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The art of the possible: issues of learner support in open and distance learning in low income countries

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The art of the possible: issues of learner support in open and distance learning in low income countries

> In order for distance education to fulfil an appropriate role in the third world, its underlying assumptions must be critiqued, and rather than reproduce the structures of the developed world, distance educators must seek to generate appropriate and sensitive models and practices, derived from forms of research which are reflective, participatory and emancipatory in intent and procedure and are situated in the cultural contexts of the third world.
>
> *Guy 1989: 58*

The issue

Although the quotation above uses language which sounds rather dated fifteen years on, questioning the assumption that distance learning practices established in one context can translate into new ones remains valid. As is well documented, there are many approaches to providing a learner support system in open and distance education. The ways in which this support is provided will vary considerably depending on a wide range of factors. This paper reflects on the existing approaches to learner support, with a particular focus on lower income countries, and gives examples of how such support is provided in a wide range of circumstances. It does not try to identify ideal models but rather provides a range of principles on which learner support systems may be based and gives some examples of how these systems have been developed in a number of institutions.

Focus

This report focuses on one aspect of learner support in open and distance learning (ODL) namely tutoring, defined here as the support provided to assist students directly with their learning from teaching materials. We include in our definition of tutoring, support for the development of study skills as we regard this as integral to the role of the tutor and only truly effective when integrated with the specific subject being studied. We have excluded from our consideration the areas of student support relating to administration and counselling.

However as our thinking developed it became clearer that in many parts of the world, where transport, telecommunications and the numbers of qualified people available to teach at a relatively local level are seriously constrained, many students are left to rely on their text materials alone. Our thinking then has developed to encompass the importance of 'tutorial support' from within the learning materials whether these are print, web-based, or through the use of audio/video tapes and broadcasts.

We have taken as our primary focus a very real distance education (DE) situation in low income countries – a DE learner with print learning materials who may or may not also have occasional tutorial support and support from other learners – and we have asked in what ways that basic unit can be strengthened to maximum effect.

Context

Western models

In much of the western distance education literature the role of the tutor as a key player in supporting student learning is emphasised (Tait 1989; Simpson 2000; Mills 2002). It is considered particularly important in the context of continuous formative assessment, predicated on the assumptions that (i) the tutor 'gets to know' the student and (ii) the tutor deals on an individual basis with students' learning, being thoroughly familiar with the strengths and weaknesses of the student's study skills.

This knowledge of the student can only be attained if there is regular academic contact in some form or another, such as by comments on the student's work, by telephone conversations, by e-mail or through individual or relatively small group interactive face-to-face sessions. Transmitting this knowledge from tutor to tutor, as in the case of a programme of study leading to a qualification, is a costly and controversial business. Even a relatively wealthy institution such as the Open University in the UK (OUUK) has been unable to maintain such sophisticated coherence in its teaching systems.

As ODL is increasingly regarded as a viable policy option for countries with limited educational resources and large numbers of potential students, it is timely to reflect on the implications for such systems of the problematics, both educational and economic, relating to the provision of tutorial support. Even if all the evidence pointed to the need for creating small groups of students subject to regular student/tutor interaction, there is little point in advocating such approaches where the local situation is such that this could never be achieved either because of financial constraints or because of a totally different cultural context.

The OUUK has been successful at least in part because it was established in a country with good postal, telephone and road/rail systems, had the backing of major political party which was in government, was able to develop a partnership with the national broadcasting corporation, the BBC, and met a large, mainly reasonably well-educated, yet frustrated, demand for degree level education. The circumstances pertaining in the United Kingdom were very different from those in many other contexts. But even in countries which are ideal for the establishment of comprehensive tutorial systems, e.g. those with quite high population densities, good transport and communication systems and a ready supply of good quality tutors who are keen and willing to be trained, there are still issues about the balance between resources spent on materials production and on tutoring/learner support.

Sometimes the rhetoric of the importance of the tutor/tutorial support is not matched by institutional decision-making where materials production and ownership can clearly be seen as a tangible output and an asset for the institution, whereas tutorial support is regarded as a cost. Attitudes are changing slowly and recently studies have demonstrated the resource effectiveness of good student support in situations where institutions receive government funding based on retention rates as well as enrolment numbers (Simpson 2003). Of course where there is no government funding the cost structure of distance education has in the

past been such that more 'profit' is made when students pay the full costs of a programme of study 'up-front' and then drop-out.

However, in countries where there are major resource problems, where communications are difficult, where potential students are spread over large geographical areas and where there are few available tutors, the simple adoption of tried and tested models from industrialised countries can at best be unhelpful and at worst positively dangerous. We have to reject at the start certain given wisdom. For example, Rumble (1997: 108) states that 'as a general guideline, 25 students per tutor is suggested for study centres which are easily accessible to students.' This is unlikely to be attainable in most countries in the world

Culture and ownership

In a review of a recent book *'Distance and open learning: challenges to developing countries'*, by P.R. Ramanujam of the Indira Gandhi National Open University (IGNOU) in India, Nhavoto (2005) provides an insight into a core issue when considering the ways in which systems of distance education have been developed. Ramanujam points out that developing countries are confronted with huge educational needs but have scarce resources for addressing this task. They are faced with having to develop strategies for dealing with issues but without the necessary experience or infrastructure. He points out that this has meant that developing countries, instead of creating their own models of open and distance education have been heavily dependent on models from developed countries. He argues that those countries which simply adopted western models have found a poor match between their specific needs and the imported models. Although acknowledging the role played by, for example, the OUUK as a source of inspiration to many developing countries, he points out that in adopting this model, universities like IGNOU and the Allama Iqbal Open University (AIOU) in Pakistan have neglected local needs, learner characteristics, academic traditions, access to technology and learning styles of their potential distance students. He claims that those countries which chose to create their own models or adapt models from developed countries were better able to respond to local needs and that the staff involved gained a significant degree of self confidence.

