ Robinson (1995:221).

⁶² Creed (2001:18).

Similarly, to avoid problems with standards (plagiarism, cheating, copying, favouritism, etc.) and to facilitate quick and easy marking and moderation procedures, there is a tendency for DE programmes to rely on simple standardised assessment methods requiring rote learning (e.g. multiple choice, basic content-recall and final exams). Correspondence tuition, involving one-to-one feedback on essays requiring application, reflection and individual accounts of practice, often vanishes because of logistics – it is time-consuming to mark and moderate, difficult to standardise and relies on quick turnaround times that cannot always be guaranteed. While the value of the school-based model depends on innovative, formative assessment practices, such as journal-keeping, portfolio work, peer assessment and ongoing lesson observation and discussion, more traditional assessment practices fail to capitalise on the opportunity to link theory and practice and to encourage situated learning.

In the end, there is not much evidence that school-based distance training is adopted for its potential to transform school and classroom practices, and plenty of evidence to suggest that it is adopted because it is cheap and can help meet teacher shortages in rural schools. It is also possible that “workplace and competency-based training are an effective means of depoliticising and disempowering the teaching profession, and thereby rendering any positive considerations of enhancing their social status and pay irrelevant”.⁶³ This line of reasoning brings us to the less generous interpretation of the reasons why student support tends to be inadequate in DE programmes for teachers. This interpretation takes into account the local political and social dynamics operating in the sub-Saharan Africa region - in particular, the possibility that it is more in the interests of ruling elites to “direct resources to the feeding of the patrimonial system rather than the long and arduous investment in development”.⁶⁴

4.4 “The need for an efficient but cheap way of containing educational demand without meeting it”⁶⁵

The idea that distance education programmes for teachers in developing countries can function as a ‘safety valve’ to contain educational demand is common⁶⁶ but is usually based on speculation rather than direct evidence. This is probably because it is difficult for researchers to distinguish between lack of capacity and lack of political will. It is also true that evidence of the former is much easier to establish and much less controversial than evidence of the latter, which often takes the form of “subtle strategies to maintain the status quo, in spite of repeated expressions of commitment to reform”⁶⁷.

The weak institutionalisation of politics, and the subsequent effect on general education policy in sub-Saharan Africa, is well documented, along with the growing recognition that “it is the political dimensions of a reform, as well as the technical ones, that make or break it”⁶⁸. It makes

⁶³ Elliott (1999:139).

⁶⁴ Ward et al (2001:8).

⁶⁵ Perraton (2000:199).

⁶⁶ See Perraton (2000) and (2000a);(Creed 2001).

⁶⁷ Ward, et al (2001: 10).

⁶⁸ Moulton et al (2001:2).

sense then, to examine these political dimensions in relation to the challenges facing the provision of student support in field-based models of teacher education. Three themes drawn from the literature are significant here:

1. The interests of ruling elites and their patrimonial networks

With the collapse of public services following the financial crisis of the 1970's, education reform is now strongly influenced by the efforts of urban elites with political influence to secure their own educational advantages – for example, by diverting resources away from basic provision towards private, secondary and tertiary education⁶⁹. In many African countries, the education system is the largest national industry and employment and expenditures are an important source of political patronage⁷⁰. As a result, ministry-led programmes and projects tend to concentrate resources at the higher levels, i.e. among those closest to the decision-making and budgeting processes. This sets up a structure where motivation might be strong at the centre but declines rapidly in the decentralised field offices and schools where there are fewer tangible incentives.

2. The symbolic value of education policy as a sign of modernity⁷¹

Policy often functions primarily to display the symbols rather than deliver the substance of reform and development. Dramatic signals of opportunity, modernisation and progress (free UPE, new colleges, curriculum revision, teacher recruitment drives and salary hikes) take precedence over the less visible and more incremental goals of education quality and efficiency. Publicised planning is often an end in itself, rather than the means for implementation. Policy decisions are often made without consultation, without reference to statistics or budgets, and in isolation from one another. They do not necessarily reflect local priorities or realistic, achievable targets.

The struggle to build legitimacy by looking modern also leads the state to emulate western policy models, marshalling support from external agencies, consultants and experts in industrialised countries. This kind of external legitimation becomes increasingly necessary to compensate for the state's failure to address the demands of its citizens in the face of unaltered material circumstances.⁷² And it often goes hand-in-hand with “a kind of ‘blame and cure’ strategy to impute deficiencies in teachers and their training [and] deflect attention away from financial, career and working conditions and the complex societal problems which confront educational institutions”.⁷³

3. Divergent donor and ministry agendas

Because donors and ministries come to the planning table with different agendas, policy development is often a long, complex and expensive process. The culture of education ministries in the region works against effective planning and management – most ministries have little capacity for collecting and using statistical and financial data and ministry officials tend to respond more to internal political pressures than to data

⁶⁹ Boyle (1999).

⁷⁰ McGinn and Welsh (1999:22).

⁷¹ See Fuller (1991).

⁷² Jansen (1990); Fataar (1999).

⁷³ Elliott (1999:137).

or evidence-based recommendations put forward by outsiders⁷⁴. As a result, both donors and ministries act strategically and opportunistically to achieve their conflicting objectives, with serious trade-offs becoming the only way of resolving competing political priorities.

For example, the literature reports divergent understandings and expectations of education decentralisation. For donors and NGOs, decentralisation is primarily about local empowerment and more efficient delivery of services. For ministries it is more often an opportunity to share the burden and the costs of public provision, and need not necessarily disturb the balance of power⁷⁵. The same tension can be seen in distance education for teachers. For some it is an agent for change and a source of innovation – a good way of re-allocating resources for greater cost-effectiveness and restructuring national teacher education systems. For others, it is a way of distributing workloads and transferring hidden costs to local facilities, schools, communities and students, and is often “parasitic on existing facilities to save on additional capital investment”⁷⁶.

New programmes claiming to reach thousands of marginalised schools and teachers are important symbols of reform and progress. How individual students are supported within these programmes is possibly less important. So when unrealistic budgets and targets need to be revised, it is at the end-user level that cutbacks are most often made and those in remote rural areas are the worst affected. Evaluations of pilot programmes point to the weaknesses of student support and make long lists of recommendations, generally entailing far greater investment in support and assessment. But political pressure pushes ministries to take programmes to scale quickly and ahead of capacity to respond to recommendations or to improve support at the local level.

For example, Zambia’s two ODL programmes for teachers (ZATEC and the PTDDL) present a case of strong central ownership and direction from the Ministry’s Teacher Education Directorate following good donor support. But, despite critical pilot evaluations making clear recommendations for enhanced student support, both programmes were pushed ahead without investing in the capacity building necessary for student support. Colleges have not adapted efficiently to their new roles; the existing network of TRCs is overloaded with a variety of other projects making demands on their capacity; roles and responsibilities are not clearly worked out; and high expectations are placed on ‘stakeholders’ such as mentors who are given no incentives. Competition over access to allowances during the period of donor funding has distorted work patterns and the withdrawal of allowances has eroded motivation. In both programmes, anecdotal evidence suggests that district-level support systems (in the PTDDL) and school-level support systems (in ZATEC) have broken down, to the extent that students no longer expect support, and in some cases do not even expect their assignments to be marked and returned.

In the context of the Basic Education Sub-Sector Improvement Programme (BESSIP) funding (pooled funding from a majority of bilateral donors) and increasing direct budget support, it is important for the Ministry to show the international community that they are addressing primary teacher shortages. Both ODL programmes are high-profile signals that Zambia is improving access and quality in basic education through low-cost, large-scale teacher training.

⁷⁴ See Moulton et al (2001).

⁷⁵ See USAID, (2003); McGinn and Welsh, (1999).

⁷⁶ Yates (2000:3).

But, despite pilot evaluations of both programmes casting doubt on their effectiveness, particularly at the least visible but most crucial level of student support and assessment, both programmes were nevertheless taken to scale with little acknowledgement of the existing problems or recommendations. The ZATEC school-based year relies almost entirely on unpaid school mentors and “seems to be more or less gratis from a general expenditure point of view”.⁷⁷ So it could be argued that the government is using the field-based model to transfer much of its own teacher-training responsibilities and costs to schools, getting a two-year programme for the price of a one-year programme.

The Zambian Teacher Education Directorate is now developing a strategy to tackle the problem of inadequate student support, which will devolve more resources and capacity building to the school and zone level. The School Programme of In-service for the Term (SPRINT), managed by head teachers, and school and zonal In-service Providers, sets up an annual programme of training, monitoring and reporting and provides formal support and funding to the zone level, as well as official recognition of professional activities undertaken by teachers. Both national DE programmes in Zambia – ZATEC and the PTDDL – make use of the SPRINT system, along with at least five other in-service programmes. It remains to be seen whether the SPRINT system will improve students’ school-based experience.

Malawi also presents a clear case of political pressure to go to scale ahead of capacity to support students. It was initially intended that two parallel programmes – the Malawi Integrated Teacher Education Programme (MIITEP) and the Malawi School Support System Programme (MSSSP) would run together, preferably with MSSSP slightly ahead to get the Teacher Development Centre system in place. But the pressing need to train the 18,000 newly-recruited untrained teachers in primary schools, and delays in recruitment for MSSSP advisory posts, drove MIITEP ahead first. The MIITEP model envisaged three main elements of student support:

- college tutors responsible for residential sessions and teaching practice;
- Primary Education Advisers (PEAs), housed in TDCs and trained in advisory services by MSSSP, responsible for zone-level seminars;
- Head teachers, trained in supporting professional development by MSSSP, acting as professional leaders and mentors in schools.

For the first few years of the programme, while MSSSP was delayed, two crucial elements of MIITEP were simply not in place. Zonal seminars went ahead for as long as donor funding was available to support them, but petered out when problems arose with the disbursement of funds. Head teachers, who had originally been promised some financial reward for their extra duties, did not respond well to ‘orientation’ persuading them that mentoring is a duty of all head teachers. Neither Primary Education Advisers (PEAs) nor head teachers had been trained in advisory or support services and neither college tutors nor PEAs had the transport funds they had been promised. There was also lack of communication and co-ordination between college tutors and PEAs, who gave students starkly different messages and information. As a result, the quality of support available to MIITEP students in the early years was very poor.

By 2005, the successful completion of MSSSP was providing a stronger foundation for teacher training by distance in Malawi. TDCs have been built in every zone, along with accommodation

⁷⁷ Ndhlovu et al (1999).

for the PEA, who has a motorcycle for school visits. Most PEAs now hold a National Certificate in Advisory Services and three senior staff members per school hold National Certificates in Headship. Malawi is now in a much stronger position to introduce a proposed new two-year initial training programme, with the second year being school based.

The South African government too launched a national mixed-mode upgrading programme, the National Professional Diploma in Education (NPDE), raising the minimum qualification for primary teachers from a Certificate to a Diploma. The state provided clear guidelines and standards for the NPDE curriculum but none for student support and assessment, leaving the quantity and quality of support provided up to each of the ten regional providers. A technical review comparing the proposals of the ten providers found a wide variation in the proposed level and quality of support and assessment. Percentages of learning hours allocated to contact time varied from 10% to 25%, and only five of the ten providers intended to provide school visits for observation and assessment purposes. However, these findings did not influence any decisions taken at a national level about which providers were granted programme approval or bursaries. The programme went ahead with no minimum standards or quality assurance mechanisms for student support and assessment until evaluations were commissioned in late 2003 and 2004, by which time the NPDE was coming to an end. Interim findings from these evaluations suggest that, in the absence of norms for the quality of delivery and minimum standards for learner support and assessment, it is easy for providers to get away with clearly inferior programmes.

Zambia, Malawi and South Africa represent clear examples of the political pressure on education ministries to launch large-scale national training programmes a long way before rural students can be guaranteed adequate support. These examples, among others, lend credibility to the view that government investment in DE is often “a safety valve – reducing unsatisfied demand with a minimum of resources and little concern for effectiveness”⁷⁸. All three countries discussed above are working on new initiatives to strengthen student support and to establish standards in this regard, but this has generally come as an afterthought.

Where resources and capacity are scarce, it is difficult to establish to what extent a minimal investment in student support indicates a cynical attempt to cheaply contain educational demand, or to what extent the ‘multiplier effect’ encourages the genuine belief that investment in centralised operations brings greater returns. However, there is some evidence to suggest that political dynamics have a lot to do with the distribution of resources and incentives among the staff responsible for teacher training in the field-based model. The common pattern of resource distribution tends to mirror the ‘cascade model’ of training with a high concentration of incentives (allowances, workshops, vehicles, equipment, career and education advancement opportunities) at the centre, diminishing to a meagre trickle at the end-user level.

4.5 Cost-cutting and lack of incentives at the local level

We have noted evidence from the field which suggests that as student support operations are devolved to the local/school level, so are many of the responsibilities and hidden costs of teacher education that were formerly carried by the state. While the introduction of a DE programme allows donors, ministries and national providers to demonstrate that they are undertaking large-

⁷⁸ Perraton (2000a:181).

scale, high-profile reform, it is the least formal and largely invisible level of student support that makes or breaks a DE programme. It is also the least visible and vocal of the stakeholders who carry this burden of responsibility, often with insufficient incentive, training, capacity or resources.

While the diversity and informality of field-based support cadres is a key aspect of their strength – namely their flexibility and mobility in contrast to the inertia, conservatism and isolation of colleges – it is difficult to co-ordinate and rationalise these diverse structures in the interests of a coherent national strategy. Given their uneven geographical dispersion, their different levels of formality and autonomy, their various accountabilities and the complex ways in which they support and intersect with one another, as a stakeholder interest group ‘teacher support cadres’ are fragmented and difficult to mobilise. It is not always possible to involve them all in the planning phase, and very often, those groups who are allocated the greatest responsibility for implementation are the last to hear about it. It is often assumed that teacher support agents will embrace new roles given the right ‘orientation’. But promotional and motivational workshops do not go very far in winning over field-based staff if they feel left out of the decision-making process.

Field-based support staff are also often last in line for the incentives and rewards being shared out, and given their large numbers, the ‘multiplier effect’ works against them once again. The issue of allowances has proved to be a stumbling block in a number of projects, at almost every level of new decentralised structures. In contexts where salaries are very low, there is a widespread expectation that they will be augmented by allowances. This creates reluctance to take on delegated work unless allowances are attached, and the desire to take on as many activities as possible that do have allowances attached, both of which can significantly distort work patterns⁷⁹. A project that introduces no opportunities to generate extra allowances generally meets with little enthusiasm or serious engagement, particularly if allowances are withdrawn following a shift from donor to ministry funding.

In the case studies undertaken for the present report, the issue of incentives and allowances comes up over and over again as a reason why support agents fail to play their assigned roles. In Zambia, for example, District Standards Officers, responsible for monitoring and supporting ZATEC school mentors simply refused to carry out their work, arguing that during the donor-funded pilot, project staff played the same role for an allowance which has now been withdrawn. The issue is not just that allowances are no longer available, but that while they were available, others cashed in and they were excluded – in the words of one official, “it’s political”. Allowances also divert attention away from distance education programmes. Commenting on ZATEC support staff and the support role played by TRCs in the PTDDL, a local researcher found:

What was difficult to establish but apparent was the motivation aspect in terms of allowances that some programmes offered. Where the allowances were good, such programmes tended to be given priority... Most staff had other responsibilities and drifted to whatever programme was ‘resourced’ at any one time⁸⁰.

⁷⁹ Davies et al (2003:146).

⁸⁰ Ndhlovu (2004:22).

In Kenya, SbTD planners tried to avoid this problem by ruling out allowances and instead trying to build ownership through wide stakeholder consultation and transparency about the budget. The teachers' union, which has a mandate for professional development, was brought on board at the first planning stages. District Education Boards were asked whether the programme was needed in their district and whether they were able to support it. "We said to the stakeholders, 'this is our small budget and we need your support'. We made it their problem. We made it demand-driven"⁸¹. Nevertheless, the SbTD programme still encounters some resistance from local support staff who feel that "expenditure is too concentrated in Nairobi" and resources are not filtering down to the people who actually keep the programme going.

Another example of the issue of incentives is the fact that mentoring - where a more experienced teacher provides ongoing coaching and guidance to a trainee teacher - is only gradually becoming accepted as an unremunerated role. In countries such as Zambia, Malawi and Gambia, there has been considerable resistance to this role. This is particularly the case where allowances have been provided or promised by donors in the pilot stages of school-based programmes and then withdrawn, or where comparisons can be made with other support agents who do receive allowances. ZATEC provides a clear example, where the quality of mentoring varies greatly from school to school, depending on individual teachers' personal commitment. There is no effective monitoring of mentors (again because of a disagreement over allowances for the monitoring role played District Standards Officers) and the role is generally not taken very seriously.

In order to neutralise this resistance, Southern Africa Development Comming (SADC) ministries of education have all agreed that mentoring is a teacher's professional responsibility and should not be remunerated. But teachers in the field are quick to point out that it is difficult to justify this decision, given the disparities in teachers' salaries and working conditions in the region.

In the absence of financial incentives, some ministries are considering various forms of recognition, accreditation and/or promotion for training given and received. However, there is seldom a functional strategy for accrediting the experience acquired by in-service providers, or a clear career structure for them to follow. Zambia, Kenya and South Africa are working on national accreditation frameworks for in-service training but this is a complex arrangement involving collaboration with Higher Education, and governments have to be careful that formal accreditation of in-service training does not over-inflate the salary bill. In Kenya, the main threat to the sustainability and credibility of the SbTD programme is the issue of accreditation and incentives. Teachers graduate from the five-month programme as Key Resource Teachers (KRTs), responsible for in-service training and staff development in their schools and expected to disseminate the training they have received. However, there is little evidence that any KRTs are organising in-service activities in their schools, the main reason being that their salaries and official status remain the same and there is no reason why other teachers should look up to them for training simply because they have completed a course. Other teachers eligible for the next SbTD intake are asking why they should put themselves out for a course that carries no tangible rewards. Since the beginning of the programme the Ministry has made a number of promises that the SbTD certificate would be credited towards a further qualification at university level and this has been an important motivation for many students, but to date accreditation has not been formalised. Similarly in Zambia, a key element of the School Programme of In-service for the

⁸¹ Ministry official, personal communication.

