

# Supporting Guyanese Distance Education Audiences: Challenges for Providers in a Small State

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## **Abstract**

Guyana, a lower income country that has a limited communication infrastructure and occupies an area of 216,000 km<sup>2</sup>, is home to a population of 750,000. While 90 percent of the population occupies the narrow and relatively easily accessible coastal plain, the remaining population is sparsely distributed in the mountainous and forested hinterland which, more than any other part of the country, is affected by limited trained human resources. Guyana's topography combines with her population distribution pattern to pose immense problems for the provision of quality face-to-face education for all Guyanese. An additional problem to the provision of quality education is the small budget available for educational development. Confronted by these challenges the nation has turned to print-driven distance education as an alternative mode of educational delivery. The distance modality allows delivery of a standardized educational programme to coastal and hinterland communities. Nevertheless, if it is to facilitate equitable opportunities for education, it requires the provision of suitable support services to help students overcome the challenges presented by distance study and any resource limitations that exist in their communities. Given the limitations in the country's communication infrastructure, human resources and financial capacity, Guyana has had to opt for equality of concern rather than equality of provision in providing support services to distance students in less accessible areas of the country. This paper details the problems encountered by providers of distance education as they attempt to offer quality student support, and chronicles the attempt to solve these problems.

## **Introduction**

A recognized characteristic of distance education is its potential for enabling the delivery of a standardized, quality educational product to students whose geographical and sociological circumstances differ vastly. This strength inheres in the capacity of this delivery mode to harness

the knowledge and skills of relatively small numbers of resource persons to produce quality educational materials, which can then be made available to large numbers of students in varying locations and of varying backgrounds. It is a function of the freedom from constraints of time and space offered by some forms of distance

delivery. In addition, it is a reason for the increasing reliance on this modality by many small states which are challenged to provide equitable educational opportunities despite limited financial and human resources.

Another equally recognized characteristic is the challenge that distance education poses for some students. Rowntree (1997) observes that in a self-study situation, several learners may despair, become demotivated and drop out.

This second characteristic gives rise to the need for learner support, a third trait and one which is integral to successful distance education. Learner support in this context comprises those activities that are designed for the benefit of the individual student and are effective, relevant and functional in the particular circumstances. It comprises, *inter alia*, individualized activities delivered in interactive groups that can meet face-to-face, by telephone, electronically or through some other medium (Tait, 1996, 59). It is a 'helpline', which involves access to a tutor or mentor from whom students can get a rapid response to their queries or needs (Rowntree, 1997, 63).

It has a cost, which takes the form of an investment of human, physical and financial resources. It is an investment that could prove challenging for small states. How might they rise to the challenge? This paper seeks to respond to this question as it chronicles Guyana's experiences in the provision of supported distance education for students in some of the remote areas of the country.

## **Background**

Guyana, home to a population of 770,000, occupies an area of 215,000 km<sup>2</sup> on the South American continent. The country faces two inter-related constraining factors in its efforts to provide equitable educational opportunities. The first is geographical. While 85 percent of the Guyanese

population occupies the narrow and relatively easily accessible coastal plain that comprises 10 percent of the land space, the remainder of the Guyanese people are sparsely distributed in the hinterland, 60 percent of which is mountainous and forested. There the population density ranges from 25 to 1 per km<sup>2</sup>. The second factor is financial: Guyana is a lower income country.

Providing quality face-to-face education for the widely dispersed residents of hinterland areas requires considerable investment of financial and human resources. Evidently, the country's capacity to make the required financial investment is curtailed by its depressed economy and the resultant low educational budget. In 1996 Guyana allocated a mere 3.6 percent of the gross domestic product to education. The country's capacity to invest the necessary human resources is constrained by the paucity of trained personnel in hinterland areas. Also restricting efforts to provide essential human resources in these sectors of the country is the general flight of trained teachers from the nation because of uncompetitive salaries. Indeed, this latter barrier to the provision of face-to-face education extends to coastal areas where inequity in educational facilities and provision is quite evident.

