

**SOME FUNDAMENTALS OF
EVALUATION IN MANAGING
OPEN AND DISTANCE LEARNING**

UNIVERSITY OF IBADAN LIBRARY

Editor

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*Published by Distance Learning Centre,
University of Ibadan, Nigeria*

Some Fundamentals of Evaluation in Managing Open and Distance Learning

Edited by Adams Onuka

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ISBN 978-31299-8

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Published by:

Distance Learning Centre,
University of Ibadan, Ibadan.

Printed by:

*Esthom Graphic Prints
Tel: 07030298365*

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Chapter Seven

FEEDBACK MECHANISM IN OPEN AND DISTANCE LEARNING

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Feedback occurs in a context whereby output from (or *information* about the result of) an event in the past plays significant role to influence an occurrence or occurrences of the same type of event / phenomenon or the continuation of the original event in a present or future circumstance. When *an event is part of a chain of cause-and-effect that forms a circuit or loop, then the event is said to "feed back"* into itself.

Onuka & Junaid (2007) report that Umoru- Onuka (2003) believes that evaluation is a process that readily provides feedback for programme/individual improvement and accountability. Hayman and Rodney (1975) opine that evaluation provides feedback with which goals can be compared to outcomes of a programme/predetermined learning outcomes. Therefore, feedback could be seen as identifying the goals of a programme and thereby give the

nature and the actual outcome. Feedback could be viewed as an Information input into a system, transmitting messages of the system operation to indicate that it is operating as planned or otherwise or information concerning any type of planned operation relayed to the person responsible for the system improvement. To Damachi (1978) the object of feedback is to control a system output. Ehindero (1986), Ray Macaulay (1988), Umoru-Onuka (2003) and Yoloye (2003) agree that evaluation is a feedback mechanism, particularly with regard to formative evaluation of which CA is a major thrust. Yoloye (2003) further states that tools of academic feedback are actually the data (information) provided by Continuous Assessment, tests and the measurement of attitude of the individual student or learner in the case of ODL. Feedback would be a mirage if the data obtained by the use of the tools from evaluation enumerated above are not utilized to improve the students' performance academically (Onuka & Junaid, 2007). Thus, the thrust of feedback mechanism is the improvement of programme/learning outcomes including better learner academic achievement.

Feedback is a mechanism, process or signal that is looped back to control/improve a *system* within itself. Such a loop is called a feedback loop. In systems containing an input and output as in the case of an ODL programme, feeding back part of the output as seen by stakeholders so as to increase or improve the quality of the input is *positive feedback*; feeding back part of the output in such a way as to partially oppose the input/learner's response is *negative feedback*.

Generally, a system fed with input from an external signal source and output to an external load is a **control system**.

Positive feedback tends to increase the event that caused it. It encourages the learner to strive harder in order to achieve better results. **Negative feedback**, which tends to reduce the input signal that caused it, is also known as a self-correcting or *balancing* loop. In ODL, feedback is not a one-way activity, as the product of a distance learning programme can also provide useful information that could be utilised as feedback for systemic improvement.

Sources of Feedback in ODL

Learners: They provide feedback on how they perceived the workings of the system and how the individual programme personnel does his/her work in tandem with the programme goal or promote the realization of the programme objectives, on how these personnel operate, on who works well and otherwise.

Course writer/developer/tutor/facilitator: on how they perceived the operation of the programme, learners' performance, how other stakeholders perceive the operation and/or performance of the programme.

The products of the programme: as to how the programme impacted their lives and their work.

Programme Operators: on how they perceived the quality of the programme input including the funding of the programme, the administration of the programme and other programme processes.

Employers of Programme Products: Employers of the products of distance learning programme should be in a position to rate the impact of programme, as such is an evidence of the work behaviour of the products in their various workplaces in terms of effectiveness and both improved and increased productivity, which in turn is the direct impact of the programme on its products in those workplaces.

Feedback: A Product of Evaluation

According to Onuka & Junaid (2007), evaluation is an every day and everybody's phenomenon, thus, its importance as a feedback mechanism cannot be over-emphasised and as such must clearly understood and indeed utilize by all and sundry persons, and in particular a distance learning if it were to grow and improve its services to its clientele. Evaluation is an essential ingredient for every person and every organization/institution, if he or it were to survive and develop. Therefore, Distance Learning cannot be an exemption to this assertion. Invariably, therefore it may be unequivocally made clear from the outset that evaluations are used for different purposes, one of which is feedback. A programme must first exist before we evaluate and get feedback. You conceive distance learning programme, plan it, budgeting for it, organise and implement it, evaluate all the aforementioned stages and provide feedback for programme revision (replanning), and start the cycle if we are to continuously improve the entire system and resultant products as shown below:



Figure 1: feedback loop showing how a programme revolves round in a cyclic form from planning through budgeting to organising & implementation to evaluation to feedback back to planning for systemic improvement.

