Models of Distance Education for Developing Island States.

The key to successful establishment of distance education in developing countries seems to be the initial choice of an appropriate model (a model that can be built upon the historical and cultural context, can survive in an environment of limited resources, and will be compatible with the views and ambitions of its political sponsors and clients). Such a model should take into consideration the following factors: (1) historical influences; (2) cultural factors; (3) geography and infrastructure; (4) the technological environment; and (5) the political dimension at all levels. The best models of distance education in small developing countries (such as the Solomon Islands and the Maldives) include situational analysis to identify significant environmental characteristics and the relationships between such factors and their relationship with the functions of distance education. (Contains 15 references.) (KC)
MODELS OF DISTANCE EDUCATION
FOR DEVELOPING ISLAND STATES

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MODELS OF DISTANCE EDUCATION FOR DEVELOPING ISLAND STATES

Distance education has in some ways been more a model of cultural imperialism than a model of appropriate development. Attempts have been made to export models of western systems to cultures and contexts which render them inappropriate.

The very idea of distance education may be difficult to reconcile with some cultures, but there are many others where it could provide a significant avenue for development, but only if the type of distance education preferred is appropriate to the prevailing cultural environment.

The key to the successful establishment of distance education in a developing country seems to be the initial choice of an appropriate model; a model which can build upon the historical and cultural context and survive in an environment of limited resources, and be compatible with the views and ambitions of its political sponsors and clients.

Historical Influences

Rather than being the victims of ruthless colonial exploitation, the Maldives and the Solomons have a history of fairly benign neglect, as protectorates offering few opportunities for extensive economic development. Consequently, both countries maintained their indigenous cultures to a large degree, until comparatively recently. However, there is a considerable difference, insofar as the impact of Christianity and a new language of trade (Pidgin) in the Solomons has no real counterpart in the Maldives, with its continued use of Divehi and English, and its enduring Islamic culture.

Similarly, the influence of western schooling in the Solomons was far more extensive than in the Maldives, with its long tradition of formal Koranic instruction. Despite the countries' links with higher education in the UK the impact of correspondence courses purporting to prepare students for overseas high school examinations, as elucidated by El-Bushra (1976) was negligible. Ansere (1979) indicates that these correspondence courses were very centralised, with students being isolated from each other and their own culture, and not a good model for future development.

Independence led to a reappraisal of educational systems needs and priorities in both countries, with the indigenisation of the curriculum in the Solomons and a complex review of education in the Maldives to align it with wider dimensions of national planning. Both countries saw a role for distance education, especially in upgrading the training of teachers and sought to develop plans, uninfluenced by the outdated and alien correspondence model.

In theory it would seem that the conditions were supportive of the establishment of distance education based more on collaboration than colonisation. However, since independence two other important influences have emerged: international aid and
communications technology. Neither of these influences in themselves necessarily lead to educational neo-imperialism, and despite some previous excesses elsewhere, aid funded distance education in both countries is being introduced collaboratively, taking into account the cultural context.

For example, in the Maldives a national conference was called to advise a consultancy concerned with planning the development of distance education, and in the Solomons there is an emerging interest in distance education as a vehicle for community enhancement. In both countries it is important that distance education does not distance itself from local culture and indeed local pre-existing education systems. Therefore an important dimension of a model for distance education in developing island states is the historical context. There are enough examples of historical tragedy repeating itself as technological farce.

Cultural Factors

Freire (1972) saw reciprocity with indigenous culture as an essential component of the preferred mode of knowledge communication. Ideally distance education should capitalise on this by taking into account local structures and competencies, local needs at all levels and by training indigenous staff to act as linking agents in a collaboration between cultures. Unfortunately as Ansu Kyeremeh (1991) observes with reference to Ghana, there is a lack of an endogenously generated theoretical framework based on local conditions. This is equally true of the states in question, where there is a lack of documentation of local cultures in all their variation, and possible implications for distance education. Consequently the importation of models, concepts, expertise and technology from the developed world easily leads to an excessive degree of dependency and the emergence of a kind of post industrial cargo cult.

Similarly, imported models frequently require excessive centralisation of organised structures, administrative and bureaucratic procedures. Elements of these problems are evident in the case of both examples, with greater centralisation of decision making being evident in the Maldives with its political system which encourages the imperative of the executive. Nevertheless the delivery of materials in both cases is planned to capitalise on local expertise in the provinces and atolls, by using existing local educational centres as secondary delivery centres.