As a consequence, the nation's educational administrators see, in distance education, a means of equalizing access to education. Thus, a number of key institutions have introduced distance education programmes.

The remainder of our discussion will focus on a sample of these programmes.

## **A Profile of a Sample of Distance Education Programmes Offered in Guyana**

The predominant thrust of existing distance education programmes in Guyana is towards

remediation and the development of the skills of junior professionals, especially teachers. Among these programmes are:

*The Distance Education Foundation for Unqualified Teachers*, which is conducted by the Guyana Basic Education Teacher Training Project of the Ministry of Education. The programme seeks to realize an increased number of qualified teachers in hinterland Regions 1, 8 and 9 and remote or deep riverain areas of Regions 2, 4 and 7.

*The Guyana In-service Distance Education Programme*: This programme was developed by the Ministry of Education to increase the competence of the large number of untrained, underqualified junior secondary and community high school teachers who need to upgrade their knowledge and skills in Mathematics, Integrated Science and English Language. Thus, in its initial delivery, it focused on these subjects and Teaching Methods. At present it focuses on Mathematics, Integrated Science, English Language and Social Studies. The distance mode was selected because the school system could not afford to lose from the classroom at any one time, the large number of teachers involved.

*The Pre-University Programme* which encompasses English Language and Mathematics. Of course, both these subjects are considered basic routes to the acquisition of knowledge and skills in a range of technical, vocational and academic subject areas in which the performance of a significant percentage of Guyanese students needs enhancing. The programme was originally intended to target secondary school leavers who have not mastered the requisite skills. However, in response to demands, the provider has adopted an open entry policy, which has resulted in participation also by adults who have not had exposure to studies at secondary level.

*The Supervisory Management Programme* which introduces junior supervisors to key administrative skills. The programme had its genesis in the country's establishment of a decentralized national administrative process which, over two decades ago, resulted in the country being divided into ten regions, each of which is locally administered. A concomitant of this process has been the need to build the capacity of these regions to administer their own affairs. Amid the areas in which the newly formed regions continue to require enhanced skills is supervision. Thus, one region requested the development and delivery of the programme which was quickly embraced by four other regions.

*The Pan Commonwealth Diploma in Youth in Development* which prepares youth work practitioners to empower young people to develop themselves and their communities. The programme, which was developed for delivery in the four Commonwealth regions - Africa, Asia, the Caribbean and the South Pacific - is conducted in partnership with its designer, the Commonwealth Youth Programme.

*Basic Nutrition for a Changing Society* which seeks to equip food service workers and other interested groups with information and skills centering on nutrition and health. The programme is conducted by a local agency in collaboration with the Ministry of Health and its developer, the Caribbean Food and Nutrition Institute.

## **Support Structures**

Table 1 presents an overview of the delivery strategies and support mechanisms in the six programmes as well as information on two factors - reach and approach to financing - which have proved to be key determinants of the nature and

quality of support possible and which, as a result, we will examine first.

### ***Reach and Financing***

There is considerable variability in the reach of the programmes. Only the Pre-University Programme reaches residents of all ten regions. Notably, it is the programme which is most heavily reliant on students' fees and therefore the least well financed. With the exception of early pre-university students who were sponsored by the Commonwealth of Learning, subscribers to this programme have not benefited from scholarships. Perhaps contributing to this situation is the fact that, on the one hand, the trend has been for less than 60 percent of these students to be employed and, on the other, there is a perception that direct benefits do not accrue to most areas of employment from the study of the pre-university subjects.

The Supervisory Management Programme is offered to participants in five regions. While its financing is also dependent on students' fees, the programme attracts a high level of employer funded scholarships because more than 90 percent of its clientele is employed and there is a belief that on the job performance benefits directly from students' exposure to this subject.

The reach of the two foregoing programmes, which are offered by the same provider, results from the institution's concern for inclusiveness and its recognition that students in the more remote areas have little or no access to opportunities for participation in any form of adult and continuing education.