An evaluation can be formative or summative depending on the stage of the programme in which we evaluating it. Whichever evaluation we are embarking the end result must provide feedback as part of the evaluation outcomes. In either case, many questions are asked and to which answers sought for.

Invariably, therefore, evaluation is a means of accountability as it connotes responsibility and answerability, in the sense that evaluation is fully understood and is also well taken, then it becomes a feedback mechanism which results in both programme and its operators' improvement. Secondly, we have what is usually termed summative evaluation, which usually takes

place after a completion of a project or programme like a course. In this sense, a degree or diploma course of an ODL programme's final examination is a summative evaluation, which provides for feedback on the usefulness or otherwise of the programme. It is to this latter type that impact or ex-post evaluation belongs. Essentially both types provide accountability level as well as give feedback on the success or otherwise of the object of evaluation.

Evaluating a distance learner could be in terms of its suitability, achievement, aptitude or the impact he is making where he works as result of his participation in distance learning programme is imperative for systemic sustenance and improvement. However, in doing this, obviously implies evaluating the effectiveness of the programme and its operators as well as the learning materials including the effectiveness of those who put the materials together. This is so that the programme and its operators as well as its operations become improved if and only if the resultant feedback is well utilized as the human capital, material resources and their utilization is bound to enhance programme improvement for the benefits of its clientele and other stakeholders.

It is noteworthy that evaluation can take various forms depending what the goal of the evaluation project is all about. In the context of this write-up, evaluation is here concerned with the evaluation of student achievement and by extension the evaluation of teaching and learning process. It also pertains to examining the inputs to the teaching-learning process, by which the text and other learning materials and their utilisation. It is important to note that

student achievement may be only cognitive or affective, cognitive and psychomotor. In the case of the latter, it is comprehensive as learning is a function of a number of variables including the affective, cognitive and psychomotor domains. In distance learning, evaluation of learning invariably implies the evaluation of the effectiveness of textual and other learning materials as well as the authors of those materials. It resulting feedback that brings about improvement when properly utilised.

Thus, in distance learning, evaluation of learners' achievement will mostly take the form of evaluating the cognitive achievement as that is more likely to be the easiest thing to do as the learners are scattered all over the place and the teacher/facilitator hardly come in contact with the learners. Where that is feasible the time they spent with learners is infinitesimally small to enable them have the time required to do both affective and psychomotor evaluation of the learner. To do that will require that a specially be commissioned evaluation is imperative, and this will indeed be limited to a sample from which a generalization can then be made, therefore, forestalling the possibility of doing an evaluation of the affective and psychomotor domains of distance learning.

Types of Feedback

Feedback can take a variety of forms. It can be categorized into different types depending on the following:

- ◆ The depth of information provided the learner;
- ◆ Times when the information is given;
- ◆ Types of materials to be assimilated; and
- ◆ Function or quality of the information.

From the foregoing feedback can be seen from the point of view of verification and elaboration, which are effective in:

- ◆ highlighting learner's response errors;
- ◆ giving correct response options; and
- ◆ providing information that strengthens correct responses and enables learner retain them (Falaye, 2008).

While almost all feedback provides response verification, elaboration could either be informational, topic-specific or response specific. One can thus infer that stating type of feedback is a function of the role it is intended to play or it plays.

Informational elaboration provides a framework of relevant information from which the learner can identify the correct response, however, it does not specifically address individual responses.

Topic-specific elaboration provides specific information about the target topic or question, but it does not address incorrect responses either; however, guides the learner through to the correct answer.

Response-specific type, which is the most specific and direct form of feedback addresses both the correct and incorrect answers, such that if a learner selects an incorrect response, response specific feedback will explain why the chosen response is incorrect and further provides information about the correct response.

Feedback that encourages the learner to do/try more would be regarded as positive while that which discourages the learner from learning should be regarded as negative. It could be immediate or delayed depending on the gap between when it should have been given and when it was/is given.

Characteristics of Effective Feedback Interventions

There is doubt that feedback is a remedial/corrective mechanism

For feedback to be of pedagogical value, it must inform the learner on

- ◆ What is right;
- ◆ What is wrong;
- ◆ How to correct the mistakes without making the right responses inappropriate. And in the case of distance learning feedback of the nature of response-specific must be provided in both textual and electronic materials. Thus these materials must be written in a manner that depicts interpersonal interaction between the text writer and the learner.