With regard to internal cultural differences, in the absence of suitable information, little account has been taken of variation in local culture even though at a superficial level there are in the Maldives obvious differences between the Southern and Northern atolls, and further complexities as a result of the rapid development of the tourist industry. In the Solomons there is much more heterogeneity, with marked cultural and linguistic differences, none of which have been taken very much into account when designing their emerging distance education systems. Although it should be noted that the early stages of development have focussed on those regions in both countries where local support has been expressed most strongly and there are relatively few transport problems.
In view of this discussion, it seems necessary for designs for distance education systems to involve knowledge of and collaboration with, local cultures, even to the extent of taking cognisance of variations within states, no matter how small and isolated. Although such observations beg the question of how to do this in a cost effective manner, in an environment of scarce resources.

In addition to the above, reciprocity with the indigenous culture requires ownership and involvement on the part of local staff. Nyirenda (1989) highlights the lack of adequately trained indigenous personnel to initiate and maintain Distance Education programs. Similarly, Guy, in Evans and King (1991) points out that indigenous officers of high competence do not necessarily see distance education as a preferred career path. Both these phenomena are evident in the cases in question, and despite the intensive local participation and staff development program in the Maldives, there is still a tendency to impose a system from another culture in the belief that the local culture will adapt. In a collaborative venture this may be desirable, but only if it arises from genuine reciprocity rather than simple convenience. Therefore training participation and ownership are essential components of the model.

The indigenous culture also must be incorporated in relation to the student clientele, as the culture of Westernised distance education, which provides English language instruction to individuals via depersonalised books or electronic media may not be relevant. Kaye (1981) discusses the limitations of being a distance education student, in terms of isolation from other students, teachers, libraries and equipment. This being exacerbated by strong cultural and kinship obligations. Perraton (1979) also sees problems with individualised distance learning in developing world cultures which remain strongly group orientated. Dunbar (1991) discusses differences in learning styles and attitudes to authority and Griffin (1981) is concerned about the effectiveness and cultural impact of learning materials delivered in English for students who use it as a second or third language. Such examples indicate that indigenous student culture and its relationship with learning should not be ignored in the design of an appropriate system.

It is not common in the developing world to experience the kind of cultural and educational homogeneity that is assumed for the student populations in the developed world. This homogeneity exists to some extent in the Maldives, but is not apparent in the Solomons, with their multitude of indigenous languages and distinctive cultural practices. Also as Zahlin (1988) points out, distance education in developed countries is predicated upon well developed intellectual traditions quite different to those in host countries.

In the Maldives the current priority in distance education is to develop functional English for students who already have some knowledge of the language. To achieve this the early part of the course is written (by hand) in Divehi, with English being used more as the competence of students increases as they progress to more advanced units. In this case, although some students come into the course with a much greater knowledge of English than others, the medium is indeed appropriate to the message, although the consequences of using print in a society which went rapidly from an oral tradition to modern electronic communication, without establishing a literary culture...
remain unexplored. In the Solomons a similar course in English cannot easily be developed in the indigenous language, or rather languages, as there are many of them. The option of using Pidgin, which is commonly spoken, and is the language of the local radio is difficult to gain formal support for, as the medium of instruction and official language of the country is English. This conflicts with both the traditional and colonial cultures and whilst ensuring the course is consistent with local needs of a national scale, the use of English to teach at a distance in a variety of subjects including practical mathematics is obviously a problem.

Such failures to fully consider the requirements of the local culture may arise not from arrogance nor from ignorance, but from cost. One aspect of local culture is the size of the potential student population. In the cases considered, it is comparatively small. Rumble (1983), an acknowledged expert on the costs of distance education shows conclusively that economies of scale are important in keeping unit costs down. Therefore, the capital costs of setting up autonomous distance education systems in small states, more or less decree that there will be little variation in the materials used, although there may be considerable cultural diversity on the part of the clientele. The only cost effective way to incorporate such differences, is to encourage local adaptation in a network of study centres using staff involved in conventional education. Local delivery is planned in the Solomons and occurs in the Maldives, although there is still in both instances the problem of those isolated from local centres, either by distance or culture.

What can be learned from these discussions is the need to consider the needs and competencies of the learners in the most cost effective manner. Such inputs forming part of the overall model.