A different slant is that problems in learner support in low-income countries stem from unrealistic expectations in the promise of DE on the part of their governments. Certainly it is the case that distance education has held, and continues to hold, a particular attraction to developing countries and their donors. Highly centralised correspondence DE models hold out the compelling quick-fix promise that they can solve big educational problems of quality, quantity, access and cost at the same time as achieving economies of scale. But in practice, centralised models have tended to impact negatively on learner support in *three* distinct ways:

First, one problem associated with these centralised top-down approaches is that although they tend to be used to overcome infrastructural deficiencies in mainstream educational provision, they bring with them their own infrastructural and organisational demands which are frequently underestimated. The literature provides widespread evidence of programmes that have been developed centrally but ahead of their capacity to support learners at local levels, particularly in remote and deprived areas. As a result, as many evaluations acknowledge, large numbers of distance education learners on programmes are studying while working, with little local face-to-face support or supervision. Other local level

difficulties are evident: delays in delivering study materials; difficulties in recruiting appropriate local tutors; low participation in tutorial sessions because getting to centres requires long journeys. Since distance education is typically used to reach long underserved areas, learners in these areas are likely to be the least able to cope with lack of support. Exact figures for drop-out, non-completion and unsuccessful pass rates are often not available but many programmes acknowledge that low rates are directly related to poor support systems. An external review of the New Primary Teachers' Orientation Course in Pakistan, for example, suggested poor management at regional level was responsible for a 69% drop-out rate. The Indonesian D-II Air programme admits to very low graduation rates among trainees in remote areas. The NCE Programme of the National Teachers' Institute in Nigeria attribute the 27-39% drop-out rates partly to under-resourced and overstretched study centres, difficulties in recruiting and retaining local tutors and poor tutoring within the study centres.

Second, in these sort of industrialised models quality is often seen to reside, ready-made, in the standardised package of self-study print materials rather than in their local-level mediation; the materials are often regarded as self-standing, teacher-proof and with the potential for a long shelf-life. As mentioned previously, materials can be viewed as a tangible output, tutorial support as a cost. From these perspectives, a tutorial support system can end up being seen as an additional rather than as an integral part of ODL delivery. This would account for misjudgements about the importance of student-tutor contact and the wider capacity-building demands of distance education. Where resources are tight, additional parts of a delivery system are easily jettisoned or skimped on.

A *third* problem affecting the quality of a student support system is that since DE has often been regarded as either a stop-gap measure or a specialised educational approach, it has tended to operate as a parallel system to the mainstream educational structures. As a result, rather than using existing pools of mainstream expertise and infrastructure, many programmes are instead preoccupied with setting up their own structures in curriculum development, materials production and outreach infrastructures and it is easy to see how sometimes the quality of tutorial systems issues can get overshadowed. Additionally, the structural complexity of distance education can make for fragility in student support systems. To make distance education work you need structures and facilities for seven main functions: governance, planning, management and funding; materials development and production; materials reproduction and distribution; student recruitment, advice and support; assessment and evaluation of learners; feedback systems for formative evaluations; record systems. In many cases, it will not be possible for one institution to carry out all the functions and they have to be shared between several partners. An open university, for example, may be contracted by a ministry of education for the development and central management of a programme but this is likely also to involve coordination or collaboration with a national accrediting agency, with curriculum bodies, with local level partners for student support. Partnerships have strengths but they tend to function with varying degrees of success. Consistency of quality is difficult to achieve in large-scale programmes with decentralised field operations, which also need to be responsive to local conditions.

Whatever the underlying causes are for poor learner support, the centralising tendencies of distance education need to be balanced with more regular two-way, field-based interaction between students and tutors if it is to be more effective. One persuasive response to these

problems is for distance education to centralise and industrialise those parts of a DE programme for which it is appropriate and so devote more time and resources to creating more opportunities for interaction and reflection.

Learner support in low resource environments

There follows a review of a range of potential approaches to providing learner support in low income country contexts where the basic unit is a learner with self study learning resources and with occasional access to other learners and tutorial support. We examine these approaches under two types of tutorial support: support within materials and support provided by tutors and fellow learners. We have used tables in Appendix 1 which capture the key questions and option choices relating to tutorial support, in order to ground thinking about what may be possible in low resource environments.

Support within materials

Where distance learners are highly, perhaps totally, dependent on self-study learning materials the support strategies within them become critically important. In third world contexts distance learners often bring to the learning experience additional language and study skills needs. Many are from a predominantly multilingual oral tradition often with a limited reading culture and where access to libraries or reading materials may be restricted. Many have had to use a European language, with varying degrees of competence, as a medium of instruction. Against this background, the typical prose-intensive style of print distance learning (DL) materials makes heavy demands on adult learners who are returning to study, are often unpractised readers *and* writers (in both their mother tongue and official language of education) and new to writing assignments in a range of academic literacy text types specific to the subject area under study (such as report, argument, description).

In these contexts distance materials carry a special burden of responsibility, one that is frequently sidestepped, underestimated or inadequately addressed.

Language support strategies

DE producers have traditionally used one or some of the following *four* language support strategies: writing 'simple' text (usually with the help of readability indices or writer's guidelines); assessing tutor-marked assignments (TMAs) for understanding rather than language (i.e. overlooking language deficiencies by checking only the learner's overall understanding); adding language-focused elements such as glossaries to the print materials (high-tech tools include on-line dictionaries, thesaurus, spellcheckers and translation); general English language development courses run in parallel with or before the course content.

One general problem with all these strategies is that they do not take into account the diversity of language and literacy practices across different subject areas and as a consequence do not contribute towards developing learners' abilities to cope with the different demands that are made upon language within different programmes. The approaches stem from the traditional tendency to separate content and language teaching and reveal the extent to which educators underestimate how learning and the language of

learning are crucially interrelated; that if more attention were devoted to ways of improving language development, through contextualised use, learning in all areas would be greatly assisted.