Two programmes - the Distance Education Foundation Programme and the Guyana In Service Distance Education Programme - serve residents of four regions. Collectively, these Ministry of

Education programmes address teacher upgrading needs in eight regions. Funding for both these programmes is sourced from external agencies with a counterpart provision from the government. Significantly, teacher training is the only area of distance education which is government sponsored, thus signaling the administration's priority in expending its limited resources.

The Pan Commonwealth Diploma in Youth in Development reaches students from two regions. However, all its face-to-face sessions are held at the university campus, thus requiring that students from Region 5 travel to Georgetown. This pilot programme is fully funded by the Commonwealth Youth Programme.

It is therefore evident that each of the externally funded programmes focuses on a limited number of regions. This focus reflects an effort to address the variables associated with delivery in the targeted regions.

Basic Nutrition for a Changing Society benefits participants from three regions. However, it is delivered from two sites - Region 4 from which the tuition originates in most instances and Region 2 in which it takes place through a teleconferencing link with the Georgetown site. Students from the third region have to travel to the Region 4 site to participate in the sessions. This programme depends on tuition fees but its clientele attracts many employer scholarships because its members are largely employed and employers anticipate a direct link between this form of training and job performance.

### **Delivery Strategies and Student Support**

A number of similarities are evident in the delivery strategies and support mechanisms across programmes. Delivery strategies comprise two

**Table 1**

1 Programme	2 Reach Regions	3 Source of Funding	4 Delivery Strategies	5 Support Mechanisms
Basic Nutrition for a Changing Society of the Institute of Distance and Continuing Education (IDCE), the Ministry of Health and the Caribbean Food and Nutrition Institute (CFNI)	2, 3 and 4 (Coast)	CFNI ( through Material development)  Students' fees Approx. 50% of students receive scholarships from employers. Fees cover tutoring, mentoring and all other costs)	Mixed Mode:  Face-to-face/ teleconferencing supplemented by a printed manual	Pre-Course: Newspaper Ad., Interviews, Study Skills, Profile Planning In-Course: Lectures by Face-to-Face/ teleconferencing twice weekly, Mentoring for academic & emotional support when needed, Facilitation of Teleconferencing Sessions, Printed materials, Occasional use of videos
The Foundation Upgrading Programme of The Guyana Basic Teacher Education Programme	1, 7, 8, 9 (Hinterland)	CIDA Counterpart-Government of Guyana	Print Based supplemented by face-to-face tutorials	Pre-course: Circulars, Interviews, Study Skills, Profile Planning In-course: (Interactive Self-Study Modules) Monthly Face-To-Face Tutorials, Mentoring
The Guyana In-service Distance Education Programme	3, 5 ,6 (Coast) 10 (Inland and riverain)	DFID Counterpart-Government of Guyana		Print Based ( Interactive Self Study Modules) Model 1- Fortnightly Face-to-Face Tutorials & Mentoring Model 2 - 1 week residentials at start of semester; cluster meetings
The Pan Commonwealth Diploma in Youth in Development of the Commonwealth Youth Programme and partner IDCE	4 and 5 (Coast)	Commonwealth Youth Programme	Print Based supplemented by face-to-face Tutorials, Self and teleconferencing	Pre-course: Advertisements, Interviews, Orientation session, Study skill, Profile planning In-course: Interactive, self-study modules, Tutorials twice per month, Teleconferencing once per module, self help study groups
The Pre University Programme of the Institute of Distance and Continuing Education	1, 2,, 3, 4, 5 ,6 ,7, 8, 9, 10 (Coast, riverain, hinter-land)	Start-Up- Commonwealth of Learning –material Development and tuition scholarships CIDA-Paper, PROMESUP/OAS- Travel. Currently- Students' fees	Print Based supplemented by Face-to-Face Tutorials and Teleconferencing	Pre-course: Advertisements, Counselling In-course: Pre-study counselling, study skills information contained in a student's handbook, Interactive self-study material, self help study groups. Module 1- 2 hour monthly tutorials Moduel 2- 6 hour tutorials once per term
The Supervisory Management Programme of the Institute of Distance and Continuing Education	Regions 2, 4, 6, 7, 9 (Coast and hinter-land)	Students' Fees Several students receive scholarships from employers.	Print Based (Interactive Self Study Modules) supplemented by tutorials and teleconferencing	Pre-course: Advertisements In-course: Print based interactive modules, tutorials