Geography and Infrastructure

The separation of these aspects from culture is fairly arbitrary, as they form a subset of a multi dimensional cultural reality, as do politics and economics which will be considered later. Both the Maldives and the Solomons are Island States, they have had strategic significance in the past, but are outside the main routes of commerce. Although both have international air services, transport within the country is not well developed, with an embryonic road system and sea transport often occurring on an irregular basis. The Maldives has a better developed unscheduled sea transport system and regular services to resorts, whereas the Solomons has regular sea services to the provincial centres and a series of provincial airports. Notwithstanding these differences, the geographical outreach capabilities are limited, especially for those really isolated through geography, culture and poverty. As in Ghana the following observation of Ansu-Kyeremeh (1991) is largely accurate.

"In a sense, geographical limitations translate into educational deprivation, as it is the poor who are most unlikely to own or have access to the means of program reception."

He also observed that the absence of a mailing system and a lack of facilities for and expertise in Teleteaching created considerable problems for distance education.
Guy (1991) gives numerous examples of infrastructure problems in the developing world, including: lack of printing facilities; support systems; distribution systems; trained personnel, and well developed materials.

With all these problems existing to some extent in the countries being considered, and the enormous cost involved in developing something approximating to a western infrastructure, the distance education system must be devised around existing facilities. That is accessible existing facilities as although commercial enterprises are often willing to assist, they will not do so at the expense of their profit generating activities, an example of this being the difficulties of inserting large amounts of educational broadcasting into privately operated radio companies, or even public ones who have different priorities based on their perceptions of the needs of the total viewing audience.

Infrastructure limitations in the Maldives and the Solomons have led to the initial development of models where simply produced print based materials are supported by local tutors or study centres. The next stages in development will involve the establishment of interactive teleconferencing facilities as regional centres, however, accessibility for people in outlying areas will still remain a problem.

Assertions that distance education is for all, unrestricted by geography or other dimensions of isolation are simply not tenable in many rural areas in the developing world. There are very real barriers which have been circumvented by recruiting students who are upgrading their existing education and have reasonable access to regional centres.

Even in the developed world distance education does little for the isolated rural poor, in many ways it has become a propagator of inequity, providing alternative forms of urban provision. Therefore the model should accommodate a critical analysis of the existing infrastructure, the potential for cost effective improvements, and an acceptance of the limits of accessibility.

The Technological Environment

In the developing world, as elsewhere, there must be an optimum level of technology, but this optimum level is often exceeded in aid sponsored distance education schemes. Ansu-Kyeremeh (1991) postulates that lack of learner contribution to the education process accounts for excessive reliance on technology based distance education, unprocurable or unsuited to local socio-cultural structures.

In the haste to modernise, simplify, centralise and control, there is little cognisance of the educationally functional characteristics of indigenous communication systems. It is interesting to note that the success of local study centres in delivering distance education courses has not been paralleled by successes in satellite delivered education. Hall (1987) sees a dangerous paradox in that the demand for distance education becomes a demand for technology, which in turn becomes a demand for
excessive resources, unaffordable in a developing economy with an inadequate infrastructure.

Examples of distance education which rely on unsustainable levels of technology are disturbingly frequent, where what you see is certainly not what you get in the long term. Such observations apply to the technology of computing as much as to the technology of electronic media. Muhenda (1991) writing of her experiences with computers in East Africa suggests:

"The only advice to the decision makers is to consider whether or not automation will improve the efficiency of the operation and accomplish previously impossible tasks .... the many requirements such as different storage and environmental requirements, availability of specific machines and supplies, are just not feasible in most cases."

Perhaps examples of technological overkill can only be properly understood, if the question of fitness of purpose for whose, or what purpose, is critically examined. Apart from the obvious purpose of teaching more people more effectively, technology in distance education has been suggested or introduced to impress donors; placate ministers; justify consultancies; and even sell equipment.

Commercial and political influences are real elements in decision making about distance education but must be considered alongside a realistic assessment of the sustainability of any technology in the indigenous environment, and a quest for simple, community orientated alternatives.

In the Maldives, distance education is based on known technological competencies, being print based, complemented with audio tapes, produced by educators, with the next phase being an expansion of delivery by national radio and eventually, television, when its range becomes extended. The radio and television can only broadcast one way transmission, but to this will be added two way contact with Atoll Education Centres, using radio equipment known to function in the environment.