Term (SPRINT) is the promise of official recognition of in-service credits towards a Diploma, as an incentive for both teachers and trainers to undertake in-service activities. However, this has yet to be operationalised and at the moment represents an empty promise.

Another possible incentive is the prospect of career advancement opportunities. This is a crucial aspect of the highly influential model for teacher education by distance developed by the UK Open University. According to staff responsible for student support in teacher training, the UKOU would not be able to afford student support if it had to carry all the real costs. Most UKOU associate lecturers (part-time tutors) work not for the minimal salary but rather in order to advance their careers, and the incidental costs involved (phone calls, Internet use, photocopying, transport, etc.) are not an issue – in fact they are often carried by their employing institutions. Similarly, while host schools receive a small retainer fee, they are also motivated by staff development for mentors, ICT support, access to OU materials, discounts on courses and permission to use the OU logo. However, in low-income countries, where providers and programmes do not carry this kind of prestige or offer this kind of incentive, the OU model may not be transferable.

We also find that the support agents closest to the schools and teachers are often expected to carry a number of hidden costs. Centrally developed budgets sometimes fail to anticipate basic costs such as transport, accommodation, equipment, telephone use, materials and resources. Students themselves are often expected to bear unacknowledged expenses and there is a common assumption that “the community” will make some kind of contribution.

In Zambia, for example, local communities are expected to assist trainee teachers with accommodation, food and other necessities as their allowance is insufficient to meet all their needs and is seldom paid on time. (In one school, three trainee teachers were sharing the principal’s office for overnight accommodation.) A new teacher education strategy in Ghana speaks of “harnessing the community” for support and sustainability of resources, despite the extreme poverty of most local communities. While it is important for communities to have a sense of ownership and support for school-based training, it is unrealistic to expect them to provide any material support, for the same reason why in most developing countries, attempts to make TRCs self-sustainable have failed⁸². The problem is summarised here by the Media Education Trust which has spent many years trying to build self-sustainable community centres able to support open learning:

There is not enough awareness of the poverty levels in these communities. Rural schools do not have discretionary funds in their budgets, and communities are often so poor that they simply cannot absorb costs that might not even be noticed in urban areas. We have also come to realise that resource centres cannot become financially sustainable through fund-raising or income-generation that draws largely on money that is available in the communities around the school. Raffles, or the sale of local crafts at the resource centre, are not viable. Parents battle to pay school fees or cover other basic costs of their children’s schooling, let alone make additional contributions. True income-generation needs to access money from outside these rural communities, and we are now working on plans to market products more widely.⁸³

⁸² Knamiller et al (1999).

⁸³ Media in Education Trust (2004).

The same NGO describes its experience of establishing TRCs in rural schools, with three-year funding to cover capital expenditure as well as the maintenance cost of equipment, telephones and connectivity. Schools were to carry certain counterpart costs and eventually, with the help of the provincial education department, were to take over all the costs. During the funded period, host schools were able to access funding for start-up costs but after a while were struggling to keep up with basic expenses such as extra electricity and water bills and even totally unforeseen items such as soap and toilet paper. TRC facilitators were also expected to finance their own transport to and from the Centres. After realising that these costs could not be carried by the schools and facilitators, the project had to do several readjustments of the system, and to bring in specialists to build the capacity of centre management teams do proper budgeting and financial planning. Reflecting on this experience, the organisation concludes:

It seems to be a common fallacy that open learning, which uses decentralised delivery to reach students where they are, should be less expensive than residential training that includes travel and accommodation costs of students. We believe the costs of decentralised delivery are hugely underestimated. One reason may be that the designers of open learning systems do not have a real understanding of the context on the ground, particularly in poor rural areas, and what the real costs are for the institutions or communities hosting or supporting programmes. ... We have realised that programmes cannot really be effective unless support is extended to each school community. Motivating this becomes particularly difficult when programmes are evaluated on the basis of a unit cost per beneficiary, and yet we realise that the extra costs are essential.⁸⁴

Where user fees are involved, it is perhaps easier to set up incentives and accountability systems. For example, in Kenya, the SbTD programme has students paying a fee directly to the TAC tutor in their zone. Having paid this fee, they know that it is to be used for student support purposes – for catering at tutorials and transport to schools for classroom observation and study group meetings. Teachers then know what to expect and “because it’s their money, they hold the TAC tutors accountable and informally monitor how cost-effective they are in the use of the fees”⁸⁵.

While some evidence points to the fact that teacher education by distance can place an unacknowledged burden on the community, there is also emerging evidence that it can have a positive impact:

In open learning there is the added value of the mechanisms and networks created to enable delivery, which also provide an artery right into the heart of the community. This socially constructed circulatory system can be tapped into and used to deliver other learning that might not be traditional distance education.⁸⁶

Recent research in Uganda, Guyana and Nigeria suggests that distance education programmes for teachers can have “unplanned and unexpected outcomes” which are beneficial for the whole community. These include, for example: host schools receiving new resources, the establishment

⁸⁴ *Ibid.*

⁸⁵ Ministry official, personal communication.

⁸⁶ Binns (2002:1).

of resource centres, women trainees as female role models, an increased respect for education, and the opportunity for local entrepreneurs to capitalise on incoming resources. However, it is important that this potential is recognised at the outset and community development opportunities are built into project preparation phases.

Chapter 5: The Role of Media and Technology in Field-based Teacher Education Programmes

Distance education programmes for teachers in sub-Saharan Africa rely primarily on print-based materials, within the first- and second-generation models of the four main stages of technical evolution:

- first generation: text-based correspondence courses, with text similar to that used in the classroom;
- second generation: mainly print-based, characterised by self-instructional design;
- third generation: self-instructional print integrated with media (audio and video);
- fourth generation: interactive ICTs to support course delivery and learning⁸⁷.

Print material has a number of advantages: it is familiar; easy to use either individually or in shared groups; portable; a permanent resource that can be referred to many times; does not require a power source or special equipment; and can include diagrams, illustrations, etc. Print has the drawback of facilitating only one-way communication and tends to be seen as containing an authoritative ‘truth’ (though well-designed materials can also stimulate reflection, questioning and discussion)⁸⁸. Audio and visual media (radio, cassette, TV, video) have been used in a few programmes in the region to supplement printed materials and to introduce some variety.

There is some local experimentation with ICT-enhanced teacher education programmes (e.g. the Multi-Media Rural Initiative in South Africa and the Digital Education Enhancement Programme in South Africa and Egypt) but there is little evidence to suggest that these could become sustainable or be taken to scale in the near future.

The conditions hampering the use of ICTs in Africa are well documented⁸⁹ and include:

- unavailable or inadequate, unreliable, expensive electricity and telecommunications and limited bandwidths across the region, with poor ‘teledensity’ in rural areas;
- weak policy environment for improving infrastructure, unregulated privatisation and corruption in the telecommunication sector, and high taxation of ICT products and services as a ‘luxury’;
- lack of skills, training and awareness of ICTs – even where they are available, they are often under-utilised due to lack of understanding and technical support;
- conservatism.

The implications of ICT for education transformation in developing countries are poorly understood and difficult to predict. There is a tendency in the literature toward unrealistic assumptions that poor countries “will leapfrog to widespread connectivity”, so that “advocacy precedes the demonstration of benefits to learners under realistically available conditions”.⁹⁰ This problem is sometimes exacerbated by self-reporting of project outcomes and the projection of local findings to continental levels.⁹¹ Current trends indicate that African countries will experience increasing marginalisation and dependence when it comes to ICTs, bar a few small pockets of users who can be reliably connected and can act as intermediaries, sharing the benefits of online services with the broader education community by means of more traditional media.

⁸⁷ COL (2001).

⁸⁸ Perraton (2001).

⁸⁹ see Mutula, (2001:29-30).

⁹⁰ Lewin (2000: 320).

⁹¹ IEC (2001:29).

A review of experience with ICTs in education projects,⁹² finds that in Africa, projects tend to follow a pattern of high levels of initial motivation, followed by a drop off in stakeholder interest and low levels of take-up. Apart from the same technical problems listed above, the reasons for “institutional inertia, ICT under-utilisation and reduced learning impact” include:

- weakly developed national policy contexts, which make it difficult for ICT projects to become grounded;
- a lack of institutional senior management support beyond the initiation phase;
- weakly articulated rationales, insufficient to outweigh the disbenefits of discarding existing practices in favour of new approaches;
- gatekeeping, monopolisation of equipment and use of equipment for personal rather than professional purposes;
- low institutional incentives (pay, responsibility, kudos) to engage with ICT projects and insufficient staff development and training;
- lack of online materials relevant to the African context, low levels of computer literacy and information research skills among participants, and unfamiliarity with constructivist pedagogies.

In addition, cultural, linguistic and organisational barriers can be significant.

A number of lessons are drawn from this analysis. Those relevant to projects in African contexts are:

- single nation contexts are easier to innovate than multiple contexts;
- focused initial face-to-face meetings are critical to project establishment;
- introduce ICT-based changes into education systems gradually with incremental changes matched to the contextual situation and based on a sound situation analysis;
- effective innovations may require partnerships involving state agencies, the private sector and civil society to sustain high levels of energy and resources;
- start with small-scale trialing and testing of flexible plans allowing space for local adaptation;
- facilitators and co-ordinators supporting ICT projects need training and support;
- be prepared for high levels of frustration.

Accounts of existing ICT-based teacher development projects in Sub-Saharan Africa report many ‘lessons learned’ and so far only modest achievements.

For Example, SchoolNet Uganda, a World Links (World Bank Institute) project, found that telephone lines were too slow, ‘noisy’ and low on bandwidth to support connectivity, and that rural areas were excluded from participation by the prohibitive costs of internet dial-ups. This led the project to pilot wireless connectivity using microwave modems, but rural schools were again excluded because of problems picking up signals. SchoolNet Uganda (assisted by the Gates Foundation) is now piloting connecting rural schools to the internet using VSAT (earth-satellite) technology.

In Namibia, the Educator Development and Support Network (ED’SNet), a USAID/ LearnLink-funded project, floundered partly for the same reasons above (high costs of connectivity, low bandwidth, lack of capacity, etc.), but mostly because of lack of interest from local project members. They quickly acquired the technical skills required to convert training materials to online formats, but did not see the work as relevant, knowing that the majority of

⁹² IEC (2001).

teachers lacked access to the technology. An evaluation of the project concludes that it has gone “not far” in moving the Namibian education system forward in the use of technology for teacher training at a distance, and questions the value of IT as a medium for comprehensive in-service teacher training.⁹³

An early evaluation of UNESCO’s ‘Creating Learning Networks for African Teachers’ pilot in five Zimbabwe teacher colleges⁹⁴ found that three months into the project in two colleges, computers meant for student use were still in the principal’s office. Nevertheless, high levels of motivation and commitment from participants were reported, along with the usual technical problems (damaged hardware, incorrectly installed software, viruses, no local technical support, etc.). A later evaluation⁹⁵ found low levels of take up, with less than 10% of college staff making regular use of internet facilities for professional purposes and most users conducting low-level activities such as typing assignments, web browsing and personal emails.

A South African ICT project, the Netherlands-funded Multi-Media Rural Initiative (MMRI) provides experience of equipping 26 rural centres with computers, satellite servers, video recorders, printers, photocopiers, faxes, etc. and using the ICT equipment to download a teacher-training programme. Project partners found that teachers were quick to enrol for the programme, but that attendance dropped soon afterwards and teachers took much longer to complete weekly programmes than had been anticipated. The drop in attendance was attributed to the fact that teachers were hoping to acquire basic computer skills for their own personal career advancement rather than a training programme on the new curriculum. The slowness to complete the programme was attributed to the lack of basic computer skills and the difficulty teachers had getting to the centres on time⁹⁶.

Another South African project with an ICT component, the Swiss-funded *Ikhwezi* project, reports the difficulty of establishing computer centres in deep-rural schools in the Eastern Cape. Nodal schools in clusters tried very hard to meet the minimum criteria for installation of e-mail and Internet, but after six months, only eight out of a possible 120 schools were able to meet the minimum criteria (appropriate venue, security, electricity, phone connection).⁹⁷ Nevertheless, computers were found to be a great motivating factor for involvement in a project that provided a number of other benefits.

A small-scale programme piloting the use of hand-held computers in rural South African schools shows that the majority of teachers adapt well to using such technology on a regular basis, including in the classroom with their pupils. The programme implementers believe that such programmes provide the opportunity to leapfrog expensive mistakes made by richer countries by moving straight to portable user-friendly flexible technologies, which are likely to rapidly decrease in cost⁹⁸. However, at current prices, hand-held computers are as yet an unrealistic option for African teachers.

⁹³ Coupe and Gouveia (2002:11).

⁹⁴ Berg (2001).

⁹⁵ IEC (2001).

⁹⁶ The Media in Education Trust (2004).

⁹⁷ *Ibid*

⁹⁸ Leach et al (2002, 2005).

Despite the many obstacles confronting ICT projects in Africa, there is growing interest in further research and development in this field, from both donors and African governments. For example, the World Bank pushes for DE and ICT strategies to be built into national policy frameworks in Sub-Saharan Africa, and encourages investment in innovative initiatives that test the viability and cost-effectiveness of new technologies adapted to the African context. Examples of new technologies are the ‘wireless’ pilot in Uganda and DFID’s plans to pilot the use of solar panels for running computers in Teacher Development centres in Malawi. Quite apart from pressure to join the information economy and global learning networks, there are also more practical and immediate reasons for African education systems to embrace ICT. African bureaucracies waste hundreds of person-years and thousands of dollars relying on transport rather than mail and telecommunications and teacher education colleges and TRCs are scattered throughout remote rural areas. This makes it likely that the potential of ICTs will continue to be explored, if only to raise capacity and overcome isolation.

But when it comes to student support, the introduction of new media and technology will anyway necessitate the recruitment, training and employment of new support staff to assist in its effective operation. In the short term at least, new media will require intensive on-the-spot, face-to-face interaction and, far from rationalising and streamlining student support, will make an even greater demand on limited human resource capacity. For the foreseeable future, it is likely to remain the case that “in selecting and deploying teaching media, the most important issues arise in deploying face-to-face support rather than sophisticated electronics”⁹⁹.

⁹⁹ Perraton (2000:7).

Chapter 6: Guidelines for Planners

When it comes to drawing out lessons from the research and guidelines for planners developing distance education programmes with sound student support, the most important point is that there is no blueprint. Many of the problems noted in the preceding discussion arise from the assumption that what works in one context will automatically work in another. This is true for learner support in all forms of distance education:

Clear conclusions are difficult to draw from the research on learner support. Some of the most basic questions ... cannot easily be answered by present research findings, at least without so much qualification as to be unhelpful for practical purposes. Answers to questions such as these often begin with the words 'it depends'. Decision-making in response to them has to take account of a number of different kinds of factors, and trade-off one set of benefits or losses against another. While research can (and should) inform practice, providing services for learners is most often a pragmatic, problem-solving activity enacted in a particular context.¹⁰⁰

Bearing this in mind, the following ideas serve as very general starting points for discussion:

1. Adopt a planning continuum and plan for the judicious, integrated use of DE and face-to-face delivery in a flexible model

As we have seen, the field-based model allows for a wide range of programme designs with the carefully rationalised use of resource-based/ self-study elements in combination with group and one-to-one contact sessions and school-based support and assessment.

