The Use of Tracer Studies for Enhancing Relevance and Marketability in Online and Distance Education

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Over the last two decades online and distance education has been greatly developed as a methodology for providing education for those who formerly may have found further education inaccessible for various reasons. As with most education processes, it is customary to have students complete an evaluation of the course or programme. This type of evaluation usually focuses on issues such as course content, the instructional material provided, the usability of the technology, and rating the performance of the course facilitators. In this writer's opinion, this form of assessment focuses on the production process of ODL(Online and Distance Learning), rather than on the product of the learning process, which is the acquired knowledge and skills of the student. The ODL provider should know the fortunes of their graduates in order to make a complete assessment of how the educational process has impacted their graduates. With this type of data, they are able to make modifications that could enhance their students' chances of achieving success. This paper looks at the tracer study as a means of maintaining curriculum relevance and of providing targeted benefits to graduates to enhance the marketability of ODL.

Evaluation in ODL

ODL is still a developing learning methodology and therefore concern for quality assurance makes evaluation critically important. The fact that the student is separated from the tutor means that the spontaneous communication and feedback possible in a traditional classroom is not present, and there is the need to monitor whether student-tutor interaction is really facilitating the learning and teaching process.

ODL employs the use of technology for course delivery. Despite the advantages of computer , its adoption has not been problem free. ODL practitioners are all familiar with malfunctioning software, websites that are not user friendly and the untimely response of technical support staff. Therefore the technology itself becomes another focus in the evaluation of ODL. Educators need to be constantly assessing the effectiveness and quality of their online technology. If there are inadequacies which lead to frustration for students and teachers the quality of the whole exercise is undermined.

Technological changes and innovations, take place at a high cost. The instalment of equipment and the employment of the technical support staff call for the investment of funds which do not arise with traditional classroom education. The expenses have to be borne by the institution and are usually passed on to the student through fees. The financial outlay associated with ODL dictates the continual need for scrutiny of expenditure. Systematic evaluation is key in determining the efficiency of the technological systems that facilitate teaching and learning.

There is ongoing debate about best practice for course evaluation, researchers differ on the kinds of questions asked, the weighing and measurement of student responses, and how the information gathered is uiltised or whether indeed it is being used to improve the educational process. Scanlan (2003) notes that despite the plethora of guidelines issued for evaluation and quality assurance in education, including for distance education, "none provide the actual measurement tools needed to conduct quality assessment. Indeed, in its preliminary review of distance learning, the Institute for Higher Education Policy (1998) emphasized the need for reliable and valid performance measurements."

ODL as a product/service

The ODL student, is often classified as a non-traditional student. Easton(2003, 88) cites the characteristics of the non-traditional student: one who is older and more mature, voluntarily seeking higher education, possessing the motivation and self-discipline to undertake study. The choice to study by ODL indicates that family or employment commitments do not permit participation in the traditional classroom based education; yet the desire for education remains. The sacrifices that have to be made dictate that the ODL student is likely to be anxious to see a return on the sacrifices made in time and in fees.

Potential ODL students are not a captive market. Most traditional institutes and colleges can at least rely on a student intake derived from the geographical location in which they are approximated . Proximity and subsidized fees through state sponsorship often make nearby institutions the first option for students. For those who cannot physically attend, the market is much wider. With the internet students can access education from anywhere on the planet. This writer is familiar with two Barbadians who obtained postgraduate degrees from Australian universities online. The prospective distance education student can therefore shop around in a global market for the type of programme they wish to pursue which are congruent with their professional and personal goals.

The global market for ODL has grown extensively in the last decade. Many universities and colleges have increased their student intake by offering programmes by distance. They have therefore increased their revenue base with no necessity to create more physical space and employ more academic staff. With the large number of institutions participating in ODL it has become a highly competitive market for providers. ODL education has taken on the characteristics of a service industry, with students becoming the customers for the education product. The need for customer satisfaction therefore increases the necessity to have students evaluate the product. However, as discussed above, evaluation usually focuses on the production process, i.e. the course delivery or the inputs, course materials, resources and tutor performance. Student responses on these matters can gauge the level of satisfaction with the course itself and institutional planners can implement improvements where dissatisfaction has been expressed. However, this form of evaluation does not measure the outputs and outcomes of education. Schomburg(2003, p.25) identifies the outputs as attributes such as knowledge and skills, and outcomes as transition to employment, work experience and service to society. He suggests the use of the tracer study by institutions as a method for knowing the "destiny of their graduates and the relationship between their study and their professional reward." (Ibid, p.29) The information to be acquired focuses on the experience of gaining employment and career advancement, and used to make whatever adaptations may be necessary to improve the marketability of the qualifications and as a marketing tool for the institution's ODL programmes.