The strategy of producing 'simple text' has a particularly long tradition in ODL precisely because its preoccupations with widening access, equalising participation and redressing educational disadvantage. Typical techniques include shortening the overall sentence length by splitting complex sentences into independent sentences, making sentences simple in content (e.g. with one idea in each sentence) and using short, concrete, familiar words while limiting polysyllabic and abstract words. Guidelines to DE writers often include advice to avoid long words and sentences, to use positive and active words rather than negatives and passives. Readability indices (such as the Fogg index) have also been widely used to indicate to writers of learning materials where some sentences are overly complicated. Used judiciously, these techniques can be useful but an overly formulaic approach to writing carries risks.

One problem is that there are language factors which operate at a broader textual and rhetorical level which are crucial to the understanding of any text. Sentences are not in themselves wholly meaningful; they assume meaning within a broader context (within and across text and between the reader, writer and text). Measures at the level of a sentence will not reveal these difficulties. As a result of structural 'simplification', text can lose its cohesion and become merely a collection of sentences which is both *semi*-cohesive and *semi*-coherent:

> We use language to communicate. If we use it more simply, we can communicate better. So simplifying language means improving it. Most often, English is simplified to improve technical communication to non-native English speakers. Simplified English is not only easier to read, but also it is much easier to translate.
>
> Savage (nd) *Simple English is better: guide to writing for non-native speakers*, London: Foundation for teaching aids at low cost

This type of writing reveals an underlying product-oriented view of education where the aim is to 'deposit' information by means of short, succinct shafts of information. It is a persuasive approach if the objective is to get across important information quickly of the do-this, don't-do-this type, such as simple health advice on hygiene and breast-feeding. If the objective is to facilitate a reader's comprehension from text, let alone use it as a model for writing, then a constant diet of this simplified text acts against the best interests of the learner. It assumes an inability (often on the part of highly articulate multilingual learners) to learn the complexities of a language and, at the same time, circumscribes the ability of learners to use the language and participate within the particular academic community because it produces language which is atypical of a particular subject area. Despite the best of intentions, then, 'simple text' can inadvertently contribute to learning, literacy development and reading problems.

Study skills support strategies

There has been a traditional tendency for academics to assume that there are universals of academic behaviour. Holmberg (1989: 33) in discussing study skills for distance learners, made a similar point, 'it is far from easy to lay down universally applicable principles for the teaching of learning strategies and study skills generally. I am afraid we must be more modest'. In addition to the usual generic study skills guidance (time management, note-taking skills) often found in DE programmes, there is also the need to find pedagogical strategies which recognise that becoming a part of an academic discipline is not so much a question of assimilating an immutable canon of knowledge but more an apprenticeship into the social practices of a particular community, not only of learning *from*, but learning *to* write and speak appropriately; that subject areas are communities of practice and 'impose requirements of recognised participation' (Lankshear 1997: 42). Unpractised writers need structured help to learn how to write in a particular genre and use language appropriately. Course producers tend to assume that their apprentice economists, teachers or managers will 'pick up' the language, modes of analysis and writing expectations of their discipline from three indirect sources – the simple process of writing TMAs, TMA feedback and the actual course materials. In practice, each of these can be a source of difficulty. TMA feedback is often limited and focused on content rather than the writing implications of content. DE course materials can be so heavily formatted in the traditional DE instructional design that they do not, in themselves, provide a text-rich environment. Their value as a potential source of textual varieties to the learners has become limited.

In order to more fully address language and literacy issues, the pedagogical approach needs to focus on raising the learners' awareness of the characteristic conventions and literacy practices appropriate to a given academic community. This implies strategies that are *embedded* in the materials rather than the usual *separate* study skills course or guides. Examples include:

- *direct*, point-of-need support, (including TMA wrap around materials about the structure and language implications of particular essay types; more detailed TMA feedback on content *and* discipline-specific study skills matters; awareness-raising textual devices which draw attention to specific linguistic/rhetorical characteristics, e.g. margin boxes or specific in-course activities)

- *indirect* support in the form of a text- and graphic-rich instructional design which could help learners, on the basis of the examples set before them, to gain more awareness of writing conventions and which reflect a wide range of standardised English in different media (spoken, print, visual)

The last point directly challenges well-established convention in DE instructional design. Within this tradition, DE instructional design follows a reassuringly familiar format throughout the learning materials (e.g. each unit made of statement of objectives, summaries, headings, main text and activities). In many cases, however, this format can have the effect of imposing a textual and stylistic straitjacket onto the materials in which textual variety becomes a casualty and which therefore limits the potential of the learning materials as a pedagogical resource and model. One pedagogical implication is that a DE writer can also

contribute to the language and study skills development of their second language learners by providing them with a print environment rich in a wide range of text types (report, argument), genres (a scientific article, a newspaper column), registers (degrees of formality and informality) and graphics from which the student writers can learn.

Another implication is that DE writers could work from the notion of a continuum as a basic pedagogical principle which moves from the known/familiar toward the less known/unfamiliar and assists learners to make connections between their discourses, their particular backgrounds and textual histories and the discourses found in the subject area.

> I think you can help the students make that transition … without saying lets put it in Noddy and Big Ears language
>
> *Zimbabwean DE tutor*

For example, to move from the familiar cultural and often orally transmitted practices of everyday social practices towards the less familiar written discourse of specific disciplines and to make explicit the difference in literacy practices; to use informal contexts and language as a bridge into the more formal decontextualised language in an academic domain (Northedge 2003, 1995). This is a new take on the 'friendly tutor in print' who engages the student in an 'avuncular chat' (Jeffcoate, 1981: 76) and instead suggests the deliberate co-existence of different registers and discourses to point up their difference. One key strategy would be to play on the status of oracy as a key to literacy by increasing the use of speaking (on cassettes and in tutorials) as a bridge into writing and reading.