Research and experience with distance education points to the conceptual introduction of a planning continuum of educational provision:

This continuum has, as two imaginary poles, provision only at a distance and provision that is solely face-to-face. The reality is that all educational provision exists somewhere on this continuum, but cannot be placed strictly at either pole.¹⁰¹

Such a planning continuum has a number of advantages. For example, it can:

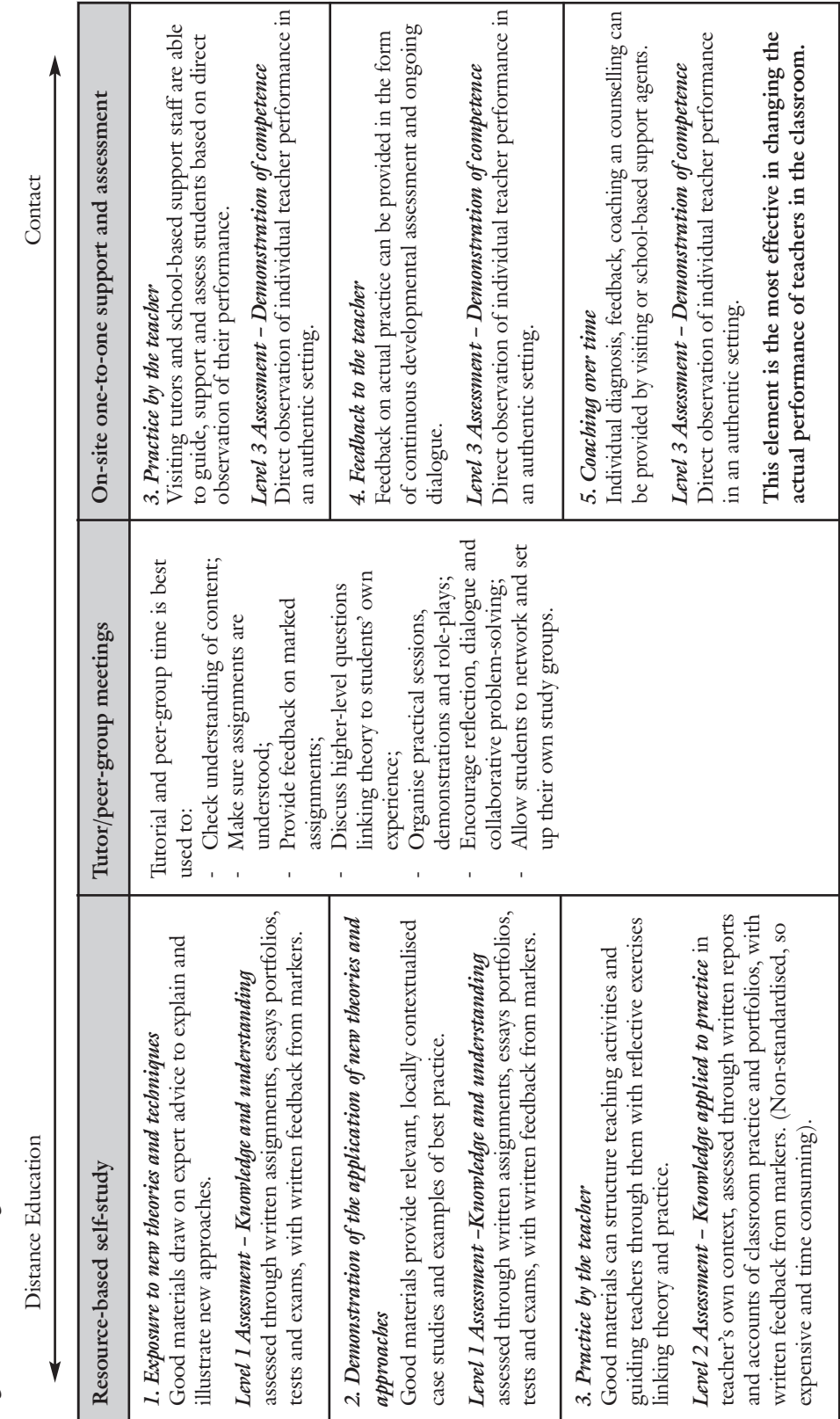
- deflect inaccurate assumptions about the quality and costs of DE (i.e. that DE is a second-rate and cheaper option);
- simplify policy frameworks for mainstream/DE integration;
- enhance the flexibility required to adapt and improve education practices among all providers;
- open up possibilities of collaboration;
- attract more favourable funding (e.g. donor support and government subsidies to public institutions) to programmes that are prejudiced by the DE label;
- enable planners to "remove the baggage of educational models developed for fundamentally different contexts"¹⁰².

¹⁰⁰ Robinson (1995:229).

¹⁰¹ SAIDE (2001:25).

¹⁰² SAIDE (2000:25).

Figure 6.1 A Planning Continuum for Field-based Teacher Education



Applied to teacher education, a planning continuum enables programme developers to choose more carefully which aspects of a course should be offered through self-study using distance materials and correspondence assignments, and which aspects should be offered through face-to-face contact.

Tables 3.1 and 3.2 in Chapter 3 (showing the elements of effective in-service and assessment that can be offered through resource-based learning and those that require face-to-face interaction) present a useful planning tool for integrating distance and contact modes. These elements can be combined and modified into a planning continuum as shown in Figure 6.1.

2. Make use of feasibility studies, audits and baseline studies to gauge existing capacity and identify development inputs

Once it is decided how the different modes of delivery might be integrated within a programme, it is possible to begin allocating roles and responsibilities to the various levels of the delivery network. This requires an audit of existing institutions, capacity, specialist expertise and decentralised structures that could be networked into a delivery and support system that meets local needs.

Ideally, the following information should be available before proceeding with programme design:

- Baseline studies of the target student audience, particularly more marginalised populations, including their language skills, subject content knowledge, capacity for self-study, access to reference materials and resources, mobility, and capacity to absorb incidental costs.
- The level of existing decentralisation of services and distribution of possible support agents within regions, districts, zones and school clusters, including a clear outline of their capacity (taking into account commitments to other projects), resources, mobility, capacity to absorb incidental costs and expectation of incentives.
- An audit of existing capacity, resources and expertise within teacher education and other higher/further institutions, both formal and informal. These would include:
 - all ministry and parastatal units and departments involved with teacher education, curriculum development, school management and inspection, distance education, assessment and exams, teacher services, unions, etc;
 - universities and specialist university departments and units with experience in distance education, adult education and teacher education, along with any regional satellite centres attached to them;
 - teacher education colleges;
 - distance education and correspondence institutions at all levels (basic, secondary and tertiary), including regional and international institutions with a national presence (e.g. UNISA, Open Universities);
 - any formal institutional partnerships and links with foreign providers and accrediting institutions;
 - multilateral and bilateral donor agencies with a stake in teacher education;

- local education NGOs and charities;
 - Teacher Resource Centres;
 - school cluster developments;
 - school-based staff trained in management and support services.
- A thorough analysis of schools' capacity to absorb, manage and support students, and to facilitate on-site "performance learning" with coaching over time and continuous developmental assessment.

3. Take political dynamics in to account – encourage transparency about the budget, consult all stakeholders and negotiate the rational distribution of responsibilities, resources and incentives

It is in the context of ministry-led reform, involving all stakeholders, that teacher education stands a chance of achieving sustainable long-term reform. With a capacity audit in place, it is possible to plan for the convergence and rationalisation of previously fragmented teacher education systems into one integrated, flexible delivery system, capable of delivering a variety of programmes. But systemic change introduces more and new stakeholders to the planning process, each with their own set of assumptions and vested interests, which can make consensus more difficult to achieve. It is therefore crucial to design field-based programmes in consultation with all the relevant stakeholders.

The consultative process should promote transparency with regard to the budget and the way in which resources and incentives are distributed throughout the system. The issue of allowances should be openly discussed and resolved at the outset. This should secure the 'buy in' of all stakeholders and deflect any resistance to unremunerated roles and responsibilities.

Attempts to avoid duplication and maximise resources will subject all stakeholders to new demands on their capacity and resources. Where capacity and resources are not up to these demands, trade-offs become inevitable. If at all possible, it is important to identify likely nodes of incapacity and/or resistance and to resolve problems before they arise.

Possible stakeholder groups and interests might include, for example:

- ***The Ministry***
- A ministry's main concern is to contain the teacher education budget and the salary bill while increasing teacher performance.
- Ministries are subject to political pressure to introduce high-profile policy reform and large-scale teacher training initiatives, but might be less concerned with delivery and support at the local level and might be tempted to cut costs at this level, believing that investment in central operations brings greater returns. There might also be pressure on ministry decision-makers to concentrate resources and incentives at the central and intermediate levels in order to achieve buy-in from more senior officials who expect perks and allowances.
- There might be pressure on ministries to win credibility by importing education innovations from industrialised countries without first assessing their feasibility or appropriateness, or the capacity of local systems to implement the reforms. Policy agreements and decisions might be made without reference to reliable statistical or budget information.

- The ministry might be reluctant to formally accredit field-based programme qualifications, or to attach salary increments to completed qualifications (for students and field-based staff) for fear of inflating the salary budget.
- A ministry-based teacher education unit or directorate implementing a national field-based programme would probably function most effectively as a cost centre able to develop and support its decentralised operations in the field with some degree of autonomy.

- ***Universities***

- Universities might have a role to play in capacity building and upgrading for College lecturers shifting to the field-based mode.
- University Departments of Education might be required to accredit field-based programme qualifications or to recognise them as credits towards higher qualifications.

- ***Colleges***

- Colleges generally lack the financial and administrative autonomy to lead and support innovation in teacher education. They would benefit from new forms of governance promoting greater autonomy and professionalism and a strategy of ‘whole college development’.
- Colleges need to adapt to new functions as partners in a field-based programme, with big implications for administrative practices and job descriptions and work loads for lecturers. Ideally, they should build stronger affiliations with TRCs and schools but college staff are often threatened by the shift to field-based training and the sense that other agents in the field (e.g. TRCs) might be attracting a greater share of ministry investment and support.
- Capacity building in the various aspects of field-based training (course design, materials development, delivery, support and assessment) is necessary to shift colleges away from entrenched traditional practices.

- ***Specialist distance education institutions/ units***

Institutions with experience and expertise in distance education and facilities for resource production (e.g. publishing, broadcasting and ICTs) might be able to offer their services in the development and delivery of teacher education programmes.

- ***Local support agents in the field (TRCs)***

- TRC tutors often lack status in the school community and are subject to unpredictable project funding and job insecurity. The introduction of a large-scale field-based programme can give their work a recognised formal focus and strengthen their position.
- Field-based programmes often place a heavy admin and training responsibility on this cadre without first assessing their capacity and their responsibilities to other in-service training programmes. Consultation in the planning stages is probably a better way of winning the support of TRC tutors than ‘orientation’ after the fact.
- It is common for hidden costs to be devolved to this level – e.g. transport, communication and tutorial costs – which can create resistance and the tendency to use ‘lack of resources’ as a reason for not performing responsibilities. All local-level costs should be anticipated as far as possible and budgeted for, either through top-down funding or user fees.
- Training is often necessary to shift this cadre from a supervisory/inspection function to an advisory/support function and to strengthen their training and support skills. They are likely

to be motivated by formally accredited training that advances their further education and/or career prospects.

- ***Local (division/ district / zone) Ministry officials***

- Local officials are often called upon to play a monitoring role, ensuring that school-based students are receiving the support they need. These officials can also play a role in the administration of decentralised operations such as student recruitment, selection of placement schools, delivery of materials and collection and processing of assignments.
- Again, the costs of transport and communication at this level must be taken into account.
- There might be an expectation of allowances and other incentives
- Where district officials are responsible for the selection of placement schools, they might be more concerned about filling vacancies than providing appropriate training environments. Ideally, the selection of placement schools should be a role shared with college staff.

- ***NGOs***

NGOs working with school communities are a valuable resource. They often have a wealth of experience in providing or facilitating local-level support for ministry, university and donor projects in whole school development, school management systems and in-service training, and have the trust and support of local ministry and school staff.

- ***Head teachers and mentors in schools***

- Head teachers and mentors are often the main source of support for school-based students and benefit from training in advisory, support, observation and assessment skills. They are likely to be motivated by formally accredited qualifications with further study/career opportunities or salary increments attached.
- The teacher's role as mentor is contested in sub-Saharan Africa, where some teachers feel entitled to an allowance.

- ***Students***

- Students undergoing initial training will hope to be placed in schools that serve as good training sites where they will receive adequate support, rather than merely filling vacancies in remote and under-staffed schools. They would expect proximity to a TRC and the presence of a suitable mentor to be minimum criteria for selection of placement schools.
- Students in in-service programmes will want easy access to tutorials and resources, ideally at the cluster or zone level. In remote areas, it might be necessary to deploy extra staff and resources.
- Students new to distance education might need foundation courses in self-study skills and encouragement and support in setting up informal peer study groups.

- ***School communities***

Communities are sometimes expected to carry hidden costs such as accommodation and food for school-based students. On the other hand, the introduction of school-based programmes can bring advantages to the community, e.g. with transport and communication networks, TRC facilities and business opportunities for local contractors.

4. Build the capacity of the entire delivery and support network in a way that links the key stakeholders with one another.

Experience of capacity building at Kyambogo University in Uganda¹⁰³ indicates that a good way to strengthen the capacity and effectiveness of a distance education network is to train the support agents themselves using distance education methods. First-hand experience of what it is like to study at a distance puts the support agents “in the customers’ shoes” and can quickly bring about cultural changes in attitudes and practices as support staff develop empathy and understanding of their students’ material and support needs.

Training should reach as many stakeholders as possible and involve participants from each category of stakeholder: senior management, lecturers, tutors, field-based support agents, delivery and administration staff, etc. Ideally, contact sessions should include opportunities for these people from diverse jobs and locations to meet together and build relationships and a sense of teamwork throughout the decentralised system. The following tables¹⁰⁴ outline the strengths and weaknesses of DE as a means of training teacher educators:

Table 6.2(a) Strengths of Using DE to Train Teacher Educators

Strengths of using DE to train teacher educators	Maximising the effects
Reach – participants can be many and varied (from all aspects of the DE development and delivery network).	Selection of participants for all cadres involved in the programmes no matter where they are situated geographically in country.
Participants remain in post so day-to-day work continues and the institution is not depleted of its human resource.	Recognition and appreciation of the learning taking place (e.g. contractually, consultatively, follow up).
Learning is immediately relevant and applicable to participants’ work.	Activities and assignments require the participants to use their day to day work as the basis for investigation and as examples.
Peer group support.	Select groups for face-to-face sessions in a manner that brings together players from different parts of the DE network so that an understanding of the issues others are involved in is shared.
Develops first hand experience and understanding of what it means to be a DE learner.	Deliver the DE course following best practice.
Cost effective.	Use the materials for second and third cohorts and as general resources for self study or reference for teacher educators.
Good for an overall understanding of the subject – an introduction to the field of study.	Development and production of high quality materials with regard to content.

¹⁰³ See Binns (2004).

¹⁰⁴ From Binns (2004).

Creates a unity of understanding which provides a strong base on which to take the discipline forward - a core of knowledgeable people able to effect change.	Follow up to the course and involvement of the participants in the on going plans for change in institutional and individual practice.
Materials may be used for reference and reminders – as a more generally available resource.	Over run of material production and distribution of extra copies to colleges, district education offices, community centres and libraries.
Tailor made materials.	Produce high quality materials that are culturally specific and use relevant examples.
Learners develop the skills that will assist them in taking DE courses at higher and more specialised levels.	Learning successfully at a distance requires organisation, self-discipline and practice. Create opportunities for further study where appropriate.
Popular with the learners.	Awareness raising and involvement of the potential learners.
May be accredited by the local institute and form part of a standard staff development package (could be separated into smaller ‘chunks’ at the module level).	Check mechanisms and procedures for this.
Develops a cadre of local teacher educator tutors.	Select and train local tutors.
Knowledge is gained over a longer period than short courses or workshops and is therefore more likely to be retained.	Study time organised to suit the needs and lifestyle of the users.

Table 6.2(b) Weaknesses of Using DE to Train Teacher Educators

Weaknesses of using DE to train teacher educators	Minimising the effects
For specialised topics for small numbers of learners or for practical tasks such as technical skills required for media development other kinds of training may be useful.	Seek out specialised and appropriate courses delivered at a distance by other institutions. Reinforce and extend learning through workshops and short courses. Use time in face-to-face sessions for practical sessions/demonstrations.
The experience is ‘internal’ limiting the opportunity to learn from others outside Uganda.	Good materials with comparative examples and activities will overcome this to some extent. Supplement DE study with some experience of training outside the country. Depending on the level of IT capability and connectivity it may be possible to link to other institutions involved in similar work.

Travel to the face-to-face sessions	Reach a balance between geographical and role selection criteria when organising face- to-face and ensure that participants are aware of why they are travelling to residential.
Finding the time to study and reaching balance with other life priorities.	Select pace of course in response to learner needs and capacity, bearing in mind work and family commitments. Avoiding conflict with crucial/ busy work times such as examinations. Provide face to face in school vacations and provide caring student support.

5. Prioritise student support as the key ingredient of success and take time to consolidate effective delivery. Devolve resources, capacity and incentives to those responsible for support and assessment.

As the research has indicated, the allocation of resources and incentives tends to favour the central operations and both diminish rapidly towards the end-user level. This is partly because the multiplier effect pushes up seemingly insignificant costs at the local level, and it is natural for planners to try and save costs by investing in centralised functions. But it is important to remember that

the reasoning behind doing this is as faulty as designing and constructing a highly sophisticated irrigation system, but cutting costs by not taking the pipes right to each plant: By not investing in the necessary last step, the entire expensive infrastructure is then wasted¹⁰⁵.

Avoid wasting resources on an over-centralised system by prioritising local-level student support right at the outset and taking enough time to ensure that the delivery and support system is functional and effective before going to scale. Support agents will require capacity-building (see above), sufficient resources to carry out their responsibilities, as well as the incentive and motivation to succeed in their work.

Distribution, delivery and communication infrastructure should not be assumed, but might first need to be established before a field-based programme is feasible. Evidence suggests that official channels for the distribution of resources to districts, zones and schools are not always reliable, and alternative distribution systems might need to be developed.

A sound management, administration and support structure can be achieved through a well-regulated system of form filling and record keeping to ensure consistency and standards. A good model is the SbTD programme in Kenya, which bases its record-keeping methods on UK Open University practices.

ICTs have an important role to play in record-keeping, administration and communication

¹⁰⁵ Media in Education Trust (2004:12).

between the various agents in a field-based network. If ICT development funding is available, this is probably where it is most usefully and appropriately deployed.

Support systems rely on motivated and accountable local agents who have adequate resources to carry out their responsibilities. One highly effective way to increase resources, incentives and accountability at the local level is to have user fees paid directly to the support staff, who are then held to their commitments and informally monitored in their effectiveness, as in the SbTD model in Kenya. If a programme does not command user fees, students should still be informed of their rights and what they can expect from support staff.

Another way to provide incentives is to develop a career path for local training and support staff, with formal recognition of the training they receive and their years of experience in the field. Rewards could be in the form of salary increments and/or accreditation for further qualifications. This must be carefully balanced with the need to contain the salary budget.

Negotiate carefully around the issue of allowances and try to resolve any disputes (even if they are historical) right from the start. Misunderstandings and resentment over the issue of allowances can cause a great deal of resistance and can severely disrupt a programme. Where the same staff are involved in a number of projects, some of which offer more opportunities to claim allowances, try to ensure that these projects do not distract from their official duties.