By implication an effective feedback intervention does not only provide an information about the learner' performance, it must indicate what is wrong with the responses as given by the learner, what makes his response wrong and how to correct the wrong responses while still retaining the correct responses s/he provided earlier.

Factors responsible for the Effectiveness of Feedback Interventions

Effectiveness of feedback is a function of improved achievement of learners. According to Falaye (2008) low achievers benefit more from immediate feedback, while high achieving students on the other hand could utilize delayed feedback better. A previous wider knowledge base makes the high achieving learner to be in a position to actively process the information during the delay period, and thus could benefit better from delayed feedback than would the low achieving students. It, therefore, implies that delay feedback seems to promote the learners' thinking process.

On the other hand, low achieving students may possess a weak understanding of the basic information, therefore, immediate feedback allows them to correct their errors and hence benefit more.

Enhanced course materials, improved services by programme operators because they are responsive to the feedback provided through evaluation show that the feedback mechanism is effective.

Conclusion

It is no gainsaying that evaluation is an every day and everybody phenomenon, thus, it can not be over-emphasised and as such it must be clearly understood and indeed utilize by all and sundry persons. Evaluation is a necessity for every person and every organization/institution for sustainability and development. Distance Learning Programmes cannot, therefore, be exemption. Suffice it here to make it unequivocally clear

from the outset that evaluation is used for variety of purposes, thus the purpose of an evaluation determines its form or type. Basically, there are two main types of evaluation, yet there are quite a number of variants of evaluation which takes the form of either one or the other of these two major namely: **Formative evaluation** which critically examines whether or not a programme is approaching the accomplishment of the objectives/goals for it was designed and if not, why not? And how did what happen happened as well as how could it be ameliorated and improved?

These and much more questions can be asked and answers sought for, when carrying out formative evaluation. Formative evaluation can be in the form of diagnostic evaluation like training needs assessment to determine deficiency at the commencement of training or learning programme so that the programme can bridge the perceived gap that exists between what should be known and what is known. It can also be used to decipher deviation from the tract that should lead to the accomplishment of an on-going programme in order to improve the programme performance. It should be understood that no programme can plan and execute itself unless human beings are involved. Thus evaluating a programme or a part thereof definitely implies evaluating the contribution of those operating the programme. Invariably, therefore, evaluation is a means of accountability as it connotes responsibility and answerability as well as responsiveness, in the sense that evaluation which is fully understood and well taken becomes a feedback mechanism which results in both programme and its operators' improvement.

The second main type is termed: **Summative evaluation**, which usually takes place after a completion of a project or programme like a course. In this sense, Senior School Certificate Examinations are a summative evaluation for the senior secondary students. It is to this latter type that impact or ex-post evaluation belongs. Essentially both types provide accountability level as well as give feedback mechanism on the success or otherwise of the object of evaluation.

Evaluating a distance learner could be in terms of his/her suitability, achievement, aptitude or the impact he is making where he works as result of his participation in the distance learning programme. However, in doing so, we are invariably and obviously evaluating the effectiveness of the programme and its operators as well as the learning materials and the effectiveness of those who put the materials together. This is done so that the programme and its operators as well as its operations might become better if and when the feedback resulting from the evaluation process is taken seriously and appropriately utilized by improving both the human capital, material resources and their utilization to enhance programme improvement for the benefits of its clientele and other stakeholders. It could be merely trying to know the level of achievement of the distance learner in his course of study.

It is noteworthy that evaluation can take various forms depending on what the goal of the evaluation project is all about. In the context of this write-up, evaluation is here concerned with the evaluation of student achievement and by extension the evaluation of teaching and learning process. It also pertains to examining the inputs to the

teaching-learning process, by which we mean the text and other learning materials as well as their utilisation.

It is important also to note that student achievement may be only in the cognitive or affective, or psychomotor or a combination of any two or all three. In the case of the latter, it is comprehensive as learning is a function of a number of variables including the affective, cognitive and psychomotor domains. In distance learning, evaluation of learning invariably implies the evaluation of the effectiveness of textual and other learning materials and the authors of those materials as they are expected to put up learning materials that the learners can interact with and be effectively being led to learn well.

Thus, in distance learning, evaluation of learners' achievement will mostly take the form of evaluating the cognitive achievement as that is more likely to be the easiest thing to do as the learners are scattered all over the place and the teacher/facilitator hardly come in contact with the learners. Where that is feasible the time they spent with learners is infinitesimally small to enable them have the time required to do both affective and psychomotor evaluation of the learner. To do that will require that a special project be commissioned and this will indeed be limited to a sample from which a generalization can then be made, therefore, forestalling the possibility of doing an evaluation of the affective and psychomotor domains of all distance learners as that will be very cumbersome. This is not to preclude the possibility of carrying out such evaluation except that it may not be as thorough as it should ordinarily have been.