The Tracer Study

The ILO Thesaurus 2005 defines a tracer study as an impact assessment tool where the "impact on target groups is traced back to specific elements of a project or programme so that effective and ineffective project components may be identified." In educational research the tracer study is sometimes referred to as a graduate or alumni survey since its target group is former students. Schomburg(2003, p.36) notes that graduate surveys are popular for "analysis of the relationship between higher education and work." They provide quantitative-structural data on employment and career, the character of work and related competencies, and information on the professional orientation and experiences of their graduates.

Although the usual end of the course evaluation can ask for the student to assess whether they have gained the knowledge and skills necessary for fulfilling their personal objectives, there is really little proof of this until the student has completed the entire course of study and has entered the workforce. By surveying a cohort of graduates from: a specific institution; profession; discipline; graduation date; level of education; or a combination of these for comparative analysis, Schomburg presents examples of issues which can be addressed in tracer studies. Biographical data on "Where are our graduates now" may supply information on income, job title, nature of employment, and years of employment. He also believes that surveys should also include information "about the kind of work task the relationship between study and work, and professional values and job satisfaction."

The information gained from survey items can be used by the graduate's alma mater and indeed other education stakeholders for curriculum development and reform. They may also answer questions such as :

- What are the retrospective views of graduates on higher education based on their career experiences?
- To what extend do graduates consider their education and training as a wastage or an opportunity?

- How are the outcomes of curricula aiming to create new types of learning and qualifications to prepare for newly emerging types of occupation and work task?
- How broad or narrow is knowledge fostered in individual degree programmes in comparison to occupational tasks or major occupations? (Schomburg, p. 38)

Tracer studies have been conducted by educational institutions for decades. Harald Schomburg and his colleagues at the Centre for Higher Education and Work, University of Kassel, Germany, have done considerable research on conducting tracer surveys, constructing effective tracer study questionnaires and their statistical analysis. They have conducted survey projects such as the CHEERS (Career after Higher Education-a European Research Study) which investigated the links between higher education and graduate employment in Europe. They have done similar research in Africa, Asia and Latin America.

A tracer study was conducted on of the graduates of the University of Malawi who graduated between 1987 and 1995. This tracer study was part of a comparative study on higher education in Africa, sponsored by the Association of African Universities(AAU), using ten other similar universities in Nigeria, Malawi, Ghana, Kenya, Uganda, and Tanzania.

The main objectives of the tracer study were to: investigate the transition process from higher education to:

shed light on the course of employment and work over a five year period after graduation; analyse the relationships between higher education and work in a broad perspective which includes the fulfilment of personal goals such as job satisfaction and objective measurement like job position, income, job security and the type of work; find out what factors are important for professional success of graduates taking into account personal factors like gender, work motivation, acquired qualifications during course of study and labour market conditions; evaluate on the basis of the experience and views of graduates, central aspects of the University, including resources, facilities and curriculum and get feedback for their improvement; and identify key aspects of the continuing professional education of graduates, and themes and kinds of courses, including extent, cost, location, reasons for participation, proposals for University courses. (Zembere and Chinyama ,1996)

The findings from this University of Malawi study indicate that graduates were satisfied with teaching quality, course content and the knowledge gained. However less than 50% of the respondents gave good ratings for resources and facilities. It was interesting that they saw knowledge of English, communication skills, a sense of responsibility, self confidence, reliability, problem solving ability, initiative, willingness to learn leadership qualities and ability to learn are important to professional life irrespective of the discipline studied. (Ibid)

Another tracer study for the AAU research project on Higher Education and Work in Africa was conducted in Nigeria entitled "Higher Education and the Demands of Manpower Development in the Nigerian Manufacturing Sector: an Empirical Study of Enugu and Anambra States." The findings for this project were similar to those for Malawi in terms of student satisfaction about the utilization of knowledge and dissatisfaction about resources. The research was used to make recommendations such as the need for:

- Mutual and comprehensive capacity building in both our industries and higher education
 profiles especially in the areas of general infrastructures, linking theories to practical
 skilling and computer technology as a means of achieving the desired comprehensive
 capacity building in both our industries and higher education profiles.
- Improved funding of higher education institutions in order to enhance their overall capacity for the provision of vital equipment, study facilities and off study infrastructure, thereby strengthening their study provisions and conditions profile.
- Curriculum planning and development in higher education to be more broad based and trans-disciplinary than hitherto. Greater emphasis placed on multiple and practical skills acquisition or practice oriented study and the revision study curriculum at least every two years to keep abreast of technological and socio-cultural changes.

