

A Case Study: Evaluating Distance Education at the University of the West Indies

Ruth Reviere

*The University of the West Indies Distance Education Centre,
Cave Hill campus, Barbados*

Abstract

The University of the West Indies (UWI) is in the process of becoming a dual mode institution. Its Distance Education Centre (UWIDEC) was established to effect the university's distance education mandate. The model of DE envisaged is a faculty-driven one. There still remains, within some sectors of the UWI, a reluctance to embrace DE, and this has implications for its successful implementation and, also, for its acceptance by the various stakeholders. These stakeholders include the broad university community – its students (both face-to-face and distance), regional governments (an important source of funding for the university), and the broader Caribbean community. All of these factors have implications for the way evaluations are envisioned and implemented and for their results. The paper is a case study of the evaluation of one DE course offered by the UWI. It describes the facilitators and barriers to the evaluation exercise, in addition to the evaluation results themselves.

Introduction

This paper presents a case study of the evaluation process at the University of the West Indies (UWI), as it pertains to distance education (DE). It begins with brief definitions of DE and evaluation and goes on to identify some of the impediments to the evaluation process and includes illustrations from an attempt at evaluating some DE courses.¹ This paper also discusses the importance and purpose of evaluation in distance education and presents recommendations on an effective and useful evaluation process.

One remnant of our colonial past is that the Caribbean is still fragmented into a set of small island nations, with limited material and economic resources. This has meant that we have been forced to cooperate in the form of UWI (a single multi-campus university), in order to allow our

peoples access to tertiary level education. Considering the limited physical capacity of the three campuses, including our outreach programmes like Challenge and our work with the regional tertiary level institutions (TLIs), DE provides this region with an opportunity for increased access to tertiary education, in keeping with UNESCO's Education For All by 2015, to which all Caribbean governments are signatories. To fulfil these governmental mandates, and UWI's own mission, its Distance Education Centre (UWIDEC) should be spearheading research in identifying strategies to develop and ensure access to new programmes and credentials deemed important on a regional level. It should also be ensuring the availability of a suite of support services, including the provision of programme advice, assessment of learners' current skills and knowledge, and assistance in the development of

programme learning plans. The first step in meeting these glaring needs is for UWIDEC to put an evaluation programme in place to assess its own efforts and those of other DE programmes put in place by regional governments. It would appear that the institution concurs with this view, since the long-awaited research officer has recently taken up residence at Cave Hill.

The UWI, begun during the throes of British colonialism, has an academic history embedded with British traditions. It is still in the process of becoming a dual mode institution and, since 1997, has begun to offer some of its programmes (mainly by print) to both face-to-face and distance students via its Distance Education Centre (UWIDEC). Previous to this, beginning in 1982, UWI offered a more limited DE service through its Distance Teaching Enterprise (UWIDITE). UWIDEC was established to effect the distance education mandate of the university. For a university that began life with a clearly defined identity as a traditional institution to which students come for face-to-face instruction, UWI has moved a significant way towards a dual, flexible-learning instructional mode, but still has a long way to go to reach the student-directed modes commonly found in open learning institutions. Profiles of UWI's distance students indicate that most possess professional skills and substantial work experience. Distance courses offered by the university are intended to enable these students to work at their own pace, in their own location and relate course content directly to their daily occupations. The UWIDEC courses are normally highly structured. Most are fairly interactive and provide students with many opportunities to practise and clarify the course content presented.

Research done here (see Table 1) and elsewhere confirms that there is a positive correlation between age and success, i.e., older students do better than younger ones (Rekkedal, 1998). In

general, and according to our own experiences, adult students, well established in a working situation with family and children, succeed better than younger students with fewer vocational, family, social and economic responsibilities. There is also a positive correlation between the level of previous education and all measures of success in distance study,² and a negative relationship between time since last school experience and success (Rekkedal, 1998). The data provided later in this paper show that UWI students do possess all of these characteristics.