A good evaluation undertaking must produce utilisable feedback which should be fed into the system for the purpose of systemic improvement. If evaluation does not provide adequate feedback may be regarded as an exercise in futility. However, if the organisation/institution fails to implement the input from feedback then it is doomed to failure or stagnation. It, therefore, follows that evaluation must produce feedback which must in turn be utilised by the receipt or else the whole exercise will be a waste.

Recommendations

The underlisted are hereby recommended for implementation in evaluating and providing feedback for the distance learner as a measure of best evaluation practices in distance learning:

1. The scope/content of each course should be stated/given at outset (beginning) of text and any other learning materials being used by the distance learner
2. Learning outcomes/objectives be clearly stated at the outset of text or any other course/learning materials produced by DL programmes for the use of learners
3. The resulting behavioural objectives including skills which the learners are expected to exhibit/acquire at the end of each module must be stated at the beginning of the module
4. Distance learners' achievement evaluation should be based on the stated behavioural objectives in each module i.e. there is need to always synchronise evaluation with learning/behavioural objectives
5. Marks allocation should be stated against each question i.e. distribution of scores should be indicated against each question on the question paper

6. Examining of distance learners be based on 40% essay questions, 30% objective- multiple choice, fill in the gap, matching, etc and 30% continuous assessment
7. Moderation of both questions and marking vide essay papers should be done by department appointed external examiner in liaison with the programme officer, evaluation for both quality control and quality assurance in the examining processes
8. The conduct of examinations should be organized by a monitoring and evaluation committee headed by the evaluation programme officer assisted by assistant coordinators, exams, assessment and monitoring so appointed for the purpose at study centre of a distance learning out.
9. Computer-based test should be used with a quality marking scheme/guide for essay questions in such a manner that it can be released to the learner to guide him/her in obtaining immediate feedback for remediation. However, such guide must not accompany the test so that he/she would separately access it only after he/she had concluded the CA whatever the form with a different password from the one he/she had used to access the test.

Furthermore, it would also be essential that course developers/ writers/facilitators/tutors of ODL programme take the following steps to enhance quality evaluation practices in ODL in the African university setting:

1. Facilitators should provide course outlines, question papers, and marking scheme to the departmental coordinator for onward transmission to the moderator

and the returned moderated must be secured kept until the particular paper is due for examining by which it could be handed back to the course facilitator or one so appointed for conduct and the subsequent marking which should be promptly concluded (possibly within three weeks) and marked scripts returned to the appropriate officer for prompt compilation and release of the results.

2. Information on mode of test, time-table and other relevant instructions concerning in whatever form/mode i.e. essay, objective, CA should be place on the website for students to access in time
3. Distance Learning Institutes/Centres of African Universities should sensitise as well as appeal to participating lecturers to attend promptly to issues concerning the learners for the purpose of positively promoting the good image of university departmental exam officers should be involved in DLC/Institute examinations
4. Examination intelligence persons be sourced and be alternated among the participating units during the exams. In other words, such intelligence persons should be engaged and be rotated on duty among the participating units
5. Sub-Deans in the various faculties should be carried along in the scheduling of examinations in situations where the distance learning programmes have no full academic staff of its own and use two modes: physical interaction between the facilitator and the learner and learners' interaction with textual/electronic learning materials.

6. Faculty/Institute Board of Examiners could act on behalf of DLP before its Board considers the overall results, if no 5 above is the case.
7. Facilitators should take responsibility for answer scripts until the scripts and scores are handed back the departmental coordinator not later than three weeks after the paper may have been taken, DLP should ensure prompt payment allowances to facilitators once they complete their assignment if its case is as in 5 above.
8. All answers should be duly signed by examiners while students should be required to cross all empty spaces in their answer scripts
9. Script number should be recorded by the student in the attendance sheet before leaving the hall
10. student should be properly screened before being allowed into examination hall/room
11. Questionnaire should be used to evaluate the affective domain of learners while practicals should be utilized to examine the psychomotor domain
12. Counselling should be mounted to assist the learners to correct their deficiencies
13. The relevant university examination rules and regulations should be strictly observed in the conduct of Distance Learning Programme examinations
14. Matriculation numbers should be used to seat the students in the examination hall
15. Facilitators should be given orientation in the conduct of examinations.

All the suggestions and steps given above would enable feedback to be promptly given to all stakeholders for systematic improvement and sustainance.

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