DE producers in general need to move away from the assumption of monolingualism and cultivate, where feasible, an ethos of multilingualism within and around a course destined for use among speakers of other languages. Strategies could include, for example, accompanying audio tapes in the mother tongue which provide an informal overview to each unit; the inclusion of group activities (where participants naturally tend to revert to mother tongue or multilingual exchange) alongside the more individualised activities within the materials.

Gendered nature of study

Studying at the same time as working is demanding for all learners, men and women alike. However, the presence of women on a DE programme, their status within it and the time they can devote to it are often all matters of continual negotiation. Their roles tend to be socially constructed in relation to their capacity as caretakers of their partners' and children's needs, as well as being income generators. These domestic and professional pressures tend to impact on *how*, *when* and *where* they study; that is to say, within gendered learning contexts. First, study periods are often snatched, wherever feasible, in sporadic, short bursts which can often be threatened by distractions, tiredness or lack of family support. Secondly, in contrast to the idealised notion of women distance learners studying at the kitchen table, the pressure around home-study can often result in their deliberately choosing to study *away* from the home.

The implication is that course developers need to pay heed to the (typically unrecognised) gendered nature of study and could address those differences if they worked with the

constraints faced by their women students as their frame of reference for the design principles of a print-centred learning environment. The argument here is that the strategies that flow from this would not disadvantage men whereas working from study conditions more characteristic of male students - such as the potential for more extended study time and concentration - *does* disadvantage women.

Women-friendly strategies might include the following:

- thinking closely about the time demands of reading and writing tasks and chunking them (say in half to one hour tasks) particularly at the start of a course for women returnees rather than working from the assumption of extended study
- providing more cohesion to short, sporadic study periods by means of more comprehensive cognitive hooks (overviews, summaries, the use of diagrams or audio cassettes to provide an overview of a unit/concept, information-transfer tasks such as chart fillings from readings)
- exploiting the audio + print combination in a variety of ways (listen to readings, commenting on readings)
- thinking through ergonomic issues of print-based design which takes into account women's need to work away from home and often with differential access to private transport (heavy, bulky printed course components could be reduced by a greater emphasis on their transportability for peripatetic and commuting workers, e.g. detachable pages, use of audio-cassettes for Walkmans or in-car use, cutting down on prose by greater use of graphics)

Ergonomic issues need careful planning because rather than assume learners have access to libraries, networked computers or face-to-face tutors, instructional designers need to ensure that the materials themselves are self-standing and provide the learner with *all* the learning resources.

The instructional voice

Where learners are very dependent on the materials, course designers need to seek pedagogical ways to address the fact that the students' learning backgrounds may predispose them towards a passive relationship with print materials and an overvaluing of the authority of print. One strategy would be to make the socially-constructed nature of knowledge more transparent to the learners in order to encourage a more distanced, critical appraisal of the content.

At the level of 'textual strategies' (Graddol 1993), this suggests a deliberate disruption of some of the traditional facets of mainstream DE instructional design. One example would be the overt signalling of differences between authors. This implies moving away from the traditional DE instructional design in which the team of writers are often disguised and mediated through a constructed 'personal' voice with the text (our avuncular tutor-in-print). The danger here is that the personalised voice may have the effect of shifting the reader's attention to the voice rather than to the text and give the impression of a course as a seamless and authorless entity rather than a collection of disparate texts from different

authors. Graddol (1993: 26), for example, notes this tendency in DE towards closed texts (Eco 1981) which 'speak with a single voice; to control stage by stage the state of knowledge of the learner' and which presume to predetermine the reader's response. To create open texts with his OU courses, he drew on Bakhtin's notion of social heteroglossia or dialogism, which is an attempt to relativise a unitary truth or canon of knowledge by reflecting the multiple social languages (heteroglossia) of different generations, professions, epochs and their different ideological-belief systems. One adopted strategy is to deliberately disrupt the high factual status, teaching voice in typical DE texts by inviting course team members and external authors to take up a variety of voices in informal and informal registers. Examples include authors directing students away from their teaching voice 'to an article (by themselves) written in a more formal academic register … at which claims can be safely disputed' (Graddol 1993: 28); to distance themselves from their own assertions; to talk informally, on cassettes, about the background to their work and orientation of their thinking.

Another example would be to physically highlight the resource-based rather than course-based nature of learning. One version of this might be a main course book with accompanying resource books, another version would be to offer courses based almost entirely on resource books (containing, for example, a mix of classical and topical articles about the subject under study) accompanied by a pedagogical wrap-around; in other words, relocating the navigational voice away from the academic resources. In this case, the navigational voice needs to take responsibility for providing cohesion to the range of educational resources.

Support provided by tutors and fellow learners

Having looked at providing tutorial support *within* the materials themselves, we now turn to the context of large groups of distance learners with access to a restricted tutorial system in low resource operations, particularly in cases where the potential student population is much dispersed. What approaches offer lessons for good practice in low income country contexts? In reviewing the evidence, we have augmented the paucity of literature in the area with a variety of case studies (see appendix 2), drawing on both ODL and face-to-face programmes, to examine ways in which they have addressed the situation of large numbers of learners, outside the mainstream educational infrastructure, supported by inexperienced or under qualified teachers/tutors in under resourced study centres/classrooms, often in rural areas.

Our starting point is a workshop presented at the *Cambridge Conference on Open and Distance Learning in 2003* (and in a subsequent paper), in which Lentell and O'Rourke (2003) asked a group of distance educators to reflect on a number of scenarios involving ODL with large student numbers, and to propose strategies for tutorial support.

These strategies included:

a) decentralising the organisation, planning and execution of learner support - making it as local as possible and calling upon local resources for tutors/mentors from teachers and other professionals, e.g. health-care workers;

b) supporting learner groups by providing materials specifically for group work in addition to the teaching materials;
c) developing self assessment tools that groups of learners could use;
d) linking learning to the work place and involving employers.