It is also essential to ensure that there are no hidden costs at the local level. Careful costing is difficult in the field-based model and unanticipated costs are likely to arise, particularly where innovations are transferred from rich countries where incidental costs are less of an issue. It is crucial that these costs are acknowledged as early as possible and funding is channelled to where it is needed. If some incidental costs are to be carried by district offices, TRCs, schools or students themselves, this must be negotiated and agreed at the outset in order to neutralise later resistance.

As such, the budgeting process should be as transparent and consultative as possible, with all stakeholders understanding the constraints and confident that they are receiving a fair share of the available resources.

If at all possible, build opportunities for community development into the planning phases. Distance education networks and facilities form an “artery into the community” which can be used for delivery of other educational services and provide business opportunities for local entrepreneurs. For example, the RAIN project in South Africa employs local contractors, many of them women, to provide transport and communication links between rural schools and central providers and offers them training in small business development.

6. Institute ongoing quality assurance, monitoring and evaluation.

It is essential to monitor and assure the quality of training and support, particularly if the programme will be formally accredited, which is the growing trend.

An effective monitoring method is to use a system of forms, where every transaction (fees,

assignment collection, marking, moderation, observation, etc.) is regulated by standard forms ensuring that the same information is recorded at each local centre and can be submitted to the central monitoring agency.

Another effective method is not only to visit local support staff in the field, but also to invite them to a central venue, where problems and difficulties can be discussed and worked out. For example, the SbTD model includes a 'trouble-shooting' system, where TAC tutors are visited by Ministry staff and are also recalled to the Ministry after the first month of the programme to report and resolve any difficulties.

The value of monitoring cannot be overestimated. It not only ensures that each part of the system is functioning as it should, but can also significantly improve a programme by detecting problems early on and taking steps to solve them. For example in Sudan, monitors of the Sudan Open Learning Organisation Teacher Assistance Course found that students failed to understand the language of one module, so they had it rewritten and redistributed. In South Africa, the University of Natal NPDE monitoring team found male students refusing to accept a young female tutor and had to step in and support the tutor. In Uganda, monitoring has uncovered the fact that students are not reading the more difficult course materials and as a result Kyambogo University is considering the introduction of audio-cassettes. These examples illustrate how the relatively low-cost function of monitoring can save resources in the long run by making sure programmes are operating effectively.

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Appendix A: Overview of Primary Teacher Supply, Demand and Education Initiatives in Eleven Anglophone Sub-Saharan African Countries

Notes on the overview of primary teacher supply, demand and education initiatives in eleven anglophone sub-Saharan African countries

The lack of reliable census data and functional EMIS and financial planning systems in most SSA countries suggests that the data on numbers and statistics presented in this overview should be approached with some caution. Most figures were obtained from UNESCO and the World Bank (themselves dependent on data provided by the SSA countries) and were only correlated or replaced with other data when this was available from a more credible and up-to-date source. The poorly understood and largely unmeasured impact of AIDS makes existing data even less reliable, particularly when it comes to projections of teacher supply and demand.

It is important to bear in mind that data for modelling and projections provided by national ministries are often a reflection of political goals and wishful thinking rather than an accurate synthesis of provincial EMIS actuals. It seems to be accepted in the literature, for example, that official figures on net primary enrolment are inflated and that national statistics should be read as rough approximations. The way in which data is traditionally presented can also be misleading. Net primary enrolment figures, data on enrolment by gender, pupil-teacher ratios, numbers of qualified teachers and figures on teacher education supply and demand all require closer scrutiny.

Figures on supply and demand of qualified teachers are difficult to come by and vary from source to source depending on what models and variables have been used. Teacher education policy decisions (such as entry requirements, length of qualifications, recruitment drives, etc.), pupil-teacher ratio targets and increasing teacher, parent and pupil mortality and attrition rates are only some of the variables involved in calculating annual demand.

Of course the biggest factor affecting the reliability of projections is how accurately the impact of AIDS has been assessed, a difficult exercise given that in SSA AIDS data are inadequate and outdated. Apart from teacher attrition due to sickness and death, the impact of AIDS introduces a variety of other new complications for planning. Most existing projection models are too simplistic to be useful and much of the actual data required for their application has yet to be collected.

Far more in-depth inquiry is required in each country before the dynamics of teacher supply and demand can be properly understood. For example, there is evidence of significant attrition due to factors other than AIDS, such as declining status, pay and working conditions for teachers. Political and economic instability are other important factors – for example, newly qualified teachers are now leaving Zimbabwe for South Africa at an alarming rate.

But despite the complexity of the causes and the uncertainty of the numbers, there is more than enough clarity and general consensus that in SSA, attrition rates and training needs are high and on the increase.

The figures in the table were collected in 2002 and were the most recent figures available at that time.

	UPE progress	% teachers trained	Number of primary TTTs	Minimum qualification	Distance Education programmes	District / school-based support programmes	Online support projects	Main donors to primary/ teacher education	Policy on DE for teacher education
South Africa	--	63%	28 public + many private	National Professional Diploma in Education or equivalent	Many public, private and public/private programmes; NPDE State-funded NPDE to upgrade 80 000 teachers	Various regional projects	Imfundo (DFID); Shoma Education Foundation; World Links (World Bank); SchoolNet	USAID, DFID, DANIDA, SIDA, GTZ, Netherlands	DE encouraged; SAIDE & NADEOSA provide support; DE funded at 50% conventional programme subsidy
	NER 90%	13-20 000 new teachers by 2004							
	PTR 25:1								
Lesotho	Serious risk	44%	One college (NTTC)	Primary Teachers Certificate (3 years)	Lesotho In-service Education for Teachers (NTTC)	Primary In-service Education Programme & District Resource Teachers (USAID)	-	World Bank, USAID, Ireland	-
	NER 70%	800-1200 annually							
	PTR 25:1								
Swaziland	High chance	99%	4 colleges	Primary Teachers Diploma (3 years)	-	-	SchoolNet	-	Policy encourages INSET, ICTS, and deregulation and privatisation of education services
	NER 91%								
	PTR 33:1								
Botswana	Risk	92% (?)	University + 4 colleges	Diploma in Primary Education	DPE Programme at University of Botswana Centre for Continuing Education; DE capacity building (COL)	TRCs (UNESCO, GTZ, SIDA, ADEA USAID); Plans to establish study centres for DPE	World Links (World Bank); SchoolNet	UNESCO, GTZ, SIDA, DFID, ADEA, USAID, COL	No formal policy statement on DE, but a growing infrastructure (BOCODOI, UB CCE)
	NER 81%	-							
	PTR 28:1								
Namibia	Serious risk	29%	4 colleges	Basic Education Teacher Diploma (3 years)	BETD INSET component (SIDA, DFID); Maths & Science INSET (EU)	25 TRCs and a school cluster system (EU, GTZ, Denmark, Norway, SIDA, DFID, USAID)	ED'SNet (USAID) World Links (World Bank); SchoolNet	EU, UNDP, DANIDA, SIDA, NORAD, USAID, GTZ, DFID	Ten-year Plan recommends improvements to DE provision & development of norms & standards for TE
	NER 91%	14 400 annually							
	PTR 32:1								
Zimbabwe	High Chance	88%	10 colleges	Diploma in Education (3 years incl 1 year in school)	One Integrated Teacher Education Course (ZINTEC) college remains	Teacher Management & Support Programme (TRCs) (ADEA); Better Schools Programme (Netherlands)	Creating Learning Networks for African Teachers (UNESCO pilot); World Links (World Bank); SchoolNet	EU, Netherlands, ADEA	Plans to develop college TRCs to deliver certified INSET
	NER --	56 900 by 2010							
	PTR 41:1								

	UPE progress		Number of primary TTTs	Minimum qualification	Distance Education programmes	District / school-based support programmes	Online support projects	Main donors to primary/ teacher education	Policy on DE for teacher education
		% teachers trained							
Zambia	Serious risk	89%	10 colleges	Primary Teachers Certificate (2 years)	Teacher Education Reform Programme (ZATERP) field-based component in 3 colleges (DANIDA)	TRCs and school clusters (SIDA; DFID's Action to Improve Maths & Science project)	SchoolNet	World Bank, EU, DANIDA, Ireland, SIDA, DFID (Fast Track)	1996 policy emphasises cost-effective delivery of INSET to reach large numbers
	NER 75%	59 600 by 2010							
	PTR 45:1								
Malawi	Low chance	54%	6 colleges	School Certificate of Education (2 years secondary school)	Malawi Integrated In-service teacher Education Programme (MIITEP) (World Bank & GTZ)	Malawi Schools Support System Project (MSSSP) - network of TRCs and advisers (DFID)	Imfundo – TRCs and CPD services (DFID)	World Bank, GTZ, DFID	No consistent plan for TE or DE; future of MIITEP is uncertain
	NER 100%	9000-1400 annually							
	PTR 74:1								
Tanzania	Serious risk	44%	40 colleges (public & private)	Grade A Teachers Certificate	Grade A Teachers Certificate INSET programme (about 47% college enrolments)	Basic Education Programme – TRCs & school clusters (UNICEF)		World Bank, EU, Denmark, Ireland, Netherlands, SIDA, DFID, Finland, Norway (Fast Track)	The Primary Education Development Plan outlines strategies to upgrade and integrate PRESET and INSET through school-based training and TRCs
	NER 65%	9600 annually							
	PTR 46:1								
Kenya	High chance	97%	21 colleges and about 1200 Teacher Advisory Centres	Kenya Certificate in Teaching	School-based Teacher Development Programme (SBTDP) INSET diplomas & Strengthening Primary Education (SPRED) INSET for Maths & Science (both DFID)	SPRED and SBTDP establishment of Teacher Advisory Centres in districts and zones	Imfundo (DFID)	DFID	Plans to construct more colleges and strengthen TACs ; mounting of regular INSET and refresher courses for teachers
	GER 92%	-							
	PTR 28:1								
Uganda	High chance	75%	Kyambogo University (ITEK) + 18 colleges + 539 co-ordinating centres	Grade III Teachers Certificate (2 years)	External Diploma in Primary Education (upgrade for Grade III teachers); MIITEP & NITEP models developed in 1990's (DFID)	Teacher Development, Management & Support (TDMS) 95-99 (World Bank, EU, USAID, Ireland, Netherlands) Primary Teacher Development & Management Plan (World Bank, EU, USAID, Ireland, Netherlands)	Connect-ED (USAID) World Links (wireless/ satellite pilot) (World Bank & Gates Foundation) SchoolNet	World Bank, EU, DANIDA, GTZ, Netherlands, DFID, USAID (Fast Track)	Primary Education Teacher Development Plan (PETDR 1995) developed TE INSET and DE infrastructure

Appendix B: Research Methodology

This report draws on three sets of data:

- a literature review of teacher education in anglophone sub-Saharan Africa from the last ten years (country studies include: South Africa, Lesotho, Swaziland, Zimbabwe, Botswana, Namibia, Zambia, Malawi, Tanzania, Kenya, Uganda);
- individual case studies and reports commissioned from and/or supported by local research partners in Zambia, South Africa, Kenya, Ghana, Uganda and Malawi;
- grey literature¹ provided by local researchers – e.g. project proposals, promotional literature, college prospectuses, course handbooks, evaluation reports, back-to-office project reports, etc.

Because each country context and case study programme/project was so different, no generic formula was developed for a research instrument. It was felt that this would have yielded repetitive data with not enough nuance to further interrogate issues that are already well documented in the literature. Rather, each country/case study was selected for its potential to demonstrate a particular set of trends, problems and/or solutions, and to draw out lessons learned in context, with a view to the development of more general guidelines for planners. For these reasons, a detailed instrument was developed for each case, focusing specifically on a chosen set of issues.

On the whole, this was a successful approach in that most of the required data was captured and it was possible to draw out useful findings that shed further light on well-known issues. The quality of research findings varied slightly from case to case, and in some instances there were follow-up requests for more information or clarification.

There was an attempt to ensure that the research process served a developmental purpose in the running of case study programmes. This was particularly the case in Zambia, where the local researcher hosted a seminar with Ministry staff and other stakeholders to share his initial findings, and recorded their feedback and responses to some of the issues raised. In Kenya, the lead researcher and local research partner had an opportunity to share their initial findings with a wide range of stakeholders at a large planning workshop, before moving on to carry out detailed interviews with individual participants. As far as possible, the issues under investigation for each case study were clearly outlined with reference to the existing literature and research, for the benefit not only of the local research partners but also the programme stakeholders who were encouraged to reflect on documented problems in their own experience and provide quite specific information and ideas.

The case studies and reports commissioned for this study and submitted by research partners are as follows and are available on request from the author:

Allsop, T. and Akyeompong, K. (2004) *The Use of Distance Education for Teacher Education: Ghana Case Study*.

Atieno, J. (2004) *The School-based Teacher Development Programme in Nyanza Province, Kenya*.

Binns, F. (2004) *The Use of Distance Education for Teacher Education: Uganda Case Study*.

Ndhlovu, Z. (2004) *Field Study of Student Support in ZATEC and the PTDDL in Zambia*.

Media in Education Trust (2004) *The Role of NGOs in Teacher Education in South Africa*.

South African Institute for Distance Education (2004) *Student Support in the NPDE: A Report of Interim Findings*.

Further details of each case study are provided as follows:

Zambia

- Terms of Reference/ Research Instrument for Zanzini Ndhlovu.

Kenya

- Interview Schedules for DEOs, TAC Tutors, Head Teachers and Key Resource Teachers.

South Africa

- Terms of Reference for the South African Institute of Distance Education (Tessa Welch).
- Terms of Reference for the Media in Education Trust (Wilna Botha).

Uganda

- Terms of Reference for the International Extension College (Felicity Binns).

Ghana

- Terms of Reference for Terry Allsop (IRFOL) and Kwame Akyeampong.

ZAMBIA

The lead researcher spent ten days in and around Lusaka consulting with education officials in the Ministry of Education, with donor representatives, and with teacher education staff in colleges, TRCs and district offices.

During this time, the research instrument was developed and a local researcher, Zanzini Ndhlovu, was appointed to carry out a study of ZATEC and the PTDDL.

Ndhlovu's report was submitted in January 2004 and the lead researcher requested that he present his findings to a committee of teacher education stakeholders in Lusaka, who would provide feedback and discuss the Ministry's response to some of the issues raised by the study. This meeting took place in February and the report was re-submitted with a response from the Ministry of Education.

Subsequent email correspondence with contacts made during the field visit ensured that data was accurate and up-to-date at the time of publication.

Research Instrument: The Use of Distance Education for Teacher Education in Zambia: Focus on ZATEC and the PTDDL

1. Overview of Education Initiatives affecting Teacher Education in Zambia

Policy and Planning

1996 - Educating Our Future – GRZ's Education policy paper including Programme Implementation Plan for 1999-2002 focusing on the Basic Education¹⁰⁶ Sub-Sector and leading to BESSIP.

1998 - BESSIP: The Basic Education Sub Sector Investment Programme (funded by the Netherlands, Ireland, Norway, UK, Denmark, Finland, Japan, EU, USA, ADB, OPEC, World Bank IDA loan) aims to improve access, quality and relevance of Basic Education, and includes capacity building, decentralisation and teacher development components.

2000 - The Strategic Plan for Teacher Education (2000-2015) aims to raise the status of teachers (especially primary), improve quality, integrate ITT and CPD, rationalise the Teacher Education system, and decentralise responsibility and delivery.

2000 - PSSPE: The Professional Support Structure for Primary Education aims to raise the status and competencies of primary school teachers through stakeholder mobilisation, institutional and international partnerships, research activities, conferences, workshops and seminars.

2002 Strategic Plan and National Implementation Framework.

¹⁰⁶ In Zambia, Basic Education comprises Grades 1-9, with Grades 1-7 provided free and culminating in the Primary School Leaving Exam at the end of Grade 7.

Teacher Education Projects

1977 – TRCs were introduced as places where teachers could receive INSET, form study groups, carry out research and develop curriculum materials.

1985 – SHAPE: *The Self Help Action Plan for Education* (funded by SIDA) saw the division of the schooling system into zones and the establishment of more TRCs.

1992 – AIEMS: *Action to Improve English, Maths and Science* (funded by DFID) saw the establishment of 14 Provincial and 63 District Resource Centres and the delivery of INSET through a five-tier cascade system (National – Provincial – District – Zone – School).

1998 – ZATERP: *The Zambia Teacher Education Reform Programme* (funded by DANIDA) was piloted in 3 Primary Teacher Colleges. ZATERP introduced a competence model of teacher education and a year of field-based training, establishing partnerships between colleges, TRCs and school mentors.

1998 – The Teacher Education Directorate (TED) was established in the re-structured Ministry of Education, alongside the Directorates of Distance Learning; Standards and Curriculum; Planning and Information; and Human Resources and Administration. The TED was an amalgamation of the SHAPE and AIEMS projects, which had established good donor and stakeholder support.

1998 – PRP: *The Primary Reading Programme* began as an Irish Aid pilot project in the northern province (called Breakthrough to Literacy) and was such a success that it was taken to scale in 1999 with funding from DFID for 7 years. The PRP introduced an extensive training model for college staff, district trainers and teachers and is now being incorporated into ZATEC as a component of PRESET and the PDDL as a component of teacher upgrading. The PRP established a system of National, District, Provincial and Zone Education Support Teams and ‘key teachers’ to deliver and monitor PRP in-service activities.

1998 – SPRINT: *The School Programme of In-service for the Term* provides a termly routine for INSET in schools; formalises the interaction between District In-service Providers and schools; and creates an INSET credit system for promotion and entry to the PDDL.

1999 – ZATEC: *The Zambia Teacher Education Course* is a continuation of ZATERP as the national course for all Primary Teacher Colleges. ZATEC is now the only PRESET route for primary teachers. There are plans to review ZATEC and to add a third year to the course in 2004.