 Lecturers, particularly those of the engineering and related fields to take short term "sabbatical" leaves to work in industries for cross-fertilization of ideas and practical skills between high education and industries, thereby reinforcing the desired collaboration between the two. (Ugwuonah & Omeje, 1998)

The Nigerian and Malawian studies discussed above are examples of surveys for traditional education classroom based institutions and programmes. Tracers studies are not confined to graduates of specific national institutions . Surveys have been done by international organizations and lending agencies and the graduates of scholarship programmes. The use of tracer studies for ODL institutions is not as common. The Staff Training and Research Institute of Distance Education (STRIDE) at the Indira Gandhi National Open University (IGNOU) has conducted research on distance education and the job market in India and done tracer studies of their graduates in specific programmes.

In Nigeria a tracer study was done for the Nigerian Teachers' Institute(NTI) which launched its Nigeria Certificate in Education by ODL in 1990 in response to urgent need to train more teachers. The findings of the study were that the performance of ODL graduates was as effective in the classroom as that of their peers who had studied in the traditional way. Their classroom teaching, lesson preparation, motivation of students, record keeping and communication in English was good. The students themselves rated the instructional materials provided quite highly. However the study revealed some dissatisfaction about the use of audio visual material. It was also thought that teachers needed to be better trained in the techniques of ODL. The Institute itself had improved its management and monitoring systems and efforts had been made to address these inadequacies. (Umar,2006)

Tracer Studies and ODL Marketability

Earlier in this paper it was suggested that the findings of tracers studies could be used to reform ODL programmes. As seen in the African studies graduate dissatisfaction with resources, technology and the need to enhance teacher competence in audio-visual technology points to where institutional investment and reform could be targeted. The Malawi study revealed the importance of interpersonal skills and proficiency in English. This information could be used by curriculum planners for the incorporation of these skills into training and course content. The Nigerian study indicated a need for greater linkages with the industrial sector to make programmes more relevant to the manufacturing industry, especially for engineering.

Most importantly, the fact that tracer studies can show that the quality of ODL graduates is comparable (as with the NTI) with those of traditional education suggests that they should be an integral tool for evaluating ODL. Some speculation about the quality of education delivered by ODL remains. Research that shows that ODL learners can perform competently in the job market and are not being given an inferior education can convince those who remain sceptical. Where shortcomings are revealed, the findings can be used to correct deficiencies. Boettcher(2006, p. 105) suggests that trends in distance education will be on "updating knowledge and skills, building perspectives, contextual problem solving, networking" and a shift to "competency based outcomes." Planning to incorporate these new emphases will need the input of graduates who have entered the job market and are able to assess the relationships between their education and professional competencies.

This approach may be criticized by those who object to education being subverted to the human resource needs of employers and industry, and to the concept of education being a "product" marketed to "customers." Professor Reich, former Secretary for labour in the Clinton administration warned about the marketisation of education. He stated that "Higher education in the United States is coming to resemble any other kind of personal service industry...Products, higher education products, are sold on the market, there is a kind of marketisation that has set in...Universities were competing for students and there was a greater and greater emphasis on vocational and pre-career courses in accounting, law, economics, finance, engineering, applied sciences." (Reich, 2004) He felt that this was not in the interest of the society which needed a broader base of skills.

However in free societies prospective students will choose disciples which suit their personal interests and objectives. According to Burnside(2001), there is "a deep need among

workers to ensure that they have the means for a successful career path. To attain this, they first need skills that bring success in their current jobs, that are portable to their next jobs, and that increase market value . . . they need legitimation [sic] that degrees such as MBAs can bring but delivered in a way that fits into their daily lives."

Tracers studies of ODL graduates can provide the information needed to reform educational programmes to bring about the fit between the requirements of the employment world and study. Surveys do have their disadvantages: it is sometimes difficult to locate graduates and have them complete questionnaires. Schomburg warns that the graduate might not always be able to identify the relationship between the knowledge acquired during study and their professional lives and that research findings are valuable inasmuch as planners can turn the findings into concrete reforms. However, this paper suggests that the tracer study can be a marketing as well as an evaluation tool. The success of graduates can be advertised, as a marketing strategy to recruit new students. ODL providers can use the information gathered to adapt their courses to the demands of the labour market and modify programmes to attract the ever expanding market of prospective students looking for personal and professional advancement through ODL.

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