Table 1: Age Range of Students in DE Sample

< 20	21-30	31-40	41-50	>51	NR
2	25	40	10	1	2

Table 2: Previous Academic Qualification Male

1	2	3	4	5	6	7	NR
27	22	28	4	2	2	0	3

Table 2: Key

- 1 CSEC /O-Level
- 2 A-Level
- 3 Certificate
- 4 Diploma
- 5 Associate Degree
- 6 Degree
- 7 Other

Defining Distance Education

Distance education is often defined as *flexible* and *open*. *Flexible* here means that learning options can be adjusted for both current and future learning needs and provides for the learner at a time and place suitable to his or her needs. On

the other hand, *open* education constitutes the removal of academic restrictions and privileges – that is, the elimination or reduction of the barriers between areas of knowledge, careers, institutions, the increasing and enriching of useful activities and experiences to complement the academic educational purposes. Above all, open education proposes substantial changes in the traditional relationship between the students and educators.

As defined above, DE affords the region a welcome opportunity to look beyond the conventional model of education to provide increased opportunities tailored specifically to Caribbean students. This provides us with an ideal opportunity to capitalize on new information and communication technologies. New technologies can be used to produce, modify, duplicate, and transmit teaching materials of all sorts. These can extend access to education, especially for isolated rural and island communities – which are major locales of disadvantage in this region.

Distance education, therefore, delivers education directly to the learner, in a convenient mode and at a time and place convenient to the student. It makes the education available to meet the particular needs of the student. Consequently, it overcomes many of the obstacles faced by students when confronting the inflexibility of traditional systems. Indeed, given that business and other working people (who make up the majority of UWIDEC students) often have inflexible schedules, distance education, which allows learners to study at the time and place of their choice, is probably the most effective vehicle to reach them. Distance education implies the utilization of media systems, either individual or collective, in order to offer effective instruction, especially where the direct contact between students and educators does not exist.

The model of DE envisaged and attempted at UWI is a faculty-driven one. Despite this, there still remains within some sectors of the UWI a

reluctance to embrace DE, and this has implications for its successful implementation and for its acceptance by the various stakeholders. The instructional modes employed include printed material and two-way communications with a face-to-face tutor. The tutors represent the students' main contacts during their studies. Thus, high qualities for both the printed material and the tutor's work are *sine qua non* for the total system to function satisfactorily. In order to ensure this high quality, evaluation and assessment should be built in as integral parts of the course development and instructional processes.

Defining Evaluation

There is no single definition of evaluation used in DE or in education generally (Rathore and Schuemer, 1998). Evaluation is most generally defined as part of most human activities involving decisions and simply means assessing the quality³ of something. It has also been defined as “the collection, analysis and interpretation of information about any aspect of a programme of education and training, as part of a recognised process of judging its effectiveness, its efficiency and any other outcomes it may have”. There is another definition – this is the act or result of examining and judging the value, quality, significance, amount, degree or condition of something. Evaluation is also considered as a process that implies a comparison of the object under evaluation to another similar object used as a standard of comparison whose qualities are well known to evaluators. Its operational aspects present difficulties, because the evaluation of a distance education system, being dynamic, requires permanent monitoring and restructuring.

There are many reasons why evaluation and other measures to control quality have been so important and have been taken seriously by DE institutions. Some of these include the fact that there is less immediate contact between

programme planners, teachers and students in DE, so there is a need for formalizing evaluation of what is going on. This also makes formal evaluation more necessary. In addition, political purposes, such as the need to reach particular target groups, are often more explicitly stated in distance education. Evaluation of results is therefore desirable and can be quite innovative as regards pedagogical elements, media and technology, and organization. Finally, DE is often influenced by the need to demonstrate quality in order to overcome the usual perception of being second rate.

Evaluation is of two main types - formative and summative. Formative evaluation takes place during all stages of instruction and is designed to promote revision of procedures and/or materials. Summative evaluation takes place at the end of instruction and is designed to assess the overall effectiveness of the instruction. Both types of evaluation can include quantitative and qualitative elements. A quantitative evaluation yields a breadth of information, and asks questions that can be statistically tabulated and analysed. A qualitative evaluation gathers a wider range and depth of information using open-ended questions and interviews in addition to observations. For UWIDEC's purposes, the most useful evaluation programme would be one that is essentially formative in nature with elements of qualitative and quantitative evaluation included.