2000 – The Basic School Curriculum Framework is an outcome of BESSIP and is closely linked to Teacher Education reforms. It reinforces a learner-centred, competence model.

2001 – PTDDL: *The Primary Teachers Diploma by Distance Learning* was created to upgrade 40 000 primary teachers to Diploma level to raise the status and professionalism of primary teachers to parity with secondary teachers. Previously, the only route to promotion was an

upgrade to secondary level, so the PDDL is a way of keeping teachers with diplomas in the primary schools.

Current Policy Background

The MoE's new Strategic Plan (2003-2007) is a continuation of BESSIP planning, pulling the various components of the Ministry into a more coherent unit, with greater attention to infrastructure and organisational development, as well as new areas such as gender, health and AIDS.

BESSIP was a useful transition from the project approach to sector development with non-earmarked funding as it got donors and the MoE talking and planning. As a result of BESSIP, ownership and management have improved; funding has gone to free UPE; and teachers' salaries and housing allowances have increased. Nevertheless, the Oxford Policy Management Team has recommended that Zambia is not yet ready for direct budget support due to a lack of transparency in the treasury. Teacher support can therefore only be externally indirectly funded – through training and housing allowances.

Teacher Requirements

The Strategic Plan does not indicate a large demand for teachers. The annual Basic Education overall teacher requirement for 2003-2007 averages at 38 677. Annual need for 2003-2006 averages at 3 424 while annual teacher output for the same period is estimated at 5 257. However, the MoE hopes to gradually phase out double shifting from 2007-2015 and is juggling PTRs and class sizes in the different grades to accommodate this process. Along with natural attrition, AIDS morbidity and attempts to equalise teacher distribution in rural areas, the phasing out of double shifting will gradually push up demand. Meanwhile, World Bank simulated projections on AIDS impact indicate that demand for primary teachers in Zambia will remain significantly higher than supply (ActAfrica, 2000).

The Strategic Plan states the Ministry's aim to build and rehabilitate Teacher Education Colleges and to create 1000 new college places by 2007 (MoE, 2003:45). The overall vision for Teacher Education also includes courses delivered through a mixture of DE and residential training in order to increase output without building colleges (Chiputa, 18/06/03).

Open and Distance Learning in Zambia

The Strategic Plan recognises that the opportunities provided by ODL have not been realised, and plans 'a complete overhaul' of ODL provision (13), starting with the new Directorate of Distance Education (for which a director still needs to be appointed). The previous Department of ODL was under-funded, unfocused and conservative. (For example, the promising Interactive Radio Initiative was led by the more adventurous Educational Broadcasting Services with direct project funding from USAID and was never linked with the ODL Department). ODL centres such as the National Correspondence College are generally moribund and a national audit of ODL infrastructure, potential and needs is required for strategic planning of a cohesive continuum of ODL from basic to higher education levels, and to link up and extend existing projects. There is interest in the partnership model that is showing signs of success in Namibia and Botswana (NAMCOL and BOCODOL partnerships with Bath University in the provision

of secondary education) and there is some talk of building similar links with South African providers such as UNISA.

ODL and Teacher Education

Following Ministry restructuring, there is presently little communication between the Directorates of Distance Education and Teacher Education (though they share the same building) but there is talk of strengthening the links between the two. The brief of the DE Directorate is to “develop alternative approaches to in-service, upgrading and general delivery of education by harnessing modern approaches to technology while being cost effective” (MoE, 2003:54). With regard to Teacher Education, the Strategic Plan mentions expanding the DE function of NISTCOL and greater utilisation of the existing network of TRCs for INSET delivery.

Perceptions of ODL

Perceptions of ODL are changing. It is generally seen as a second-rate option and correspondence teacher education courses such those offered by the South African Azalia College have a poor reputation. But as the first cohort of PDDL students is now being awarded UNZA accredited certificates, there is an expectation that attitudes will change and ODL will gain more credibility.

Within Teacher Education there has been little re-thinking of what ODL means and the traditional compartmentalised view remains – that the correspondence model of distance education is a less expensive alternative to college-based training. While the PDDL is recognised as an ODL initiative, other innovative approaches to teacher education, such as the Primary Reading Programme, SPRINT and ZATEC’s school-based year are not – even though they all depend on decentralised operations and school-based support. The network of TRCs is seen as a powerful tool for extending and invigorating teacher education and these centres are already playing a crucial role in the administration and delivery of the PDDL and other INSET activities, and a more minor role in supporting ZATEC students.

Distinguishing Features of the Zambian Teacher Education System

A ‘project’ culture in the Teacher Education Directorate

According to the Director, Mr Simon Chiputa, the TED evolved through an amalgamation of successful donor-funded projects such as SHAPE and AIEMS. Staff therefore established the Directorate with the enthusiasm and commitment of project workers rather than a civil service mentality, and with the support of both donors and stakeholders. This can be an obstacle in winning the support of other directorates: “Some people argue we’re still just a big project, not a department because we are so autonomous and we work more like a private enterprise. But we have the support of the main stakeholders because we are so committed” (Chiputa, 18/06/03).

To a visitor, the culture of commitment and innovation in the TED is plainly obvious. Resources are also plentiful - every office has a computer, Internet connection, telephone, and shelves crammed with books and files. Everyone is helpful, interested in the research questions and very open about the problems and shortcomings of their projects. All documents requested are quickly and freely provided.

A long history of TRCs and a network of school zones

TRCs were introduced in Zambia in the late 1970's and the network of centres has steadily grown and formalised over the last thirty years. According to DANIDA adviser Barney Plant, the TRC exists strongly as a concept, if not always a physical facility, in the minds of Zambian teachers. It seems a TRC can be anything from a well-resourced and staffed Provincial Resource Centre with a library and computer lab to a classroom set aside for INSET activities in a remote school. It is generally recognised that the effectiveness of the 72 District Education Offices and Resource Centres varies considerably - those in better resourced urbanised areas perform better than the more remote rural centres, and much depends on the capacity and commitment of the local staff. The intention behind the TRC network (under AIEMS) was that PRCs, staffed by secondary school teachers, would co-ordinate the activities of a constituency of DRCs, staffed by primary teachers, who would serve the schools. In practice, however, PRCs came to be associated with secondary schools and DRCs with primary schools, which entrenched the hierarchical divisions between the two levels. Because PRCs were perceived as serving only the secondary schools and were out of touch with primary schools, they were bypassed by BESSIP funding and most teacher education initiatives focused on the DRCs. DRCs are now seen as more active and successful than the PRCs, where there is "a feeling of lifelessness" (Nkhata, 17/6/03). The TED is now trying to remove the primary/secondary distinction and promote the idea that all TRCs are for all teachers.

The TRC network is built along the divisions of the schooling system, as follows:

- 9 provinces with about 8 districts each;
- 72 districts with about 10 zones each;
- 800 zones with about 6 schools each.

Provinces and districts are recognised by all sectors of government in Zambia, but zones are recognised only by the MoE, which means they tend to function less formally. In an attempt to formalise the system, zones are now being incorporated into the database structure of the EMIS system (still being established by the Planning Section with USAID assistance). The Ministry aims to establish a TRC in each of the 800 zones and has plans for 618 more centres, starting with the most needy zones.

2. Summary of Main Research Theme

Zambia's two ODL programmes for teachers (ZATEC and the PDDL) present a case of strong central ownership and direction from the Ministry's Teacher Education Directorate following good donor support. But both programmes have gone to scale too quickly and ahead of capacity to support students at the local level. Colleges have not adapted efficiently to their new roles; the existing network of TRCs is overloaded; and high expectations are placed on 'stakeholders' but no incentives are given. Competition over access to allowances during the period of donor funding has distorted work patterns and the withdrawal of allowances has eroded motivation. In both programmes, anecdotal evidence suggests that district and school-level support systems have broken down.

In the context of BESSIP funding (pooled funding from the World Bank and five bilateral donors), the World Bank's \$40m Fast Track commitment and the prospect of direct budget support, it is important for the Ministry to show the international community that they are

addressing primary teacher shortages. Both programmes are high-profile signals that Zambia is improving access and quality in Basic Education through low-cost, large-scale teacher training. However, pilot evaluations of both programmes cast doubt on their effectiveness, particularly at the least visible level – that of student support and assessment.

This is a well-documented problem in the literature on the use of distance education for teachers and a number of possible reasons are suggested:

- overambitious blanket-coverage aims accompanied by unrealistic expectations of the promise of distance education in solving problems of quality, quantity, access and cost;
- the tendency to underestimate the infrastructural and organisational demands of decentralised delivery, admin and support;
- inadequate organisational planning and lack of coherence within the dispersed organisational structure (central, regional, district, local) and among the variety of institutions and personnel involved;
- a lingering transmission view of education which fosters “the simplistic idea that all that is missing in educationally deprived areas is adequate means for depositing ready-made instructional materials” and underestimates the importance of student-tutor contact;
- ministries’ need for “an efficient but cheap way of containing educational demand without meeting it” to “insulate the elite system from pressures that might otherwise threaten its status or ways of working”.

(see Creed, 2001:17-18; Perraton, 2000:199)

3. Background Discussion of the Research Questions

It is of course important to keep the research questions open-ended and to stay alert to any issues that we haven’t anticipated. Nevertheless, it’s possible at this stage to identify some themes, and to make sure the research process uncovers more information and insights into these aspects.

There are some common and well-documented problems in ODL for teacher education, some of which are clearly identifiable in Zambia and which our research should interrogate. ZATEC and the PDDL meet some of the criteria for successful programmes at the central level (unequivocal political support and direction from the Ministry; programmes based on a systematic needs analysis and integrated into sector-wide reform; prior planning and stakeholder consultation). However, both programmes fall prey to the problems of decentralisation. In particular we can see evidence of *political pressure to go to scale ahead of capacity to support trainees at the local level – particularly in remote and deprived areas* (see Creed, 2001:17).

Both ZATEC and the PDDL have succumbed to this imperative in different ways. Both programmes were piloted and evaluated but it seems that national roll-out of each programme took place before there was time to respond to the recommendations of the evaluation reports. As a result, not all problems noted in the evaluations have been rectified and some problems have been exacerbated by expansion and the decrease in resources as the programme moves from project/pilot funding to more austere Ministry funding. The consequences of moving too quickly to scale are felt most severely at the level of student placement, support and assessment

where local admin and support cadres are not sufficiently mobilised, sensitised, trained or instructed (in terms of job description/ roles and responsibilities) to carry out their tasks.

For both programmes, the research will take account of both administrative and academic support structures, but with a different emphasis for each programme. In ZATEC we will focus primarily on academic support structures (school placements, tutoring, mentoring, counselling, assessment and feedback). In the PDDL we will focus primarily on administrative support structures (enrolment, admission, registration, record keeping, information provision, assignment marking and turnover, and delivery of study materials).

ZATEC

ZATEC is a response to two kinds of political pressure – to alleviate teacher shortages in rural schools and to train more teachers at low cost. The school-based year kills two birds with one stone as trainee teachers take on a significant workload but are paid an allowance amounting to only a quarter of a full teacher's salary (\$20 a month). Colleges receive no grants for the school-based year and local support cadres (DEOs, Standards Officers, TRCs, head teachers, mentors and local communities) are not rewarded for any of their efforts to assist the trainee. As Ndhlovu et al (1999) point out, “the school-based year seems to be more or less gratis from a general expenditure point of view”. There is a clear conflict between ZATEC's two roles. And, despite the Ministry's insistence that ZATEC is a two-year course and that the drive to fill vacancies should not compromise the quality of training in the school-based year, there is some evidence to suggest that the demands of teacher supply outweigh the interests of the trainee. For example:

- *Schools selected for student placements are not always suitable as training grounds, lacking facilities, resources, trained teachers and mentors and being too far from colleges and TRCs.* The 1999 ZATERP evaluation recommended that placement schools should be close to TRCs, colleges and towns but this does not appear on the current official list of criteria for school selection (accessibility by vehicle; presence of trained teacher as mentor; and accommodation for the student). Students placed in schools far from colleges, TRCs and libraries are at a distinct disadvantage when it comes to writing assignments (lack of reference materials). They are also left in the lurch if their mentors do not perform their duties (according to one PIP, the mentoring system has ‘fallen apart’ so students turn to PIPs and DIPs for support and advice). The ZATERP evaluation also suggested that colleges should be responsible for selecting the schools, but this is still in the hands of the DEOs, which suggests that the selection of schools might have more to do with filling shortages than providing students with good experience.

As far as possible, the research should try to assess to what extent school selection and placements work in the interests of the trainee. For example, the following research questions can be raised:

- *Why is the selection of schools still a DEO function despite the colleges' request and evaluators' recommendation that colleges have more of a say? The 'Guide on ZATEC' says colleges must 'verify' ZATEC schools identified by DEOs – does this give colleges a chance to root out unsuitable schools? Do they use this opportunity or do they generally accept the DEO's recommendations?*

- *Have any attempts been made (at any level – Ministry/ DEO/ college) to take remote schools off the list of placement schools?*
 - *Why has proximity to colleges and TRCs not been included as a selection criterion, following the recommendation of the ZATERP evaluators?*
 - *Are the official criteria for school selection upheld in practice? In particular, does the DEO ensure that the student can receive good support from a mentor? Are there enough suitable schools that meet all the criteria?*
 - *Criteria for a mentor are that s/he must be trained, have 4 years experience and be active and committed. Are these criteria applied in practice? Are there enough teachers in schools who meet the criteria and are prepared to mentor?*
 - *If trainees are placed in remote schools, are any special arrangements made by the college to ensure that they receive adequate support?*
 - *If the colleges were entirely responsible for selection and placement, would they do it differently? If so, how?*
 - *How does the School Experience Co-ordinator at the college match particular students with particular schools? Are students allocated schools randomly or according to any (official or unofficial) system (such as where the student lives or the student's perceived competence)?*
 - *How do trainee teachers manage in situations where they have little support? How do they write assignments if they can't get to resource centres for reference materials? Who else can/do they turn to for support (e.g. PIPs, DIPs, ZIPs, teachers in other schools, fellow students)?*
 - *Can any correlation be drawn between marks and placements? Do students placed in urbanised areas score higher on assignments and classroom practice?*
- **Local level support and assessment systems are not functioning effectively.** Suddenly positioned as ZATEC 'stakeholders', the Provincial Office, District Office, Standards Officers, mentors, teachers, guardians and the local community are all expected to play crucial roles in the delivery of ZATEC without much incentive, reward or recognition. For example:
 - Standards Officers (in the District office) have the most active role in student support (See *Guide on ZATEC* p 23 for a list of their responsibilities). They are meant to "support, guide and counsel" and "create an enabling environment" for the student teachers by sensitising the school and community, solving the students' professional problems, ensuring delivery of study materials and access to resource centres, and informing the college on the students' welfare. They are meant to monitor the trainee's classroom practice once a term, monitor and support mentors, and report on mentors' progress to the District Office (which can influence chances for promotion).
 - Headteachers are supposed to assess the student's practice once a term, monitor the mentors and are expected to take the place of the Standards Officer if s/he is unavailable.
 - Mentors are supposed to provide general guidance and support and to monitor the trainee 8 times a term. With up to four trainees each, a mentor can be expected to observe up to 32 sessions a term. Her teaching load is supposed to be reduced, but this usually does not happen.
 - Guardians are meant to continue supporting the trainee throughout the school-based year as the allowance is not enough.
 - The school community is expected to welcome and support the trainee. They are meant to

assist the trainee in finding/ building accommodation (with sanitation), and are expected to contribute food and money, especially when allowances do not arrive on time.

It seems to be commonly accepted that stakeholders are playing their roles reluctantly or not at all and that levels of support vary from one district/ community/ school to another, with students in remote rural areas the worst off.

Neglect of duties at the local level can generally be attributed to the lack of incentives. In some cases, in the words of one Ministry official, “it’s political”. Standards Officers, who were excluded from access to allowances during the more generously DANIDA-funded ZATERP are now refusing to support ZATEC without the same allowances that were paid to the Ministry officials who carried out their monitoring roles in ZATERP. Mentors, who were promised allowances by DANIDA in the early stages of ZATERP only to have this promise withdrawn, are also objecting to the extra workload without an allowance attached. (To resolve this issue, TED consulted with other SADC countries and found that, while teachers throughout the region demand extra pay for extra work, Ministries are unanimous that mentoring is part of the professional responsibility of a teacher and should not be remunerated.) This “attitude problem” (as described by one Ministry official) means that very little effort is put into trainee support, and because no resources are available to create incentives, the Ministry has to “use the stick rather than the carrot”. The threat of discipline is left to the DEO – for example, when the mentors of one district formed a pressure group to fight for allowances, the dispute was resolved with the DEO rather than the Ministry.

This is a well-known (but rarely acknowledged) difficulty of decentralising reform in poor countries. Where a sudden injection of extra resources (such as DANIDA’s funding of ZATERP) introduces competition for access to allowances, power relations and work patterns are distorted and enclaves are created. With the withdrawal of funding, incentives dry up – especially at the periphery – and disappointed expectations set up resistance to new roles, particularly among those excluded from the opportunities while they were available (for a discussion of ‘the reality of allowances’ in Malawi, see Davies et al, 2003). In the case of ZATEC, the politics of allowances has crippled the student support structure. While Ndhlovu et al (1999) commended ZATERP for the “collective enthusiasm” and “sense of joint responsibility” created by stakeholder participation (especially between the colleges and the schools), they also warned that the DEO’s office was not living up to expectations and that Standards Officers were neglecting their duties. Anecdotal evidence suggests that Standards Officers are still largely uninvolved – leaving students and mentors unmonitored and unsupported - and that in some places the mentoring system has broken down. Furthermore, some communities are unable or unwilling to support the trainee with accommodation and many guardians withdraw financial support to the trainee during the school-based year (and in some cases, expect a share of the student’s allowance, seeing it as a salary). According to one Ministry official, teachers also give trainees a hard time: “They look down on the students and say they are half-baked. We reply that ‘you are supposed to bake the other half!’”