These suggestions for strategies certainly mesh with our subsequent findings from the case studies. Our findings fall into *four* distinct approaches, all of which move away from a one-size-fits-all approach toward a far more judicious, strategic planning towards learner support:

1. Strengthening community-based delivery

A key emerging approach is to design and focus resources around the very *specific* demands and realities of a poorly resourced rural learning situation – of groups of learners with occasional tutorial meetings with inexperienced, under qualified (and often underpaid) tutors. The options here are to either strengthen or to circumvent that basic unit in a variety of ways.

Promoting group learning
One way of strengthening community-based delivery is to exploit the existence of groups of learners in near proximity to each other and promote opportunities for group learning. Lentell and O'Rourke argue that learning in many Western educational institutions is personally orientated, with a strong emphasis on the development of the individual, whereas, in many non-western societies communal and collective learning is more of the norm. Their paper gives a number of examples and provides extensive references.

Decentralised and small-scale community-based models
These can take the form of either a large-scale operation decentralising the organisation, planning and execution of learner support (as covered by Lentell and O'Rourke) at local levels or the form of smaller-scale programmes which solely focus on and develop out of one particular area Both tend to be informed by a *participatory style* of working where the aim is to build community participation and ownership in the programme by mobilising and strengthening community resources and practices. The course is generally developed after a period of wide consultation among various stakeholders and delivered in a decentralised strategy. This might include district-based management training, the establishment of strong partnerships between community-based stakeholders and district-level education officials. This is seen as the main mechanism for quality assurance and development at the local level.

Teacher education examples include the *Northern Integrated Teacher Education Project (NITEP)* in Uganda; the *Northern Areas Education Project (NAEP)* in Pakistan; a Vietnamese programme focused on five remote provinces; the *Hinterland Teacher Training Project* (Guyana) and two richer-country examples in rural areas, the *Remote Area Teacher Training Programme (RATEP)* and *Koorie Teacher Education Programme* (Australia); *TELETECHNET programme* (USA). The evidence shows these are not without their own difficulties: in recruiting local personnel, poor communications and transport in remote areas, poverty and literacy difficulties of trainees. Nevertheless, their concentrated effort in one or more particular rural areas allows them to identify and then address the specific needs by sustained capacity-building over a period of time. With varying degrees of success, most have tried to develop a strong culture of care surrounding their trainees and put a lot of effort into local level organisation and

training. This also seems to have paid off well in terms of retention of trainees: *NITEP* has a 12% drop out rate (10 of 12 were AIDS victims). *RATEP* shows an 85% success rate and *TELETECHNET* a 95% successful completion rate.

The *A-Plus Programme* in Brazil is a variation on this community-based approach. For some distance education providers, their task ends at the point of delivery. For others, like the *A-Plus* programme, delivery is the starting point for further activities. The distance-education component — educational TV broadcasts — are produced centrally and broadcast nationally on cable TV. Nevertheless, effective use of them is dependent on a locally-based, *Community Mobilisation Network*. 60 Community Officers mobilise meetings and activities with trainee teachers/teachers in schools which opt for the 'plus' part of the programmes. This helps local education practitioners identify new content areas and exploit existing programme themes in ways that appropriate to their community needs.

The highly-structured package approach

Where there is a particular need to address quality issues in under-resourced rural areas, a more structured approach may well be appropriate. One way of supporting and strengthening the basic unit of students and an inexperienced tutor, is a whole-study centre package approach, which includes the provision of highly-structured, self-study resources with active learning approaches that support both the learners *and* the tutors. The structured and interactive self-study materials can be written in a way that they involve the tutors as partners in the teaching process by, for example, asking them to indicate and lead ready-made group activities and provide answers to self assessment questions. In other words, the materials position the tutor as a facilitator more than a teacher of content. The tutor/facilitator can also help with preparation of exam techniques, continuous summative and formative assessment and adopt the role of friend, taking a proactive approach to learner support in a range of ways, such as following up non-attendance at tutorial sessions, advising when studying becomes difficult because of personal issues. The tutors, who are usually inexperienced and under qualified themselves, are supported by the well-structured and planned curriculum which introduces them to new teaching practices designed to foster active learning and provides a model for extending their own teaching repertoire. The tutor/facilitators can also be used as a conduit for relaying questions about content and subject matter to a subject expert at the HQ or regional level.

The dual purpose learning materials, then, are being used to provide support, respite and training to the local level tutors. This embedded support for the tutors can also be supplemented by additional tutor-only learning resources and meetings/workshops. This might include very careful tutorial planning so that maximum use is made of the short time tutors and learners spend together, e.g. providing ready-made activities around content areas which have proved problematic in the past.

Another part of the package approach – and under the tutors' responsibility – would be the deliberate enrichment of learning resources at the study centre with reference books, dictionaries and visual aids as well as ready-made, semi-structured resources to support and extend the tutor's repertoire. These can provide the means of introducing new engaging learning materials and methodologies quickly and can diversify the range of learning and teaching resources open to the learners and tutor. They can also become part of the tutors responsibility and toolkit.

This package approach has been used to good effect in a range of rural, low-income contexts, such as *Escuela Nueva* in Colombia, *BRAC Open Schools* in Bangladesh, *Interactive Radio* instruction in Zambia, *Telesecundaria* in Mexico. These are primary equivalent programmes for out-of-school populations but the ways in which they have attempted to strengthen their basic unit – the impoverished rural classroom with large numbers of learners and under qualified teachers – holds out good practical lessons for the rural DE study centre. The interactive radio approach, pioneered by USAID, has characteristically adopted a whole-school or whole-programme approach to the learning contexts, which involves learners, tutor/teachers and the community.

2. Accessing tutors outside the community

Where expert tutors are thin on the ground at a community level, various strategies have been adopted to circumvent the problem and facilitate access to them:

Two-tiering
One strategy is the two-tiering of the tutorial system. In one example, as adopted by Andhra Pradesh Open School Society, learners have ready access to a locally-appointed volunteer teacher/counsellor during the week but three times a year they also go to tutorials with more highly trained teachers in 'cluster' centres. Part of the volunteer tutors' roles is to anticipate the needs of learners for these higher level tutorials. A variation of this, adopted by BOCODOL, is where the more experienced tutors are brought *to* the learners on an occasional basis via mobile units.