Evaluation is crucial to assist in meeting the needs and requirements of the instructors, students and curriculum development in distance education. Evaluation of both courses and programmes will provide course developers with information that can help make instruction more effective. A successful evaluation gathers a wider range and depth of information, choosing the information to be gathered, collecting and analysing data, and incorporating the evaluation findings in the revision.

DE Evaluation at UWI

Concerns about evaluation have changed and grown as UWI has become more committed to distance education. The concerns about design and technology remain strong. In this paper, I am concerned mainly with course evaluation where the focus is on how well a particular course, curriculum or instructional design works, how it might be improved and how it compares with alternatives. Although, at UWI course designs and development are not now evaluated from their first beginnings, with the installation of the new research officer it is hopeful that they will soon become integral parts of these processes. A fairly useful method of doing this can be through an initial piloting of the course materials with a limited number of students. This can usually identify about 80 percent of potential problems (Potter, 1998) and is a simple but effective method that originated with traditional classroom teaching. A second pilot with a larger group of students can then be conducted from which the proposed course can be fine-tuned.

So far, there is little in the way of DE course evaluation at UWI. What has obtained so far is a rather sporadic assessment of some course materials with a student questionnaire given to students at the various sites. This questionnaire contains sections that assess the elements of the DE courses: the course materials, course guides, teleconferencing and face-to-face tutorials. The ostensible purpose is to gather information in order to improve the quality of the materials offered. However, because there is no ongoing programme in place, the previous attempts have resulted in poor response rates, and failure to use the evaluation results effectively. The face-to-face form of course evaluation at UWI is somewhat more effective since there is a structure in place and the process is therefore more systematic.

Regarding the evaluation of distance education, it may be observed, therefore, that at UWI, the traditional concerns about the learning

experience of the individual student have been carried into the distance education process and this individual remains today the primary focus of distance instruction and evaluation.

For UWI, any effective evaluation should include content and pedagogy. Evaluation should provide information to improve, or at least maintain, the quality of the course materials. For effective and useful evaluations, we need to consider the different approach/approaches employed in the course development, the concepts used; the tasks included; the methods of evaluation; the assessment and delivery of materials and student support options; in addition to economic, political and social issues. Evaluations should also collect information on reasons for enrolling or withdrawing from courses; perceptions of course experiences; tutor/student interactions; effectiveness of learning processes used. Evaluation should provide the means to estimate quality, relevance, performance, etc., with a view to correct, improve or change as well as to keep track of the academic evolution of the university, to build a reliable database and devise a set of criteria and adequate mechanism for institutional support. The set of data systematically gathered through evaluation should provide a basis for a range of activities carried out by the different administrative and academic units of the university.

Design of the Evaluation Process

If our aim really is to strive for higher quality, we must take internal formative evaluation seriously. The evaluators should be given free hands in deciding evaluation design, procedures and instruments. A useful evaluation design can consist of six stages as follows: (i) planning evaluation strategy, (ii) reviewing course goals and objectives, (iii) knowing students and their needs, (iv) deciding what information should be gathered, (v) collecting and analysing data and (vi) using the evaluation results to improve instruction.

In contrast to the evaluation design, the curriculum design determines the content, profiles, pedagogical objectives, and tasks included in the instructional materials. These curricular specifications are transformed by the instructional design into programmes sited for learning and “instructional sets” for the student such as printed materials, audio-visuals, etc. These sets should be validated on a representative sample of the population before being applied to the courses.

Evaluation of distance education programmes should be based primarily on a formative process that focuses on the individual student. This process could begin with informal discussions within the course development team (comprising instructional designers, curriculum development specialists, editors and course writers), to ascertain if there is a collective understanding of the overall goals and purpose of the course; a specific understanding of the instructor’s view of the course; and a recognition of evaluation as the basis for continuous revision of the course design. These discussions should proceed until a rough draft of the course is ready to be presented. The course can then be pilot-tested initially with a small group of students. The instructional design team can then obtain information from the students – a general reflection on the course so far. At a second pilot-test, the team can conduct a more focused discussion on the students’ views of the specific design of the course; this second pilot-test can include a questionnaire concerning the effectiveness of the mode of interaction between the instructor and the student.