The research should try to ascertain to what extent the anecdotal evidence is accurate. For example:

- *Are Standards Officers performing their role of monitoring and supporting the mentors? What reasons do they give for any resistance to their role?*
- *Does the Ministry/ DEO have any strategy for bringing the Standards Officers on board,*

or creating an alternative means of supporting the mentors?

- *Are mentors performing their role of supporting and monitoring the trainees? Do they feel adequately equipped for this role through the training they receive? Do they see it as part of their professional duty or do they think they should get extra pay? What other kind of incentive/reward/ recognition might motivate them to perform their role more effectively?*
- *Are head teachers playing their role? Are they picking up the Standards Officers' role? Is this a realistic expectation of head teachers?*
- *Are students being observed and assessed in the classroom as often as they are supposed to be (about ten times a term) and by a range of people (college tutor; Standards Officer; headteacher and mentor)? Is the assessment of classroom practice a formative, developmental process involving reflection and feedback or is it seen as an administrative task or 'paperwork' (filling in the assessment instrument)?*
- *How useful is the assessment of classroom practice to the student? Does it allow her an opportunity to reflect and improve or is it experienced as 'supervision' and 'for marks'?*
- *Do students have enough contact with the college during the school-based year? Do tutors visit them once a term? Do they receive study materials and assignments in good time? Is feedback on assignments helpful? Are assignment turnaround times adhered to (i.e. is feedback given in time for the student to respond to it in the next assignment)?*
- *Is the allowance enough to support the trainee without assistance from the community? Is it more expensive to be based in a remote area (e.g. transport costs to colleges and resource centres)? What contributions can reasonably be expected from the community?*
- *Is the school-based year a valuable learning experience for the trainee? Is it good preparation for a teaching career? What factors contribute most to the year's value to the student? What factors detract?*

The PTDDL

The political imperative behind the PTDDL is the Ministry's emphasis under BESSIP on raising the status and quality of primary/basic education, in line with the Jomtien declaration and with trends in the Southern African region. Until the 1990's, teacher education in Zambia was highly stratified, preparing teachers for different levels according to their academic qualifications (Musonda, 1999:158). Until the introduction of ZATEC in 1999, the only qualification available to primary teachers was a 2-year certificate. Teachers who upgraded to diploma level did so in order to be 'promoted' to a secondary school. The PDDL was introduced as an 18-month distance course to upgrade 40 000 certificated teachers to diploma level by improving their competence in teaching the early grades (1-4) and keeping them in the primary schools, thus raising the status of primary teachers to parity with junior secondary teachers. As it was impossible to do this through the colleges or through INSET, distance education was the only option (Chiputa, 18/6/03). Responsibility for the PDDL was given to NISTCOL (previously a provider of secondary qualifications by distance) and a pilot was launched in 3 provinces reaching 3000 students in 2001. The delivery network involves TED as performance monitor; UNZA as accrediting institution; NISTCOL as central provider; colleges as training and assessment partners; Provincial, District and Zonal Resource Centres as satellite centres; and schools.

Anecdotal evidence suggests that improvements are being seen in the classroom, but it is

difficult to attribute improvement directly to the PDDL as there are so many other INSET initiatives, such as the PRP. An evaluation of the pilot in 2002 found an overall lack of coherence and integration within the decentralised operations, and by July 2003 the first cohort had still not received their diplomas due to missing information and irregularities in the student records. Nevertheless, the programme is going to scale and has enrolled another 6000? students. The PDDL suffers from similar problems to ZATEC and some of its own problems.

- *Contestation over the role of selecting students*

NISTCOL wanted control over the selection of students but TED gave this function to the DEOs, which has introduced problems of favouritism - DEOs selecting DEO staff members or too many teachers from one school or teachers who are not eligible (grades 5-9) but are trying to protect their jobs. *The research should find out whether this is a widespread problem or just an occasional irregularity.*

- *An unclear role for satellite colleges*

Colleges are meant to be playing an increasingly active role but it is not clearly defined and by all accounts they are not participating as they should.

What is the official role of colleges?

Have staff been trained and prepared to play their roles?

How do they share their responsibilities with the PEOs, DEOs, Resource Centres and district teams?

- *Lack of student support at the district level*

The Pedagogic Adviser for Distance Education at NISTCOL fears the system is failing at the district level – again because allowances are not high enough to create an incentive. In each district, a team of 5 people is appointed to distribute, collect and mark assignments and to monitor the teaching practice of an average of 50 learners (between 30 and 200) in a district. The team comprises the DEO, the DIP, a Standards Officer, a Continuing Education Officer, a reliable retired person and one other (is this correct?). Because the flow of funding to district level is irregular, it is difficult to work to deadlines. The unreliability of phone lines (especially in the rainy season) and shortage of vehicles (which are used for many other purposes besides the PDDL) makes communication and consultation difficult and NISTCOL have not seen the district support teams since their initial training. They have heard that motivation is failing because of the allowance issue, but they do not know the extent of the problem. The issue of allowances introduces another familiar problem – that of district staff making unnecessary trips in order to get the travel and subsistence allowance, rather than fitting different functions into one trip in a cost-effective way, so the few resources that are available are used inefficiently.

The research should ask the following questions:

- *How are the district teams selected and remunerated?*
- *What is the role of the district team?*
- *How do the teams divide up the roles and the resources (allowances) available?*
- *What are the main problems/ obstacles in their role of student support?*
- *What is the level of motivation and commitment at the district level?*

- *Has the flow of funding to district level improved? How does this affect the work of the district team?*
- *What is the effect of inadequate communication between NISTCOL and the districts? How does this affect the work of the district teams and the work of NISTCOL?*
- *Is there a system for planning and accounting for school visits and the use of the vehicle? Could travel costs be reduced so that more schools could be reached more often?*

- ***Poor record-keeping and administration***

DEOs are not consistent in the information they provide about selected and registered students, which makes it difficult for NISTCOL to maintain accurate records – a problem compounded by the poor record-keeping of the college staff who mark assignments and exams. The adviser describes the PDDL admin system as “chaotic and unreliable” and anticipates that many students will be coming forward to contest their marks when the first round of diplomas are awarded.

The research should find out:

- *How the management of student records was planned and roles were allocated between NISTCOL, the colleges and the districts – and how staff at each institution were trained and prepared for their new role*
- *How poor record-keeping affects the students and what it means for the credibility of the programme*

- ***Weak assessment practices***

The adviser believes that assessment practices in the PDDL are inadequate. Feedback on assignments is usually too slow to allow the student to develop a sense of progression, and there is not enough written feedback – many assignments are awarded a mark only with no comments. There is a marking key for each assignment but most assignments are not moderated, so with district team members usually knowing the teachers whose work they are assessing, favouritism can be a problem and objective standards cannot be guaranteed. Assessment of teaching practice has also been inadequate - students are observed in the classroom only once throughout the programme. It is proposed that for classroom assessment to play a more formative and developmental role, students must be assessed three times. Some of this will be done by a cadre of mentors made up of graduates of the pilot programme.

The research should find out:

- *What are the reasons for the slow turnover of assignments?*
- *How are the markers prepared and briefed for their role? Do they understand the importance of written feedback in a distance education course?*
- *The PDDL Learner’s Guide provides an instrument for ‘evaluating competences’ aimed at “the tutor, the mentor or indeed any professional person assigned to evaluate the performance of the learner”. Who actually uses these instruments and how often are they used per student? Who records the allocated mark in the student’s records and how much does this mark count towards the final assessment?*

KENYA

The lead researcher first met with Ministry of Education officials responsible for the SbTD programme at a conference at Madingley, Cambridge in September 2003.

This was followed by a field visit to Nairobi, Naivasha and Kisumu in Kenya in October/November 2003. The lead researcher travelled and worked with local research partners, Judith Waudo and Jennipher Atieno, visiting the Ministry in Nairobi and District Offices, Teacher Advisory Centres and schools in 3 districts. Interview Schedules developed by Judith Waudo were used to guide discussions with District Education Officers, TAC tutors, Head Teachers and Key Resource Teachers.

The lead researcher was also invited to attend a workshop in Naivasha to observe a planning session for the School Empowerment Programme (responsible for taking forward the next phase of the SbTD) and was able to interview a number of key stakeholders there.

The Interview Schedules are as follows:

Interview Schedule for DEOs

Interview Schedule for TAC Tutors

Interview Schedule for Head Teachers

Interview Schedule for Key Resource Teachers.

SbTD Interview Schedule for DEOs

1. How many years have you been a DEO in this district?
2. What type of training did you receive in relation to the SbTD programme?
3. What system have you put in place for the monitoring the TAC tutors in relation to:
 - a. marking assignments
 - b. moderating assignments
 - c. dealing with unexpected problems – examples.
4. In your opinion, how well do you think the TAC tutors in your district are doing in relation to the following:
 - a. visiting KRTs
 - b. handling assignments
 - c. moderating assignments
 - d. classroom observations.
5. In your view, how well is the SbTD working in the schools in your district?
6. What are the strengths of the SbTD in your district?
7. What are some of the weaknesses of the implementation of the SbTD?
8. What kind of support do you receive from the MoE headquarters in terms of implementing the SbTD?
9. Additional comments.

SbTD Interview Schedule for TAC Tutors

1. How long have you been a TAC tutor in this district/ zone?
2. How would you describe your training in SbTD?
3. Do you consider the SbTD training to be effective? Explain
4. Describe the kind of support you receive from the DEO and MoE headquarters
5. How often are you visited by the DEO?
6. For your daily responsibilities, are you provided with transport, communication and other resources?
7. In order to be effective in implementing the SbTD programme, what kind of support do you require?
8. In your zone/district, do you think the KRTs who have completed the SbTD training have improved their teaching practice? Explain.
9. Are all the KRTs in your zone members of the cluster meeting?
10. Since the training of teachers, what SbTD activities are you currently engaged in?
11. Are there any planned follow-up SbTD activities?
12. Additional comments.

SbTD Interview Schedule for Head Teachers

1. How long have you been a head teacher at this school?
2. Describe the SbTD orientation you received
3. What is your understanding of your role in the SbTD?
4. What SbTD activities do you support in your school?
5. Have you seen improvement in the KRTs' teaching practices?
6. Do you think the KRTs receive enough support? What other support would benefit them?
7. What is your view of the assessment of KRTs?
8. In your view, is the TAC tutor doing a good job monitoring the KRTs? Explain
9. Are there any follow-up SbTD activities planned for the KRTs?
10. Do you support the cluster meetings for your teachers? How?
11. Additional comments.

SbTD Interview Schedule for Key Resource Teachers

1. Describe your experience of the SbTD training.
2. What was the nature and quality of support you received during the SbTD training?
3. During and after the SbTD training, how accessible were the SbTD resource materials?
4. During the SbTD training, how effective were the following:
 - a. marking of assignments
 - b. moderation of assignments
 - c. classroom observations
 - d. reflective diaries
 - e. supervision.
5. As a result of the SbTD training, do you feel that you are a better
 - a. teacher?
 - b. resource person?

6. As a trained KRT, what is your role in this school now? Do you receive any recognition as a KRT? How do you support other teachers?
7. How would you like to see the SbTD sustained and taken forward?
8. Does the local community support the SbTD? How?
9. Additional comments.

SOUTH AFRICA

The two South African case studies were carried out by local NGOs – the Media in Education Trust and the South African Institute for Distance Education.

Terms of Reference for MiET Case Study (South Africa): The Role of NGO's in Teacher Education

Teacher education reform in sub-Saharan Africa sees a number of common trends. Most importantly, these include:

- the formulation of coherent ministry-led national teacher education strategies in the context of sector-wide reform and the gradual donor shift to direct budget support;
- the integration and rationalisation of teacher education systems linking ministry, universities, colleges, districts and zones, resource centres, local support cadres, schools and communities in the provision of standardised, accredited training along a PRESET-INSET continuum;
- the adoption of flexible ODL methods, creating new roles and responsibilities among existing providers and devolving training and support functions to district, zonal and school levels.

Increasingly, ministries, colleges and universities are trying to access and support schools and teachers via more 'grassroots' structures, and to recognise, harmonise and accredit the many informal teacher development projects on the ground. Where decentralised ministry structures are inadequate, local NGOs can provide significant support.

MiET has a wealth of experience in providing local-level support to the ministry, to donors and to universities in teacher education initiatives. This case study attempts to draw out some of the 'lessons learned' in MiET's experience. In particular, we are interested in the following themes:

1. Avoiding/exposing the Hidden Costs of Decentralised Teacher Education

Evidence from the field suggests that as student support operations are devolved to the local/school level, so are many of the responsibilities and hidden costs of teacher education.

Firstly, donors and ministries often have different understandings and expectations of decentralisation. For donors and NGOs, decentralisation is primarily about local empowerment and more efficient delivery of services. For Ministries it is an opportunity to share the burden and the costs of public provision (USAID, 2003) and need not necessarily disturb the balance of power (McGinn and Welsh, 1999; Therkildsen, 2000). The same tension can be seen in distance education for teachers. For some it is an agent for change and a source of innovation – a good way of re-allocating resources for greater cost-effectiveness and restructuring national teacher education systems. For others, it is a way of distributing workloads and transferring hidden costs to local facilities, communities and students (see Robinson, 1999:133-134).

Secondly, donors and ministries often have divergent views of student support. Most ministries have a tradition of highly centralised systems, a preference for high-profile symbolic reform and a lingering attachment to the 'transmission' model. Good student support, however, depends on effective decentralisation, has little political/symbolic value and assumes an applied competence

model. For these reasons, student support is often where big compromises are made, both in design and resource allocation. In African countries, new DE programmes are often parasitic on existing decentralised structures, and local support cadres, informed that they are ‘stakeholders’ in teacher education reform, are often ascribed heavy new workloads in addition to their existing work, without the necessary training, support, resources or incentive. Over and over again, the problems of transport and communication are raised as the main reason why local support agents are unable to fulfil their duties, while lack of incentive is the common explanation for their unwillingness to do so.

Meanwhile, donor assumptions about student support are largely defined by first world discourses and practices. For example in many countries the Open University model of support provides the ‘norm’ to be ‘contextualised’. But a crucial aspect of OU student support is the good reputation of the OU, and the prestige and professional development opportunities attached to being an OU associate lecturer, so that few people do it for the (minimal) salary and most are happy to carry the hidden costs involved (phone calls, photocopying, transport, etc.). Where this kind of incentive does not exist, OU practices might not be transferable.

In the absence of financial incentives, some ministries are considering various forms of recognition, accreditation and/or promotion for training given and received. However, there is seldom a functional strategy for accrediting the experience acquired by InSET providers, or a clear career structure for them to follow. Zambia, Kenya and South Africa are working on such systems but this is a complex arrangement involving collaboration with Higher Education, and it governments have to be careful that formal accreditation of InSET training does not over-inflate the salary bill (see Harvey and Peacock, 2001).

Thirdly, the ‘politics of allowances’ can also distort work patterns – particularly in contexts where allowances have been withdrawn following the shift from donor project/pilot funding to mainstream ministry provision. In Zambia, for example, key monitoring and support staff on a national teacher education programme simply refuse to carry out their work, arguing that during the donor-funded pilot, project staff played the same role for an allowance, which has now been withdrawn. (The issue is not just that allowances are no longer available, but that while they were available, others cashed in and they were excluded – in the words of one official, “it’s political”). In Kenya, a promising school-based programme is encountering some resistance from local support staff who feel that “expenditure is too concentrated in Nairobi” and resources are not filtering down to the people who actually keep the programme going. In some countries, teachers are reluctant to play a mentoring role without an additional allowance. In order to neutralise this resistance, SADC ministries of education have all agreed that mentoring is a teacher’s professional responsibility and should not be remunerated, but it is difficult to get teachers to take this role seriously in the absence of any incentive.

A fourth point worth noting is the financial burden that is sometimes placed on communities and student teachers themselves as teacher education is decentralised. In Zambia, for example, local communities are expected to assist trainee teachers with accommodation, food and other necessities as their allowance is insufficient to meet all their needs and is seldom paid on time. (In one school, three trainee teachers were sharing the principal’s office for overnight accommodation). A new teacher education strategy in Ghana speaks of “harnessing the

community” for support and sustainability of resources, despite the extreme poverty of most local communities.

Ten years on from the elections, South African NGOs can no longer rely on the political commitment of teachers and trainers as a motivating factor for professional development. In the absence of financial incentives, what other incentives might work to keep local support agents engaged and motivated? Is formal recognition/ accreditation simply a way of delaying the expectation of financial reward?

Does MiET’s experience offer any insights into how hidden costs can be exposed, acknowledged and minimised at the local level? Lessons on the reality of hidden costs have been learned in the MMRI and Ikhwezi projects, raising the issue of poverty as an overriding factor when transferring innovations from one context to another. What was MiET’s experience in these projects, and how has the experience altered MiET views on the rhetoric vs the reality of devolving responsibility for teacher education to the local level?

2. Possibilities for Community Empowerment and Outreach in Distance Education for Teachers

While some evidence points to the fact that DE for teachers can place an unacknowledged burden on the community, there is also emerging evidence that it can have a positive impact. Binns (2002) argues that:

In open learning there is the added value of the mechanisms and networks created to enable delivery, which also provide an artery right into the heart of the community. This socially constructed circulatory system can be tapped into and used to deliver other learning that might not be traditional distance education.

Binns’ research shows that DE can have “unplanned and unexpected outcomes” which are beneficial for the whole community, including, for example: host schools receiving new resources, the establishment of resource centres, women trainees as female role models, an increased respect for education, the opportunity for local entrepreneurs to capitalise on incoming resources, etc. For Binns it is important that this potential is recognised at the outset and community development opportunities are built into project preparation phases.