Interactive technologies and broadcasting
Another strategy is to bring experienced tutors to the learners by means of interactive technologies which allow for interaction between trainee-tutor that would not be possible otherwise. The use of interactive video technologies – sometimes referred to as two-way or interactive narrowcasting – has been used extensively in the USA but is a recent development, since mid-decade, particularly in teacher education in developing countries. (*Tele-SOPT, Tele-Maths for primary teachers*, Indira Gandhi National Open University India, *UNESCO/ITU interactive television for teachers program*, Morocco, *OFEK in-service teacher training*, Open University of Israel). Studio-based teacher-educators make live one-way satellite presentations – aided by pre-recorded video-clips – about different teaching areas to remote groups of teachers in different local level sites. Direct questions to the educators are made from the teachers via telephone and fax links. Video- and tele-conferencing have long been used in a range of programmes in island states such as the Caribbean and the Pacific Islands to increase opportunities for interaction between course participants and expert tutors.

3. Shorter life programmes

A third approach is the *diversification* of distance-education provision in terms of types of programmes, duration and management of courses. For example, there is a noticeable increase in the use of shorter, intensive distance-education courses as well as distance-education resources, where learner support resources can be specifically designed around a shorter delivery span and planned for more comprehensively or strategically than for an extended two or three year programme. There is potential for a greater degree and consistency of quality and a concentration of tutorial expertise over a shorter rather than a

longer span of time. Examples include various teleconferencing programmes such as Israel's *OFEK* programme which offers short courses for upgrading teachers in specific areas (English, maths, remedial teaching); 4-day and 5-day in-service professional development programmes (in several Korean institutions, Indira Gandhi National Open University's use of interactive TV programmes, the *SHOMA* programme's use of satellite broadcasts and multimedia computer applications for short-term, in-service training).

The shorter-life and often lower-volume features of such courses have several organisational implications. While they may reduce the long-term organisational demands at decentralised levels, they place a greater emphasis on a capacity to mobilise decentralised resources quickly and for a wider range of subject areas. Considerations such as these ask us to rethink the imperative of going-to-scale which has traditionally accompanied 2-3-year distance-education courses. The efficiency and reach of the delivery system and the capacity to mobilise local support systems become central to the effectiveness of shorter programmes.

4. Integration with established systems

Lentell and O'Rourke drew attention to learner support strategies that linked learning to the work place and involving employers. Here we look at linking DE to the mainstream educational system.

Earlier, we discussed how the development of DE in parallel to the mainstream educational structures can have a negative affect on the quality of a student support system in low income countries; rather than using existing pools of mainstream expertise and infrastructure, DE programmes are often preoccupied with setting up their own structures from scratch in curriculum development, materials production and outreach student support infrastructures. Working with constrained budgets inevitably affects the quality of these structures. However, there is evidence of different types of *integration* between distance education and regular educational systems which, if used judiciously, have the potential advantage of helping programme developers to capitalise on the strengths and minimize the limitations of each.

We found evidence of *four* different types of integration between distance education and regular education:

Allowing access to the mainstream
In some countries, government support for distance education takes the form of allowing access to the mainstream educational infrastructure. In these examples, distance education remains a separate activity to mainstream teacher training provision but can draw on its resources, including high quality tutors, study centre administrators, regional support officers and supervisors. Allama Iqbal University of Pakistan, for example, depends almost entirely on district educational offices. A richer-country example --*The Remote Area Teacher Education Program (RATEP)* of north-east Australia -- depends on a wide range of established educational and committee networks, including 22 institutions of higher education, three kinds of community council, a provincial Open Learning Centre network, the Provinces Department of Education and Office of Higher Education and the Commonwealth Departments of Education Employment and Training.

Parallel and equivalent
In some cases, distance education acts as in parallel to and as an equivalent to mainstream provision. In Belize, for example, the three-year *Certificate with School Experience* programme is delivered by the Belize Teacher Training College in two modes — full-time residential or part-time distance education. However, to avert doubts about parity of esteem, the two programmes share a common course structure, academics, tutors, supervisors, accreditation, and certification and attract the same salary incentives on qualification. This puts DE on more of an equal footing with mainstream teacher training programmes and give access to more expert student support than might otherwise be available although the number of tutorials, the tutor-learner ratio and the degree to which a tutor understands teaching in a distance mode support are all critical factors. The distance mode has also been carefully rationalised to include a 4-6 week residential summer session in subject areas difficult to teach at a distance, e.g. art, music, physical education, and instructional aids.

Supporting role
In others, distance education is more fully integrated with regular provision. In some, we can see a reversal of roles with distance education playing a *supporting role* to regular provision. In India, for example, the *Distance Education Programme (DEP) of the District Primary Education Programme (DPEP-II*) distance education has been absorbed into the regular educational framework for the continuing professional development of a range of educators and this recognised role has enabled it to benefit from existing district level structures such as the District Education and Training Centres (DIETs), which had not until then embraced distance education at all. DIETs now serve as the basis for supporting distance-education trainees and the sharing of resources in facilities and expertise.

In a variety of contexts the establishment of a local level DE infrastructure has contributed to community development by serving as a basis for the development of a wider programme of education and training. Binns et al (2004) found that the local level learner support infrastructures of DE programmes in Guyana, Nigeria and Uganda have all formed the basis for further community educational activities and were able to identify a number of indirect beneficiaries who included mainstream educators in schools, inspectors and local administrators.

Mixed-mode
Mixed-mode delivery combines both residential college-based blocks of training with blocks of independent distance-education study and, like the parallel example above, has the advantage of drawing on existing resources within mainstream system such as college lecturers doubling up as tutors and distance-education materials writers. One recent example is the Malawian Integrated In-service Teacher Education Programme (MIITEP) which consisted of 3 months in college, 20 months in school learning independently with distance-education resources and one month back at the college for a course review and final examinations.