Similarly, in the Solomons it is planned to have communication of regional centres, but in this case satellite delivered teleconferencing is contemplated, with students from outlying areas needing to attend. Whatever the solution in particular cases, the model should link the local environment with appropriate, sustainable technology.

The Political Dimension

Distance education in developing countries is almost invariably government supported and either directly or indirectly government funded. Governments of many persuasions see national development as a priority and, as indicated by Carnoy (1980) are aware that education is an integral part of national development strategies in the developing world. So the new utilitarianism emerging in Western education systems at the expense of liberal or community education, has been a feature of distance education in the developing world. The Maldives is no exception, with
education an important part of a comprehensive development plan. Guy (1991) suggests that distance education in developing countries has a tendency to become elitist, increasing the gap between the educated and uneducated, helping group who already have some education.

This is certainly the case in the examples considered, as the functional English courses in both countries can be seen as a utilitarian addition to the education of the partly trained. Although, since the major client groups are, or will be, teachers, it is hoped their additional training will permeate further.

There is some suggestion that indigenous elites control much of distance education in developing countries and have strong cultural affinities with overseas consultants and aid-donor representatives. In such cases it is likely that the utilitarian, rather than emancipating model of education will be translated into the distance mode. Distance education has great potential for individual and provincial empowerment which may not be altogether harmonious with some political systems.

In the Solomons, with its heterogeneity of population, strong regional government and fairly liberal central government, the change in emphasis from teacher training only to community education, including upgrading for untrained teachers does not appear to cause significant ideological conflicts.

In the Maldives, although each island and atoll has a chief and a system of local government, the system is very centralised with political power residing in the capital, especially in the office of the President. Consequently, distance education is focussed more on national and political goals, which would not be achieved if distance education was directed towards the development of local autonomy. Local politics are important in both cases as, without the support of Atoll Chiefs in the Maldives and local politicians and government officials in the provinces of the Solomons, distance education is unlikely to succeed.

An interesting example of the relationship between politics and distance education does occur in the Maldives, where a complex and effective system of radio telephone communication is used to ensure that the central government is aware of what is happening throughout the country. This system may well be the key to successful delivery of distance education to remote islands and atolls as it is proven and familiar technology.

The politics of donor countries and organisations are also significant, as aid is often predicated on assumptions of shared ideology.

Therefore, politics at all levels are an important consideration in designing a distance education system for a developing state.
Summary

What is needed is a model of distance education for developing countries, especially isolated small island states, which takes into consideration:

1) **Historical Influences**: changes from colonisation to independence; the danger of technological neo-imperialism.

2) **Cultural Factors**: differences between and within states; languages; customs; beliefs, learning styles.

3) **Geography and Infrastructure**: dimensions of isolation; production and distribution facilities.

4) **The Technological Environment**: electronic media and computers; availability and support; relevance and unavailability.

5) **The Political Dimension**: national and local government; national and community development; politics of aid.

**Suggested Model**

Rather than the introduction and adoption model where distance education is 'given' to the developing country in the image of the donor, with adaptation expected or assumed, a better model involves situational analysis to identify significant environmental characteristics and the relationships between such factors and their relationship with the functions of distance education.
Distance Education System for Developing Island States

Environment Characteristics
- Historical Background
- Contemporary Social and Linguistic Culture
- Dominant and Local Political Perspectives
- Geography and Infrastructure
- Technological Capabilities

Extraneous Input
- Experience
- Expertise
- Finance
- Technology
- Training

Educational Factors
- Who Should Be Taught (Clients)
- What Should Be Taught? (Curriculum)
- How Should It Be Taught? (Methodology)
- When Should It Be Taught? (Planning)

System Characteristics
- Organisational Structure
- Staffing and Training
- Funding and Financial Management
- Design and Development
- Production and Distribution
- Support
- Evaluation and Growth
- Feedback and Evaluation

INPUT
- Environmental Characteristics
- Extraneous Input

RECIPROCITY

OUTPUT
- System Characteristics

Who Should Be Taught?
- Clients

What Should Be Taught?
- Curriculum

How Should It Be Taught?
- Methodology

When Should It Be Taught?
- Planning

Extraneous Input
- Experience
- Expertise
- Finance
- Technology
- Training

System Characteristics
- Organisational Structure
- Staffing and Training
- Funding and Financial Management
- Design and Development
- Production and Distribution
- Support
- Evaluation and Growth
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Distance EDUCATION SYSTEM

Environment CHARACTERISTICS
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