While not specifically DE programmes, MMRI and Ikhwezi cluster arrangements provide good examples of what Binns describes as “an integrated resource and human infrastructure, which involves numerous stakeholders at many levels [and] reaches out into the community”. And while RAIN did not evolve specifically as a DE delivery network, it has been used as such (NPDE) and holds similar possibilities for community outreach spin-offs, particularly in terms of training and entrepreneurial opportunities for local contractors. In light of Binns’ research (attached) and MiET experience, what is MiET’s view of the potential for DE teacher training to include a community outreach component? How can this potential be strengthened while the hidden costs and burdens for the community are reduced?

3. Building/ accessing Local-level Support Structures and Networks for University and Ministry Programmes

Ministries and formal providers shifting to distance/ school-based delivery of teacher training rely on the kinds of networks described by Binns (above) to provide both administrative and academic support to students. Whether they mobilise existing agents in the field (provincial and district offices, teacher resource centres, cluster groups, head teachers) or establish new learning centres with new staff, or both, they inevitably have to call on existing data, information, communication and delivery networks that reach schools in remote areas. All too often, official networks are not up to scratch, particularly in the most disadvantaged and inaccessible areas where roads, phones and electricity do not reach. For example, in Zambia, basic EMIS data (district maps and payroll data) are not available or accurate in all areas. In South Africa, research undertaken in 1997 and 2000 found that only 50% of distributed materials reach schools and only 20% make it into classrooms, with rural classrooms the least likely to receive the materials. Where information and delivery structures are established specifically to serve DE for teachers, they cannot always be relied upon. In Zambia, district officers and college staff appointed to manage the admin of a national DE upgrade diploma were not able to keep accurate records of school-based students, resulting in a “chaotic and unreliable admin system”.

While EMIS systems are gradually improving in most countries, access to the ‘grassroots’ level can still be difficult for ministries, and even more so for universities and colleges, which are widely criticised for their isolation from schools. The literature on DE for teachers reports the difficulty ministries face in shifting from a long tradition of centralised control, and their tendency to underestimate the huge infrastructural and organisational demands of decentralised delivery, admin and support. In particular, they struggle with the complexity of managing partnerships with geographically dispersed education agents (colleges, regional and district authorities, teacher resource centres, schools) and the various forms of delegation, collaboration and formality of contract involved in defining roles, responsibilities, locus of decision-making, accountability, communication channels, etc. in order to provide quality support (see Robinson, 1999; Creed, 2001).

Where NGOs have established good working relations with local government structures, and have built their own support networks in their region, they can help bridge the divide between central providers and decentralised networks, and assist ministries and universities in accessing the school level. RAIN is probably the best (only?) example of such an initiative.

How have MiET networks (RAIN, Ikhwezi) helped the Ministry to access the local ‘grassroots’ level? How did RAIN come about? What lessons has MiET learned about setting up such a network? What are the cost implications? Is the RAIN model self-sustainable? How does it function as a two-way information system? Could a system like RAIN play a role in student support for DE teacher training (particularly admin and delivery)?

How has MiET helped the University of Natal to access the local ‘grassroots’ level? With the development of UNP’s NPDE, RAIN clusters were used to identify and recruit students and tutors, and to help establish delivery, training and support networks. Currently, UNP is showing an interest in MMRI clusters. How did this relationship with the university come about?

How and why were the RAIN and MMRI clusters originally set up and how were they used to support the university's work? What was MiET's experience of working with the university?

4. The Use of ICT for Teacher Training

In a review of experience with ICTs in education projects, the IEC (2001) finds that in Africa, projects tend to follow a pattern of high levels of initial motivation, followed by a drop off in stakeholder interest and low levels of take-up. Apart from the problems frequently listed, the reasons for “institutional inertia, ICT under-utilisation and reduced learning impact” include:

- Weakly developed national policy contexts, which make it difficult for ICT projects to become grounded;
- A lack of institutional senior management support beyond the initiation phase;
- Weakly articulated rationales, insufficient to outweigh the disbenefits of discarding existing practices in favour of new approaches;
- Gatekeeping, monopolisation of equipment and use of equipment for personal rather than professional purposes;
- Low institutional incentives (pay, responsibility, kudos) to engage with ICT projects and insufficient staff development and training;
- Lack of online materials relevant to the African context, low levels of computer literacy and information research skills among participants, and unfamiliarity with constructivist pedagogies.

In addition, “cultural, linguistic and organisational barriers are significant”.

The IEC draw a number of lessons from their analysis:

- Single nation contexts are easier to innovate than multiple contexts;
- Focused initial face-to-face meetings are critical to project establishment;
- Introduce ICT based changes into education systems gradually with incremental changes matched to the contextual situation and based on a sound situation analysis;
- Effective innovations may require partnerships involving state agencies, the private sector and civil society to sustain high levels of energy and resources;
- Start with small-scale trialing and testing of flexible plans allowing space for local adaptation;
- Facilitators and co-ordinators supporting ICT projects need training and support;
- Be prepared for high levels of frustration.

Accounts of existing ICT-based teacher development projects in SSA report many ‘lessons learned’ and so far only modest achievements. Despite the many obstacles confronting ICT projects in Africa, there is growing interest in further research and development in this field, from both donors and African governments (Murphy, et al, 2002). Quite apart from pressure to join the information economy and global learning networks, there are also more practical and immediate reasons for African education systems to embrace ICT. African bureaucracies waste hundreds of person-years and thousands of dollars relying on transport rather than mail and telecommunications (see World Bank survey in Mutula, 2001:30), and teacher education colleges and TRCs are scattered throughout remote rural areas. This makes it likely that the potential of ICTs will continue to be explored, if only to raise capacity and overcome isolation. The World Bank pushes for DE and ICT strategies to be built into national policy frameworks in

SSA, and encourages investment in innovative initiatives, such as the ‘wireless’ pilot in Uganda, that test the viability and cost-effectiveness of new technologies adapted to the African context (see Murphy, et al, 2002). Similarly, the IEC conclude their overview of ICT in education projects with the following observation:

The ICT genie is out of the bottle, there can be no going back. It is important that African educators and citizens strongly participate in and benefit from such developments” (2001:37).

Evidence from Imfundo projects suggests that ICTs are best put to use in the development and streamlining of admin and management (student records, communication between centres, etc.) rather than for the delivery of content or for their interactive potential. What is MiET’s experience of ICTs in teacher education (e.g. Multichoice, MMRI, Iklwezi and Schoolnet)? In MiET’s view, what is the most sensible use of ICTs in teacher education?

Terms of Reference for SAIDE Case Study (South Africa): The National Professional Diploma in Education

Our main interest in the NPDE is that it is the only national upgrading programme we have encountered where providers tender for the funds to deliver the programme, and where delivery is not standardised in some way (in most upgrading initiatives materials and course design are centrally prescribed). Our interest then is in how different providers interpret and provide ‘student support’ in their different versions of the same programme, and how the programme is quality assured.

We request from you a short report (5-10 pages) describing SAIDE’s interim findings on student support in the NPDE. The report should:

- Provide a brief description of the origins of the NPDE, the extent to which national standards were prescribed (particularly any relating to student support and on-site assessment), and the process by which training institutions were qualified and funded as NPDE providers;
- Present a comparative description of all the providers, outlining their different course designs;
- Describe the evaluation/audit process undertaken by SAIDE and CEPD (and any other monitoring processes/outfits) and comment on the effectiveness of quality assurance;
- Describe your overall impression of the quality of the standard of delivery of the NPDE, and any significant variations in the standard (with regard to management, course materials and particularly student support), providing examples;
- Provide more detailed case studies of 2 contrasting providers (e.g. Limpopo and a weaker model) with a focus on student support (the fit between course materials and the provider’s course design; accessibility of tutors; frequency, length and purpose of contact sessions; assessment of assignments and portfolios; extent of tutor visits/ classroom observation; internal monitoring and evaluation of student support).
- Outline any recommendations SAIDE has made/will make with regard to the QA of the NPDE or other future national teacher programmes.

GHANA

The Ghana case study was carried out by Terry Allsopp and Kwame Akyeompong in November 2003. The field visit included time with Ministry staff and agency partners as well as trips to Teacher Training Colleges and the three Universities involved in teacher education.

Terms of Reference for Ghana Case Study: The Process of Developing a Strategy for Teacher Education Reform, and Implications for Local-level Support of ODL Students

Significance of Ghana as a Case Study: Generalisable Aspects of Reform

Teacher education reform in SSA sees a number of common trends. Most importantly, these include:

- The formulation of coherent ministry-led national teacher education strategies in the context of sector-wide reform and the gradual donor shift to direct budget support
- The integration and rationalisation of teacher education systems linking Ministry, universities, colleges, districts, resource centres, local support cadres, schools and communities in the provision of standardised, accredited training along a PRESET-INSET continuum
- The adoption of flexible ODL methods, creating new roles and responsibilities among existing providers and devolving training and support functions to district, zonal and school levels

These processes are clearly evident in Ghana's new teacher education strategy. To the extent that these processes are generalisable to other countries in SSA, Ghana provides a valuable case study of the early planning, consultation and negotiation phases of strategy formation.

System-wide Reform: Sustainability and the Importance of Consensus

The widespread shift from project support to SWApS and DBS has mixed implications for teacher education in SSA. The literature suggests that during the days of project support, teacher education reform was usually an “ill-defined afterthought” lagging behind other education sub-sectors, and remaining reliant on external support as it failed to become sufficiently institutionalised. (see Stuart, 1999; Shilamba and Dahlstrom, 1999; Harley and Christie, 2003). According to Stuart and Kunje (2000), it is only in the context of ministry-led system-wide reform that teacher education stands a chance of achieving more sustainable long-term reform. The shift to SWApS and the new emphasis on ministry ownership and stakeholder participation suggest that teacher education is now better placed to receive the attention and resources required to train sufficient numbers to meet EFA goals.

However, systemic change also introduces more stakeholders into the reform process, highlights the contested nature of education reform and “makes consensual change more difficult” (Stuart 2002: 369). Conflicting interests can be detected at two levels:

- (i) Ministry and donor agendas in the initial planning phases

- (ii) Stakeholder interests and agendas during the consultation and implementation phases.

The Ghana case study provides an opportunity to examine the formulation of a teacher education strategy in the context of system-wide reform, to identify the assumptions, vested interests and roles of the various stakeholders, and to investigate strategies for facilitating stakeholder buy-in and building a genuine consensus. In the context of austerity and rationalisation, attempts to ‘avoid duplication’ and ‘maximise resources’ will subject all stakeholders to new demands on their capacity and resources. Where capacity and resources are simply not up to these demands, compromises and trade-offs become inevitable. This case study will attempt to identify and illuminate some of the likely nodes of incapacity and/or resistance in the shift to flexible ODL provision of teacher training, with a particular focus on student support. The most likely trade-offs can then be identified with a view to developing guidelines on how they might be negotiated in the realistic interests of all stakeholders.

Formalising the Informal: Representing the Least Visible Levels of Student Support

This level of enquiry is of great significance to student support practices. Evidence from the field suggests that as student support operations are devolved to the local/school level, so are many of the responsibilities and hidden costs of teacher education. While donors, ministries and formal providers can boast of high-profile ODL reform, it is the least formal and largely invisible level of student support that makes or breaks ODL provision. It is also the least visible and vocal of the stakeholders who carry this burden of responsibility, often with insufficient incentive, training, capacity or resources.

The field-based support structures employed in teacher education vary widely in different SSA countries. They include:

- The satellite centres and local or mobile tutors of universities and colleges shifting to ODL;
- Decentralised Ministry offices – provincial, district and zonal officials (inspectors, advisers, supervisors, standards officers, INSET providers, etc.);
- Teacher Resource Centres, often established by donor projects and now incorporated into various ministry INSET programmes;
- Schools – head teachers, mentors and key resource/link teachers connected to INSET projects and programmes;
- Agencies and NGOs – field-based trainers providing INSET on behalf of ministries and donors;
- Ad-hoc community support groups – retired professionals, local businessmen, PTSA members working with district officials;
- ‘The community’ – mobilised as stakeholders in teacher education and expected to assist students with housing and subsistence.

The diversity and informality of these support cadres is a key aspect of their strength – namely their flexibility and mobility in contrast to the inertia, conservatism and isolation of colleges and universities. However, it is difficult to co-ordinate and rationalise these diverse structures in the interests of a coherent national strategy, given their uneven geographical dispersion, their different levels of formality and autonomy, their various accountabilities and the complex ways in which they support and intersect with one another. As a stakeholder interest group ‘teacher

support cadres' are fragmented and difficult to mobilise. Their informality also compromises their position in relation to TTCs, which are increasingly criticised for their academic isolation and threatened by the trend towards decentralised training.

The Ghana study should yield valuable insights into how effective student support might be built into a coherent national strategy through the rationalisation, mobilisation, 'empowerment' and additional development of local support structures.

Main Research Questions

1. Ministry/donor Assumptions and Agendas

According to Imfundo the GES is driving the process, assisted by TAs in the development of 'generic' skills. Can generic strategic planning and development skills really be neutral or do they imply ready-made choices and values? Will these choices be negotiated or simply assumed?

What assumptions are held by donors and the Ministry about key principles such as decentralisation and student support? Are divergent views openly declared and reconciled at the outset or is the issue fudged until budgetary decisions or political considerations have the final say? (See Moulton et al, 2001 – donors have more influence in setting the agenda and in planning, but ministries simply reformulate policies and assert their own priorities during implementation).

2. Stakeholders

Who are the key stakeholders and how are their interests represented in decisions about local-level support for ODL students?

DFID principle to involve a wide base of stakeholders, including the private sector and civil society. What possible roles could they play in student support?

Who is represented in the Working Group? (Yates and Pontefract 2003 Appendix C)

Who is represented in the Advisory Group? (high level stakeholders)

The strategy is to be released to the wider stakeholder community – Who? How will they be informed and consulted?

Interests of key stakeholders could be mapped and further investigated as follows:

Stakeholder group	How the new strategy affects their interests	Comments
International donor/development community	EFA context; A number of Technical Assistance/ ICT contracts are mentioned in the strategy	How to distinguish between assistance and influence/ conditionality?

GES/ TED	Must drive the process assisted by T.A.s. Must develop EMIS, standards and accreditation structure. Must rationalise - avoid duplication, maximise resources.	
2 Universities UEW and UCC both have ODL T Ed programmes	Must expand teacher education through ODL – both argue they are already stretched to capacity. Should link more closely with TED, and integrate, collaborate and share resources with each other. UEW must reconsider its e-learning programme and support TED with multi-media expertise.	What about competition between the 2 universities?
TTCs In-in-out programme	Must become Centres of Excellence; extend efficiency and throughput; ‘buy in’ more strongly to DE and decentralisation; extend school-based aspects of the in-in-out programme; adopt ICT enhanced ODL model of PRESET.	Imfundo report suggests TTCs are threatened by decentralisation and the growing influence of local support structures.
Local support cadres	Support cadres to be rationalised – shared by PRESET and INSET (WSD) providers; Skills development and empowerment (with ICTs); 2 Universities to share local facilities and support staff; Circuit supervisors and school mentors to assist TTCs in school-based initial training.	Because this group is so poorly defined, it is difficult to draw out all the implications for their new roles.
Schools	WSD and INSET to be integrated School mentors to assist TTCs in school-based initial training.	The new system will rely heavily on schools but they are barely mentioned in the strategy.
Teachers	Untrained, newly qualified and serving teachers must all have access to flexible ICT enhanced ODL INSET. Salary scales, entry requirements and full-time paid study leave to be reconsidered.	Have unions been consulted?

ODL student teachers	Cost recovery for University ODL programmes – e.g. by means of student loan schemes and students to pay for printing of materials.	
Private sector	Private printers to pay for University materials and recover costs from students.	
Communities	Communities to be ‘harnessed’ for support and sustainability of resources.	Not sure what this means?

Outcomes for Guidelines

The Guidelines should assist planners in identifying stakeholders, understanding their vested interests, and encouraging transparency and co-operation in reaching a consensual view of teacher education that values and formalises local student support.

The Guidelines should help planners to anticipate where resistance, incapacity and lack of resources might jeopardise reform, and to prepare for negotiations with all stakeholders about realistic priorities, compromises and trade-offs.

Answers to the two main research questions in the Ghana study should inform the following discussions:

1. Ministry/donor Assumptions and Agendas

Donor assumptions about student support are largely defined by first world discourses and practices. For example the OU model of support often provides the ‘norm’ to be ‘contextualised’ but a crucial aspect of OU student support is the good reputation of the OU, and the prestige and professional development opportunities attached to being an OU associate lecturer. Where this kind of incentive does not exist, OU practices might not be transferable.

Ministries, by contrast, have a tradition of highly centralised systems, a preference for high-profile symbolic reform and a lingering attachment to the ‘transmission’ model. Good student support depends on effective decentralisation, has little political/symbolic value and assumes an applied competence model. For these reasons, student support is often where big compromises are made and costs are cut (not always officially but in practice).

Donors and ministries also have different expectations of decentralisation. For donors and NGOs, decentralisation is primarily about local empowerment and more efficient delivery of services. For Ministries it is an opportunity to share the burden and the costs of public provision (USAID, 2003) and need not necessarily disturb the balance of power (McGinn and Welsh, 1999; Therkildsen, 2000). The same tension can be seen in distance education for teachers. For some it is an agent for change and a source of innovation – a good way of re-allocating resources for greater cost-effectiveness and restructuring national teacher education systems. For others, it is a way of distributing workloads and transferring hidden costs to local facilities, communities

and students (see Robinson, 1999:133-134).

The Guidelines should clearly delineate the two sets of assumptions (without caricaturing the two sides as I've done above) and should pose a set of key principles to be debated at the outset of any discussions about decentralised student support.