**Table 2**

Activities cited by Bailey et al	Activities Predominating in Sample Programmes	Features Cited by Bailey et al	Features Predominating in Sample
<b>Programmes</b>			
• marketing and publicity	√	• home/workplace study	√
• pre-entry guidance	√	• study centres/exam centers	√
• induction and preparation	√	• tutors	√
• development of learning skills	√	• counselors	√
• academic guidance/mediation of course materials	√	• mentors	√
• assessment	√	• audio visual and broadcast media	√
• coping with administrative, personal and affective issues	√	• electronic media	√
• profile planning	√	• printed materials	√
• careers education and guidance		• peer support groups	√
		• community networks	
		• IT centres, libraries and laboratories	

Bailey et al (1996)

basic components – a printed element and a synchronous element which takes the form of face-to-face meetings or teleconferencing. Moreover, in all but one course the synchronous element is supplementary.

Support mechanisms comprise pre-registration information, an orientation, tuition centred on the use of self-study materials and meetings with support personnel.

While all the programmes include tutors among their support personnel, only three use mentors and two use peer tutors. In one case the mentoring role is combined with that of teleconferencing facilitator.

The frequency with which students meet support personnel varies. On an average where interactive printed material is utilized, meetings with tutors take place at least once per month. The exception is found in one region where meetings are scheduled once per term. In the only situation in which the printed material is not designed for self-study, sessions with tutors are held twice weekly. In all the programmes, meetings with mentors are held as often as students require them.

Inherent in the selection of delivery strategies and support mechanisms is the perception that good distance education involves the use of multimedia approaches and, more importantly, requires group meetings or the provision of support outside the

learning materials. Taitt (1996) credits this form of support with infusing distance education, a potentially informal form of learning, with dialogue and a sense of community typical of human learning and social situations. In addition, he views student support as a mechanism for helping equalize participation in distance education by assisting learners overcome barriers to successful learning which inhere in their geographical or sociological circumstances.

Also inherent in the choice of support strategies is an apparent perception that various teaching/learning activities and features must come together to bring about effective support. This perception mirrors the view of Bailey et al. (1996), who posit a list of teaching/learning interactions and features that characterize student support. Significantly, as Table 2 shows, 90 percent of the activities and approximately 80 percent of the features suggested by these writers are integral to the support provision of the six programmes.

### **Challenges of Supporting Users**

The student support strategies described above are implemented against the backdrop of a number of constraining factors, many of which inhere in the country's topography and population distribution and characterize hinterland and deep riverain areas and others which have their source in the limited finances available for educational resource development.

Among the constraints in hinterland and riverain areas are

1. An inadequate supply of skilled content specialists to hold tutorials. This problem has particularly serious implications since the literacy levels in these remote communities are often quite low and so the need for quality face-to-face support is crucial.

2. The absence of communication facilities such as telephones to facilitate receipt of tutorials originating at distance sites. While government-owned talk back radio facilities are available to the programmes at some sites, they are used primarily for the transmission of messages.
3. The poor transportation system in these areas. In some regions the only way of getting to the tutorial centres is by walking. In many cases this means walking for two days. In others, it might mean traveling several miles by boat. In addition, travel in some areas is impossible during the rainy season when the rivers are impassable.
4. The absence of road, rail or air service directly linking hinterland regions. Journeying from one of these regions to a site in an adjoining region often requires travelling first to the capital, through which all the main routes by road and air are located.
5. The relatively high cost of domestic flights.
6. The low per capita income of communities in these areas and the resultant inability of students to meet the real cost of support provision. *The Guyana Human Development Report* (1996) indicates that approximately 88 percent of the ethnic group which comprises the main inhabitants of hinterland regions live below the poverty line.
7. An inadequate number of learning resource centres. These centres, which are repositories for enrichment and supportive texts, are not easily accessed by students in the more remote areas of the country.