Any system evaluation must begin with certain basic measures. How many courses have been produced? How many students are there? How many applicants had to be turned away? This data can be drawn from administrative records and be presented regularly, in the form of an annual report or, in some cases, a statistical digest.

DE Evaluation and Gender

While the main purpose of this paper is to describe what obtains at UWI in terms of evaluation and the impediments to the process, we need to discuss the issue of gender briefly. It was suggested earlier that any effective and useful evaluation of DE at UWI should consider social and political issues and these issues, of course, include gender. Gender sensitivity and other concerns are critical for the effective carrying out of the mandates of the UWIDEC and we must therefore pay special attention to them.

Generally, the literature on gender imbalances, especially in the lesser developed economies like those in the Caribbean, shows that access tends to be greater for men than for women. However, UWI statistics and the general view in the region suggest something different - that women outnumber men in higher education here, except for the Engineering Sciences. The argument from both academics and male activists suggest that male access is somewhat restricted and this is borne out by a sample of enrolment figures for some DE courses in 1997, as shown below:

Total	Male	Female	No gender supplied
87	24	62	1

The figures show that women outnumber men in this sample by two and a half to one, which in itself is a disturbing finding. While I am not convinced this imbalance can be simply explained by real societal constraints impeding male access to educational opportunities in the Caribbean, we must nevertheless recognize that for fairness and societal stability, these issues must be addressed seriously in any evaluation programme.

Impediments to DE Evaluation at UWI

As I have argued above, DE evaluation at UWI is sporadic at best (where it occurs) and nonexistent

in some cases. In this section, I will identify some of the impediments to DE evaluation as obtained at UWI. All of these factors have implications both for the way evaluations are envisioned and implemented and for their results.

- Distance education, as manifested at UWI, encompasses a wide diversity of students, many nationalities, multi site classrooms, little opportunity for interaction among students, and unfamiliar technology. The very newness of the process is intimidating, and this intimidation is compounded by the many factors that must be taken into account when evaluation is to be attempted.
- The level of discomfort with DE among some elements of the traditional academics at UWI poses a problem for the conduct of evaluation of DE. The course evaluation currently being done by the UWI administration is limited to face-to-face students. These evaluation questionnaires are administered to the students on the campuses with the cooperation of the lecturers, and hence there is easy access to the students. The situation is a bit more complicated for DE evaluation, since the students are dispersed mainly among the noncampus and off-campus sites and the evaluation questionnaires have to be shipped to those sites - a time-consuming and expensive exercise.
- Many of UWI's academics have yet to be convinced that the delivery of information to isolated students is a worthwhile experience (since they believe that these students cannot fully have the "university experience"). Since the cooperation of the academic course writers is needed for an inbuilt, continuous formative evaluation, any lack of commitment poses a problem.

Conclusions and Recommendations

This paper argued the premise that effective DE at UWI must be accompanied by an in-built and continuous evaluation system. Modern, innovative organizations, such as UWI, should be aiming to become, and should reserve for themselves the key roles of, strategist and designer of their own evaluation processes. This institution must be willing and eager to exploit the productive capacities within itself, the wider region and externally, in order to achieve the goals set, in the most effective efficient and economical manner. The literature contains some remarkable examples of transformation that can take place when a vision for an education system is developed and its implementation championed by decision makers. In order for UWI to become such an example, I include below some recommendations.

- Currently, DE course development tends to be rushed, albeit unavoidably, with little opportunity for any kind of review or piloting. This state of affairs is rife with problems, and steps must be put in place to correct this. For example, UWIDEC courses can be printed initially in a preliminary version which can be piloted and evaluated and the evaluation findings fed back into the revision process. With the help of questionnaires, student attitudes and experiences can be collected before final production and the local tutors can be asked to inform the administration about students' difficulties, printing mistakes, etc., as a matter of routine.
- The application of information and communication technologies to the provision of education is impacting on the marketing of education by institutions such as ours. There is an unprecedented degree of competition nationally and internationally, with technologies crossing political and

geographical boundaries. Being small, less developed economies no longer poses the same constraints as before the new technological developments. We are in a better position to compete internationally today, than at any other time in the past.