Implications and conclusions

We have outlined two main approaches – support within materials and support provided by tutors and other learners – and strategies within each which have been employed with some success to address the particular demands of supporting learners in a range of low-income contexts where quality tutorial support is thin on the ground. It has to be said, however, that all of them, particularly the support provided by tutors -- imply a loss of flexibility within the DE learning support system since they require very careful planning and strategic use of those resources at particular times or in particular locations. Nevertheless, we should be cautious about various 'western' notions of effectiveness and flexibility because whilst they might provide a very 'customer-centred' service to students they are simply not possible to organise in many contexts. Notions of 24/7 service, of being able to enrol on a programme at any time, of self rather than institutional pacing can all be seen to be student-centred but may not necessarily support the student as well as more structured and formal systems. Nor might such approaches be regarded as important or essential in certain environments. For example, the University of Namibia runs only a few programmes each year, enabling resources to be focused on these, thus generating viable groups with sufficient numbers of students.

On the other hand, we acknowledge that different sorts of flexibility may be critical in different cultures. For example in basic education work in South Africa students demand the opportunity to study with their friends and to chose the tutor they wish.

Even in the OUUK in the 1990's much thought was given to reducing the numbers of 'low population' courses or their frequency of presentation because it was very difficult to provide highly personalised tutorial support in addition to correspondence teaching. So strategies which involve less than annual presentation of courses, fixed start dates, rather than 'start when you like', establishing clear cohorts with clear deadlines for assignments (to aid progression and commitment) are more likely to succeed than some western notions of customer services offering 'all things to all people'.

Appendix 1

Key Questions

Framework 1: The top level questions

- Are the students studying at home, at work or in a community setting?
- What is the level of resource available?
- Do students pay for their programme?
- What is the density of student population?
- Are communications well or poorly developed?
- What level of education is involved?

Framework 2: The range of tutorial support options

1. No materials, just a syllabus and formal examinations
2. Materials (Ms) only
3. Ms plus large group set piece tuition (radio, face-to-face)
4. Ms plus 'hot line' (telephone, letter, e mail) for individuals to get answers to problems
5. Ms plus self help (with one member of group raising issues on behalf of group as in 4 above)
6. Ms plus cmc/face-to-face/telephone with smallish groups
7. Ms plus systematic assignments and feed back (or feed forward*) on work done
8. Examinations and feedback on assignments

Framework 3: The types of tutoring

In-text
Friendly tutor in print
Learning to learn/study skills elements
Language support/development elements

Correspondence
Individual feedback (expensive)
Group feedback (cheaper)
Group feedback on exams and no assignments (cheaper still)
No feedback on anything (cheapest but of no possible help to students)

Telephone
Group, individual, tutor or student (individual or group) initiated (proactive or reactive)
Landline or mobile

CMC
Group/synchronous/asynchronous

Individual reactive or proactive Issues of tutor availability *Face-to-face* Individual or group Size of group *Self-help* Techniques and support for self-help groups

Appendix 2

Examples of learner support in selected programmes in low income countries

In this appendix to the report, brief analyses are made of learner support structures in three kinds of distance education programmes:

- primary school equivalence
- secondary school equivalence
- capacity building for NGOs

Primary school equivalence

The table presented below analyses four programmes which specifically target populations of young people for whom the formal government-funded primary school is not an option. It is worth noting that Escuela Nueva, in Colombia, might not be characterised as a distance education approach, but it is included here because of its unusual and innovative approach to the relationships between learners, learning materials and teachers

Primary Equivalent Programmes	**Andhra Pradesh Open School Society, India**	**Interactive Radio Instruction (IRI) Zambia**	**Escuela Nueva, Colombia**	**National Institute of Open Schooling, India**
F2F tuition	* 1 to 2 hours, 2 to 3 times per week with 'volunteer', locally appointed teacher/counsellor * Three times per year, 10 days compulsory F2F instruction by trained teachers in cluster centres, which are designated primary or secondary schools	* Students, often AIDS orphans, attend classes as per a normal primary school, but in community-provided premises. They work with genuine volunteer teachers, identified by the community. The teachers are known as 'mentors'. * Most tuition is F2F, though structured by radio broadcasts received generally with wind-up radios. The broadcasts, currently in English language only, are very supportive of the untrained teacher, with lively activities for the pupils * So far goes to Grade 5	* Yes, the pupils are sited in small multigrade classrooms in rural primary schools * They work with centrally produced, self-study materials in four subjects – language, maths, science and social science * Pupils work in groups of 4 to 6 * Teachers are freed up to give individual help and to support pupil groups in learning	* Provides alternative primary schooling through self-instructional materials and networks of study centres * F2F tuition takes place in study centres at weekends and in school holidays * Each subject packages comprises 100 study hours, 50 of which are self-study, 50 of which are in study centres with F2F contact
F2F counselling/guidance	Both volunteer and trained teachers have a counselling role during F2F sessions above	Not applicable, as F2F sessions are essentially 'normal' primary school classes	'Normal' primary school classes where the role of the teacher is integral part	Part of the tutorial responsibility in study centres
E-mail/on-line tuition and/or counselling	No	No	No	No

Assignments: submission and feedback	Assignments, based on textbook material provided for all students, are marked and returned manually by the teachers	Assignments/homework structured into the radio programmes. Presumably treated as any other school lesson	* Assessment based on combination of self-, group and teacher-assessments * Pupils assess their performance as individuals and as a group, then compare with assessments of other members of group and teacher	* Assessment based on three tutor-marked assignments per subject * Continuous assessment through credit accumulation
Planned peer group interactions	Regular 'classes' meet, as above	Pupils are in regular classes	Pupils are in classes structured deliberately so they work regularly in peer groups	Not formally
Use of study centres	The designated cluster centres are not open-access learning centres except during the three x 10 day compulsory F2F sessions. They do not operate as 'drop-in' centres	Not applicable	Not applicable, although a feature of E.N. is the considerable strengthening of school libraries	* Study centres deal with admissions, distribution of learning materials, F2F tuition, examination preparation for learners * Regular use of study centres structured into the subject programmes, along with 'summer' schools in holiday periods NIOS also offers upper primary programmes for students aged 12 upwards