Arising from these constraints is a range of challenges, which can be illustrated through a snapshot of experiences in some of the programmes.

There is a transportation challenge confronting students as evidenced by the Foundation Upgrading Programme in Regions 1, 7, 8 and 9. The providers originally established four centres in each region. However, this meant that trainees had to travel several miles. In one geographical situation, a trainee travelled 161 miles and several others travelled over 60 miles by boat. In another, trainees travelled 25 miles over mountains and across rivers.

There is a corresponding administrative challenge to providers. As a result of the travel demands on students, organizers of the Foundation Upgrading Programme have decided to hold tutorials in smaller clusters, thus requiring efforts to identify additional tutorial staff in areas where students require a great deal of effective remedial work and where there is a limited number of qualified resource persons.

There is a related financial challenge which is linked to the employment of additional tutors or other resources and which is clearly exemplified in the experiences of the Guyana In Service Distance Education Programme in Region 10. Because many of the teachers pursuing the programme in that region are dispersed in small pockets accessible only by river, the model of support used entails the conduct of a one week residential at a central site at the beginning of each semester and cluster meetings with a local tutor. A recent study pegged the cost of delivering the programme with these support structures at \$83,172 per student. This cost is almost double that incurred in delivering the programme in another region in which residential are held but in which regular ferry services link communities. Indeed, it is more than double the unit cost for the support structures necessitated in delivering the programme in two coastal regions which do not require residential.

There is also the challenge of maintaining quality

in cases when the cost of support is prohibitive. Delivery of the Pre-University Programme in Region 1, Mabaruma, is a case in point. Because of the unavailability of qualified local tutorial staff and telephone facilities in Mabaruma, it was necessary for a tutor to be flown in from Georgetown. However, the cost of travel and accommodation for tutors was high, the number of students did not allow for the spread of this cost over a sizable student body and the resultant high unit cost could not be transferred to students in the lower income hinterland area. As a result, the organizers instituted a support model comprising two three-hour tutorials held over a two-day period once every quarter, and sought external funding to meet the additional cost.

How did this affect quality? While the actual number of contact hours available to students under the Mabaruma support model was the same as that for coastal students, who had one two-hour tutorial per month, the frequency of meetings was reduced considerably and, concomitantly, feedback was delayed. Thus, in real terms, the level of support and, by extension, the quality of support available under this model was lower than that available on the coast. This deficiency is especially noteworthy since, as indicated earlier, one of the functions of student support is to help learners overcome barriers posed by their geographical circumstances. It is this precise barrier that is not adequately addressed under the conditions of the Mabaruma model.

Another, and perhaps even more far reaching, development in the delivery of the programme in Mabaruma is that, while funding could only be acquired for a two-year period, because of the flexible model adopted some students did not complete their programmes within the funding period. With no means of sustaining the additional charges that devolved to its budget, the provider was forced to reduce the frequency of tutorials even further.

While it may be argued that there is a reduction in students' need of support at later points in their studies, it is nevertheless the case that these students received less support than their counterparts on the coast. Moreover, it is evident that in situations where student support costs are prohibitive, if suitable alternatives are not found, there is considerable potential for depreciation in the quality of the learning experience.

The quality of support and therefore the quality of learning are also affected by lack of access to enrichment materials. This is a challenge that has its source in the fact that the learning resource centres in hinterland areas are not easily accessible. With respect to this challenge, it should be noted that, although the programmes entail the use of self-contained study materials, they must cater for further exploration of concepts, especially for the benefit of the more able students.