- UWI must put itself in a position for the facilitation of the development and use of virtual education delivery and organization models by collecting data on such issues as costs and benefits for the use, appropriateness and sustainability of information and communications technologies, and on the quality of the learning experience provided by these.
- UWI must set about identifying strategies to develop and ensure access to new programmes and credentials deemed important on a pan-Commonwealth basis, and ensuring the availability of a suite of support services which would include the provision of programme advice, assessment of learners' current skills and knowledge, assistance in the development of programme learning plans, maintenance of records of learning and participation in the issuance of programme awards.
- DE institutions like NKI have shown that formative evaluation of courses gives the best results when conducted by an internal specialist unit, not directly involved in the operation of the programme, but working in close cooperation with the programme staff. These evaluations should preferably be supplemented by those done as a natural routine by the staff responsible for the programme, because everyone engaged in education (or any other activity) should see evaluation as an integral part of his or her work (Rekkedal, 1998).

- UWI must also assess completion and drop-out rates in DE programmes as important criteria for deciding the quality of study material and student services. It has been suggested that drop-out from distance study is larger in the initial phases of study than later. Thus, in preventing drop-out and helping students at risk, it is important to give specific attention to the first phase of studies (Rekkedal, 1998). Systematic collection of data and reporting is the absolute fundamental basis for lasting changes and quality practice. However, if one does not take the time and resources to really examine and report the effect of specific changes and developments by methods which people trust, changes seem to have a tendency to be only short-lived. When people in the system are actively involved in the developments, and the developments are proven to be effective by accepted methods of research and evaluation, the developments tend to be followed up and to persist.
- All new course development or instructional personnel should have to go through a DE course (either by correspondence or via Internet and the World Wide Web) covering important aspects of DE course development, distance learning and tutoring.
- The evaluation of quality in DE ought to have a broad basis. It should be concerned with the total educational programme (learning material, teaching, guidance and follow-up activities), and not with just the printed part of the course material, as is often the case. A course or educational programme should be implemented according to a curriculum that is determined and described beforehand. Marketing requirements should also to be taken into account. Since the institution's own advertisements and course descriptions are often the only information that the

prospective students have when they register for a course, it is important that these advertisements are realistic and truthful.

Notes

1. Details can be obtained from author.
2. See Table 2. In addition, an informal comparison of DE and face to-face students writing the Introduction to Macroeconomics course from the Cave Hill campus shows that the DE students outperformed the face-to-face ones.
3. Quality is most often defined as "fitness for purpose" and is related to the needs of the user/customer. Quality depends upon a subject's view of what the purpose of the phenomenon is. It is, thus, a value judgement interpreted differently by different stakeholders.

Bibliography

- Champagne, M. (1998). "Dynamic Evaluation of Distance Education Courses." ERIC Document Sources.
- Machado, L. and Machado, A. (1998). "Evaluation at the National Open University of Venezuela," in *Evaluation Concepts and Practice in Selected Distance Education Institutions*, edited by H. Rathmore and R. Schuemer. Hagen, Norway: FernUniversitat.
- Potter, G. (1998). "Evaluation of Distance Education at the University of Victoria," in *Evaluation Concepts and Practice in Selected Distance Education Institutions*, edited by H. Rathmore and R. Schuemer. Hagen, Norway: FernUniversitat.
- Rekkedal, T. (1998). "Quality Assessment and Evaluation: Basic Philosophies, Concepts and Practices at NKI, Norway," in *Evaluation Concepts*

and Practice in Selected Distance Education Institutions, edited by H. Rathmore and R. Schuemer. Hagen, Norway: FernUniversitat.

Taitt, A. (1997). *Perspectives in Distance Education: Quality Assurance in Higher Education: Selected Case Studies*. Vancouver:

Commonwealth of Learning (sourced on the Web).

Woodley,A. (1998).“Programme Evaluation at the British Open University,” in *Evaluation Concepts and Practice in Selected Distance Education Institutions*, edited by H. Rathmore and R. Schuemer. Hagen, Norway: FernUniversitat.