Notes on primary equivalent programmes

- Given the age-group involved in these four selected programmes, it is unsurprising that the programme designers have acted to reproduce key elements of the primary school experience, while recognising the potential of a distance education approach to reach populations typically failing to access conventional primary schools. So, we would expect there to be significant F2F interactions between learners and teachers/tutors. Two of these examples (IRI Zambia and Escuela Nueva) operate in recognisable classrooms, albeit with distinctive and interesting methodologies. The two Indian cases of open schooling ensure that there are school-equivalent opportunities for students to interact with their peers and their tutors, even though the main instructional approach is self-study of print materials.

- Apart from the use of wind-up radios in IRI, the instructional materials used are conventional in delivery mode, i.e. print dominated, but Escuela Nueva in particular sets up very new and stimulating approaches to the use of instructional materials.

- Tutorial support ranges from modestly trained full-time rural teachers in Escuela Nueva, through a mix of volunteer and professional teachers in the Indian models, to volunteer community teachers in Zambia.

- Escuela Nueva has a particularly innovative approach to assessment.

Secondary school equivalence

Two of the three programmes highlighted in the table below – BOCODOL in Botswana and NAMCOL in Namibia – clearly come from similar origins. They largely share methodologies and cater for similar populations, namely, those young people who fail to find a seat in a conventional secondary school. Telesecundaria is more a secondary school, but one whose methodology and medium of instruction is significantly influenced by the use of intensive television broadcasts.

Secondary School Programmes	**BOCODOL**	**NAMCOL**	**Telesecundaria**
F2F tuition	* F2F tuition is provided in 50 Community Study Centres and 18 learning satellites. There is national coverage, but there remains an issue of support for learners in remote locations in this very large country. There are plans for the introduction of mobile centres.	* F2F tuition is provided at Study Centres, which have a national distribution. Each centre has a Head of Centre and a team of tutors. They provide two sessions of F2F tuition per week for each subject being studied. * For students who live in very remote locations, vacation workshops are offered as a substitute for weekly F2F sessions.	* Telesecundaria schools use television programmes transmitted nationally on a daily basis in two shifts. Each hour of work has a similar routine: 15 minutes of television teaching followed by 45 minutes of teacher and book-led activities. Follow-up is through use of reference books corresponding exactly to the programme content * Each student is exposed to a number of television teachers each day * Each student in a year group has one home teacher who supports the student across all their subject studies
F2F counselling/guidance	Yes, as part of the Study Centre provision	Yes, as part of the Study Centre provision	The home teacher provides the necessary counselling and guidance, and is well placed to do so as a result of their high contact hours with each individual
E-mail/on-line tuition and/or counselling	Being developed – expected to be operational by end-2006	No, but NOL Net is increasingly available for student access	No

Assignments: submission and feedback		* A variety of assessment techniques is used, including continuous assessment * Each subject generates three assignments, which are set nationally and marked by Study centre tutors * A booklet is available to all students containing exam-related information	Conventional approach to assignments. Telesecundaria students take a separate national examination from conventional school students, but they are graded according to common national standards
Planned peer group interactions	Not specifically planned	Yes, with the creation of self-supervised study halls	Through the normal organisation of the Telesecundaria secondary school
Use of study centres	Each Community Study Centre has a Coordinator and a team of tutors. Whilst the essence of BOCODOL delivery remains the use of print materials at a distance, the strengthening of the study centre network shows the high level of demand for F2F contact.	See above	Not required as tuition takes place in the rural secondary schools

Notes on secondary equivalent programmes

- While Telesecundaria in Mexico might be described as an alternative style of secondary school, with a significant commitment to a style of instruction led by television presentation, the two southern African examples are essentially operating in distance learning mode. For both BOCODOL and NAMCOL, the core of the learning is the relationship between the learner and print instructional materials. The Study Centre model is offered as a distinctive model from the secondary classroom, though day-to-day tuition practices may well still mirror the pedagogy of the school classroom.

- As the level is secondary schooling equivalent, the largest part of tuition is carried out by tutors or teachers who have either experience or training or both. Retired secondary school teachers provide a popular source of tutors for study centres.

Capacity building for NGOs

The programme analysed below, Learning for Change (Fahamu), is a series of five courses designed to assist Human Rights NGO's in Southern Africa to strengthen their institutional performance. Module titles include: Fundraising/ Using the internet for advocacy and research/ Fact-finding and investigations. Materials are provided on CD-ROM with accompanying print course guide. The rhythm of a sample course would look like this:

10 weeks of individual study using CD-ROM, supported by e-mail tutors and e-mail graded assignments	4 day mid-course F2F workshop facilitated by tutors	6 week individual project, based on student's own institution, supported by e-mail tutor	Feedback on assessed project, followed by certificate award

Capacity Building for NGO's	**Learning for Change, Fahamu**
F2F tuition	Only at mid-course workshop
F2F counselling/guidance	Only at mid-course workshop
E-mail/on-line tuition and/or counselling	By e-mail throughout the course
Assignments: submission and feedback	Assignments, based on CD-ROM material, submitted electronically, marked and returned with comments by e-mail
Planned peer group interactions	Informally between students by e-mail

Use of study centres	Not applicable

Notes on NGO capacity building programmes

- Workshops are deliberately held at mid-course, when all students have covered a good deal of the same material and therefore have more skills to share.
- Drop-out is negligible, as students are recruited through their workplace and the course is closely linked to their work commitments.
- Relatively small numbers per module – 20 to 25 – mean per student costs are quite high, typically £700 per module, largely due to the great costs of SADC-wide F2F workshops.

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