### **What Relevance to Small States?**

A number of the challenges cited above may be considered specific to the Guyanese geographical context. While there may be an element of truth in that view, when a different lens is applied, one can observe some factors that have relevance to small states in general. The first is that the small size of the population served in some communities may not lead to a realistic spread of costs, thus resulting in high unit costs. Secondly, since many small states also have a significant proportion of rural poor, higher costs may result in reduced access for students who are in greatest need of the distance intervention. Thirdly, where efforts are made to reduce the cost by reducing the level of contact, a corollary might be a reduction in quality. Fourthly, difficulties may be experienced in providing adequate learning resource facilities for sparsely populated communities. These two latter challenges are particularly noteworthy since all providers must

be concerned not only with access but also with ensuring maximum benefit from access. Commenting on this point, an international commission on distance education that was contracted by the African National Congress to review South African distance provision observed that:

The new government will have to consider the cost efficiency of its investment in human resources development, and serious questions must be asked of institutional policies that give access but fail to provide forms of education that enable students to capitalise on their opportunity. (Glennie, 1996, 24)

### **Solutions**

In Guyana, steps to overcome the above-mentioned barriers have been or will be taken at two levels, notably at the level of the individual institution and at the level of a collective of providers.

Among the strategies used or planned by individual institutions are the

- Adoption of a system of on the job training of local personnel to increase the number of available content specialists. Administrators of the GUIDE programme have provided opportunities for potential tutors to work along with, and have their tutoring activities monitored by, tutors from coastal areas. The agency also intends to use its newly acquired educational software to provide academic assistance to tutors and students. Of course, this latter facility could be used only in those regions with the necessary electrical infrastructure.
- Establishment of partnerships with non-governmental organizations functioning in remote areas. The Guyana Basic Education Teacher Training Project has established

shortterm partnerships with agencies such as Youth Challenge, Guyana and the Queen's programme in International Development (QPID) to provide emotional and academic support for students disadvantaged by their location.

- Reimbursement of some aspects of students' costs to increase accessibility for lower income students. The Guyana In Service Distance Education Programme and the Guyana Basic Teacher Education Project reimburse travel expenses for students from outlying areas.
- Use of book boxes to overcome the problem of access to enrichment material. GUIDE has provided boxes with relevant books for use by schools in close proximity to each other. The boxes are placed in the care of students themselves and their use is monitored by coordinators, local tutors and central office personnel when they visit the clusters.

Strategies implemented or to be conducted through inter provider partnerships include

- Where possible, using the same resource persons for all the programmes conducted in a region. This approach is particularly directed at addressing the shortage of content specialists and at enhancing mentoring and programme coordination.
- Establishing a partnership involving distance education providers, the private sector and communities to bring about the development of a network of community learning centres and satellite centres. One of its key goals will be the facilitation of activities designed to increase the influence and effectiveness of individual organizations in the areas of needs assessment, course development/acquisition, training and student support. It is envisaged that the process will be financed through joint

approaches for grants/loans for major capital inputs, private sector contributions to some capital items, community provision of land, materials and if possible suitable existing buildings, and participant contribution through subsidized user fees. Shared use of existing facilities is also planned and has already begun to be implemented.

## Conclusion

Undergirding the aforementioned approaches is recognition of the need to adopt creative strategies for dealing with problems. The main criterion, it would seem, is that support efforts should be functional and therefore tied to helping students realize their learning goals rather than being constrained by a narrow preconception of distance education which precludes the use of relevant and innovative alternatives when a tried approach proves impossible or deficient because of socioeconomic, geographical or other related factors. As Leach opines "student support would seem to be a process through which understanding is both created and transformed, rather than a 'provision' to be 'managed'" (1996, 123).

Also integral to the solution is the establishment, where possible, of partnerships with other providing agencies as well as with non providers who have an interest in individual and/or community development. This pooling of human, physical and financial resources, if well managed, has the potential to maximize the returns on the investment by the individual units. However, as Glennie observes, as this process is implemented "the institutions must ... ensure that they develop, implement and continually evaluate and adjust the service offered to learners" (1996, 30).

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