2. Stakeholders

Who are the stakeholders most important in strengthening student support? Mapping of different categories/ groups, their interests and roles

How do their interests coincide or compete? Generalisable convergence and conflicts of interest between the different categories

What key decisions require consensus, and from whom? List of decisions, who needs to be consulted, what each party stands to gain/lose, possible suggestions re how losses can be compensated and gains spread more evenly.

MALAWI

Initially, Malawi was not officially a case study country as the MUSTER Report had covered MIITEP in such detail. But in March 2004 the lead researcher took part in a feasibility analysis for the delivery of primary teacher education through distance learning. During this visit, which included time spent in the Ministry, colleges, TRCs and schools, a great deal of useful information was gathered on MIITEP and on future plans for teacher education in Malawi.

Appendix C: Case Study Summaries of Teacher Education and Capacity-building Programmes

The School-based Teacher Development Programme (Kenya)

The SbTD programme began in 1999 as the INSET component of DFID's Strengthening Primary Education (SPRED) III programme. Evaluation of earlier phases of SPRED had found that the cascade model of INSET was taking teachers out of school for too long, had a minimal impact on practice and relied on unsustainable support structures that ran parallel to ministry structures. The SbTD therefore aimed to sidestep the cascade model and reach teachers directly in their schools by strengthening existing decentralised ministry support structures – in particular the network of zonal Teacher Advisory Centres (TACs).

A 1997 needs analysis had also found that primary teachers had a limited pedagogical approach, were producing poor results in Maths and Science, and had few opportunities for professional development. The SbTD programme therefore aimed to improve performance in English, Maths and Science by identifying 3 Key Resource Teachers (KRTs) in every school who would enrol in a 5-month distance programme, supported by TACs, and become leaders in school-based professional development within their subject specialism.

The programme is based on the principles of reflective practice, encouraging KRTs to experiment with new approaches through classroom-focused activities and to reflect on their experiences through journal-keeping, written assignments and tutorial and cluster group discussions. The TAC tutor plays a key role in supporting the KRT by facilitating tutorials and cluster group meetings, observing lessons, marking assignments and providing feedback and encouragement. The TAC tutors themselves are supported by the Ministry's INSET Unit through a 2-week training course, a recall session a month into the programme, TAC visits and a 'trouble-shooting' system.

The programme was rolled out in phases, prioritising the most disadvantaged districts, and is currently in its final phase. It has reached 17,500 schools and 45,000 teachers with a 90% completion rate. It has led to the creation of an INSET Unit in the Ministry and has strengthened local support structures – in particular TAC tutors and KRTs, who now represent a decentralised foundation for continued school-based INSET. As a result, the programme is entering a new phase under the Free Primary Education Support Programme (supported by DFID and the World Bank) and the Ministry is developing three new school-based programmes – for headteachers, counsellors and Kiswahili teachers.

The Zambia Teacher Education Course (ZATEC)

ZATEC began in 1999, as a continuation of the Danish-funded pilot of ZATERP (Zambia Teacher Education Reform Project) which introduced the school-based training model to Zambia. ZATEC is a two-year initial qualification leading to a Certificate and is now the only pre-service route for primary teachers.

The first year is based full-time in a college and the second year is school-based. During the school-based year, self-sponsored students are placed in a school of their choice (usually urban) and government-sponsored students are placed in rural schools where they are paid a small allowance (US\$20 a month). School placements are managed by the College School

Experience Co-ordinator in consultation with the District Offices. Students are expected to spend 20 hours a week teaching and 15 hours a week on self-study tasks.

In the school-based year, students are entitled to the following forms of support:

- visits from a college tutor once a term;
- holiday contact sessions at the college;
- guidance, counselling and access to literature and resources from TRCs, which also assist with the delivery and return of ZATEC materials and assignments;
- support, guidance and counselling from the District Standards Officer;
- accommodation secured, introduction to the community, supervision, assessment, counselling and advice from the head teacher;
- guidance, assessment and assistance with ZATEC assignments from a mentor;
- assistance and assessment from all other teachers;
- group meetings with other ZATEC students in the zone;
- financial and material assistance, and advice and support from the PTA and school community.

The support system outlined above is monitored and supported by the District Standards Officer and the District and Provincial Education Boards, which are responsible for facilitating communication and transport and for co-ordinating and monitoring ZATEC activities. The stakeholder roles and responsibilities outlined above are spelt out in detail in the Ministry's Guide on ZATEC.

Assessment involves the following components:

- practical teaching observed (per term) eight times by a mentor, once by a college tutor, and once by a Standards Officer using a standard assessment instrument;
- a portfolio of action-research studies, lesson plans, reflections, reports, etc.;
- assignments set by the college for each area of Curriculum Strength.

A wrap-up programme is held at the college at the end of the school-based year.

There are plans to review ZATEC and to add a third year to the course in 2004.

The Primary Teachers Diploma by Distance Learning (Zambia)

The Primary Teachers Diploma by Distance Learning (PTDDL) was created in 2001 to upgrade 40 000 primary teachers to Diploma level in order to raise the status and professionalism of primary teachers to parity with secondary teachers. Previously, the only route to promotion was an upgrade to secondary level, so the PTDDL is a way of keeping teachers with diplomas in the primary schools. Successful graduates automatically receive two promotional increments on the salary scale. PTDDL students are selected by the District Education Board Secretary according to specified criteria (e.g. seniority and participation in in-service activities). The programme is centrally managed at the National In-service Teachers College (NISTCOL), previously a secondary DE college, and the qualification is accredited by the University of Zambia (UNZA). NISTCOL is responsible for assessment, moderation, data systems, production and delivery of learning materials and guides, and programme evaluation.

Provincial and District TRCs are responsible for delivery of materials, maintenance of student records, arranging district teams for student support and assessment, arranging and assessing portfolios, assignments and exams and monitoring student support. At district level, TRCs organise contact sessions and facilitate Teachers' groups. Colleges contribute to training and assessment activities as requested by TRCs (this role is currently being revised and formalised with a clearer set of responsibilities for colleges, particularly in curriculum development and assessment activities). Zone In-service Providers, head teachers and mentors provide support at the school level. There is currently only one classroom observation session (by a college tutor), as Diploma students are regarded as experienced practitioners, but this is under review.

Assessment is through assignments, a professional diary, a teaching file, a single classroom observation, an activities file and a final exam at the end of the 18-month programme.

The Diploma in Education, Primary, External (Uganda)

The DEPE Programme is a three to five year diploma that was launched by Kyambogo University (KU) in April 1999. The course saw its first set of graduates in February 2003, and marks have just been released for the second intake. There are currently approximately 800 students enrolled on the DEPE Programme using nine co-ordinating centres (colleges) around Uganda.

The Programme works on a semester system with two-week residential sessions held at DEPE Co-ordinating Centres (Primary Teacher Colleges) during the school holidays, with 12-15 weeks self-study between each contact session. The PTC Principal and Deputy are accountable to KU and are responsible for arranging and hosting contact sessions, distributing materials and providing informal student support. Team Leaders (lead facilitators selected from the KU staff, of which there is one per DEPE Centre) are responsible for co-ordinating the activities of the facilitators during contact sessions. The College Registrar is responsible for keeping attendance records. The dispatch of modules and the receipt and return of assignments all takes place at the contact sessions.

Assessment takes place in the form of assignments attached to each module, and a Project Paper. Coursework and final exams each make up 50 % of a student's final grade. There is currently no teaching practice element to the course, and therefore no teaching practice assessment that contributes to the students' final mark. However, this is due to be implemented in the near future, especially as the programme is soon going to be amended to conform to a newly developed national curriculum that makes teaching practice a compulsory part of any teacher training qualification. Students' teaching practice and assessment will be organised by KU in conjunction with the PTCs and the students' schools.

There is currently a very limited number of student support mechanisms in action, though KU wants to increase these in the future to develop a greater culture of care within the programme by providing Tutor Counsellors and organising peer group meetings and the use of audio-cassettes.

At the moment, the primary student support mechanisms are the two-week contact sessions that take place three times a year. In addition, at a more informal level, the Principals of PTCs have a good approach to helping the students solving problems together. All of the nine centres' Principals have had training in the form of the IEC Introduction to Distance Education Course, which includes a module dedicated to learner support. Contact session facilitators are also studying the IEC course, as are KU administrative staff.

Capacity Building at Kyambogo University, Uganda

In 2000, with funding from the Nuffield Foundation (Commonwealth Fund), the Institute for Teacher Education Kyambogo (ITEK, now Kyambogo University) and International Extension College began implementation of five-year programme of capacity building in distance education at ITEK.

It was intended that the Human Resource Development (HRD) project assist ITEK to institutionalise and professionalise distance education in ITEK. The programme of training was designed according to a number of design principles:

- it would be an integrated package of complementary face to face and distance study;
- the learning would be of a participatory nature;
- the programme would be flexible enough to respond to changing needs and training delivered according to the needs identified by ITEK;
- the training would reach as many stakeholders as possible and involve participants from each category of stakeholder;
- the training would be delivered according to best practice;
- the training would involve a large element of 'learning by doing';
- all elements, as well as the overall programme, would be evaluated.

The variety and nature of the training inputs were designed to be diverse in order to reach audiences with differing needs, responsibilities and areas of interest. The programmes recognised that the kind of training for policy makers and strategic thinkers in ITEK/KU would be different to that required for teacher educators actually designing and delivering courses or providing learner support and yet again different to that needed by the administrators. But that there was an imperative need for each to have an understanding of what was required by the whole system in order that it function successfully.

Discussion with ITEK indicated that the most likely areas for training would be:

- audience analysis and market research;
- materials development including audio;
- integration of face-to-face teaching with distance learning;
- student/learner support;
- assessment;
- evaluation and monitoring;
- programme management;
- programme delivery planning processes.

A series of workshops took place at intervals over the time span of the project, based at ITEK/KU. Each workshop was designed for a maximum number of ten participants, and was practical and participative. Where selection of learners was needed, ITEK and IEC drew up selection criteria so that individual and institutional needs could be considered. So, for example, for a writers' workshop, lecturers from the faculties would be invited to attend, while for planning and management, the senior management and administrative staff would attend.

Study of DE at a distance takes two forms: Firstly, a course consisting of three modules, delivered over a period of three terms to coincide with school terms, was specially developed. The first cohort took the course from January 2002; the second cohort started in February 2004. The materials were specifically targeted at Ugandan teacher educators.

The course is an introduction to distance education and its use in teacher education and targets a wide audience of teacher educators. At the beginning and end of each term the participants are brought together in groups of 20 to 25 for two to four days of face to face sessions, when they are given the opportunity to discuss their study, issues that arise from it and do some group work. The study at a distance is intended to be very inclusive, bringing together educators from the outlying teachers' colleges, District Education offices and ITEK itself. Calculated efforts are made to mix up the groups in the face to face sessions in order to ensure that staff from ITEK/KU have the opportunity to meet and work with colleagues (and vice versa) from the field who do not meet under normal circumstances. A marked assignment is completed for each module.

Secondly, in the third year of the project a second small group of learners were enrolled to pursue study at a higher level by enrolling on occasional courses in DE from the University of London, External Department's MA in DE. This was with a view to enabling some specialisation to occur and to ensure a different experience of distance learning to be experienced. These participants were selected by KU, in consultation with IEC, from among individuals who studied the introductory course. They are studying a variety of specialised modules including materials development, gender issues, electronic media and adult learning.

The Malawi In-service Integrated Teacher Education Programme

The Malawi In-service Integrated Teacher Education Programme (MIITEP) was designed in 1996 and implemented from January 1997 to train the 18 000 untrained teachers within a cadre of 22 000 new teachers recruited to meet the demand introduced by free UPE. These untrained teachers accounted for 42% of the teaching force and needed to be trained quickly. All other forms of primary teacher training were suspended for the duration of MIITEP, which had an annual capacity of 7 500 a year.

Trainees needed a JCE and a year's experience in a primary school to qualify for the programme which initially included 4 weeks residential study and five terms supervised teaching. After 6 cohorts, the programme design was modified so that students enrolled for 4 months residential training, 8 months school-based study supported by DE materials, and another 4 months residential study (with longer residential study for JCE holders). Assessment is through assignments, projects and final exams.

The five MIITEP Handbooks are a central feature of the course and constitute the main teaching/learning resource.

The school-based training model has evolved over the seven years of MIITEP. The student support systems were very weak to begin with, but now comprises a network of 316 Teacher Development Centres (TDCs) staffed by Primary Education Advisers (PEAs) serving 5-21 schools in a zone, monitored and managed by the District Education Offices and TDC management committees. Under the Malawi Schools Support System Project (MSSSP), training in supporting teacher development has been provided to all PEAs and 3 senior staff members per school through the National Professional Certificate in Primary Advisory Services and the National Professional Certificate in Primary Headship. MIITEP students rely on visits from college tutors and PEAs, and on head teachers and mentors in their schools for support, guidance, observation and assessment.

The Department of Teacher Education and Development is currently phasing out MIITEP and proposes the introduction of a new two-year initial teacher education programme, with the first year being college-based and the second year school-based.

The National Professional Diploma in Education (South Africa)

The National Professional Diploma in Education (NPDE) was launched in 2000 to meet the concern about the 86 000 unqualified and under-qualified teachers in South Africa. National standards for programmes leading to the NPDE were determined in two ways – in the qualification itself and in a set of criteria produced by the Teacher Development Directorate to assist in the development and evaluation of proposals for providers offering NPDE programmes.

Besides stating that the NPDE is for practising teachers and must be offered part-time, the qualification does not specify mode of delivery or the nature of support to be offered. The qualification requires a strong classroom focus but does not specify on-site assessment. Student support systems were initially assessed in light of how self-instructional the materials are (the less contact, the more self-instructional materials).

Ten regional consortia of providers were approved and the programmes began in 2001. Preliminary findings of a programme evaluation find a wide variation in programme design and in the quantity and quality of support offered by the different providers.

The Resources and Information Network (KwaZuluNatal, South Africa)

The Resources and Information Network (RAIN) is a materials distribution and information dissemination system, managed by the Media in Education Trust (MiET) on behalf of the KwaZulu-Natal Department of Education and Culture (KZNDEC). The system was established to address the problems associated with getting resources, and support for their use, to rural schools. The backbone of this system is a network of 120 distribution nodes in schools across all districts and municipalities of the province.

The five-year business plan lists the following main objectives of RAIN:

1. Cost-effective distribution of educational resource materials into schools.
2. Establishing clusters of schools linked to a distribution point/ resource centre.
3. Economic development of local communities and the development of schools as centres of community activity.

It is also intended that KwaZulu-Natal will provide a role model for other provinces where the dissemination of resources and information to schools is a problem. The RAIN network will also be used to disseminate information and resources about responsible sexual behaviour, HIV and AIDS.

RAIN has the following components:

- a central management system to co-ordinate and monitor all aspects, and to record all aspects of distribution, user support and cluster development in a centralised data base that is accessible to all relevant stakeholders;
- a warehouse where resources are received, recorded, packaged, labelled, bundled and dispatched, and where central controls are implemented and proofs of delivery processed;
- primary distribution to 120 distribution points or nodes in all districts of the province;
- distribution nodes (most of them in schools) linked to clusters of schools, with appropriate nodes being identified by cluster schools and district officials;
- secondary distribution from nodes into clusters of schools by local contractors, also identified by local school communities.
- the development of mutually-supportive clusters of schools around these nodes.

The KZNDEC has continued to subsidise RAIN's overheads, and uses RAIN as an internal distribution system to do different tasks for the department. The costs of these distributions are included in the funding for RAIN, as are monthly "handling fees" paid to schools that serve as distribution points. Because of the Departmental subsidisation of RAIN, and ownership of the system by the Department, MiET has not explored independent sustainability of the system.

The Multi-Media Rural Initiative (South Africa)

The Multi-Media Rural Initiative aims to pilot and refine a model that combines ICT with other school resourcing and human resource development strategies to meet the specific needs of rural and isolated deep-rural school communities, within the context of current education policies and strategies.

The project is a partnership between the North West and KwaZulu-Natal Departments of Education, MultiChoice Africa Foundation and MiET. It is funded by the Royal Netherlands Embassy. The project started in September 2001 and ends in August 2004.

MMRI has developed multi-media resource centres with information communications technology (ICT), satellite links and print resources in deep-rural clusters of schools. It builds the capacity of these clusters of surrounding schools to manage, use and share these centres effectively. Twenty-six resource centres have been established: 11 in the North West and 15 in KwaZulu-Natal. The 15 centres in KwaZulu-Natal have been developed around RAIN distribution nodes.

MiET's task is largely to ensure that school communities take ownership of and use the centres effectively, that the ICT is backed up by print and face-to-face support, and that the resources offered by the centre meet community needs.

The Multichoice Africa Foundation provides interactive digital satellite technology and programmes for the professional development of teachers. The two education departments own the equipment. It is the departments' responsibility to manage and maintain the centres, provide support to the school clusters within which the centres are located, and ensure that the centres are used effectively.

Most of the centres are located in nodal schools within the clusters. The project aims to offer the following through these centres:

- interactive digital satellite technology;
- information communications technology (ICT) applications for the professional development of teachers;
- training of teachers in resource-based teaching and learning approaches;
- training of teachers in materials development;
- the publication and sharing of teacher-developed materials through print and ICT;
- additional resources, services and programmes that meet the identified needs of the wider school cluster communities.

The primary users of the centres are teachers, school management teams, learners and School Governing Bodies. The secondary users are communities around the cluster schools. The ultimate aim is to develop self-reliant, mutually supportive clusters of rural schools that work together for mutual benefit, are jointly better able to access financial and educational resources, pool and share educational resources, and are grouped around multi-media education resource centres that become centres for community development.



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