
DESIGNING A FLEXIBLE EVALUATION SYSTEM FOR ODL ENVIRONMENT — MODEL AND PRACTICE

*Dénes Zarka, Budapest University of Technology and Economics, Distance Education Centre
on behalf of EDEN – the European Distance and E-Learning Network*

Introduction

This paper is based upon two projects implemented recently by the Budapest University of Technology and Economics (BUTE) Distance Education Centre. The first one was a research project aiming at the development of an evaluation framework and methodology of open learning systems. The second one was directed at the comprehensive development of e-learning for the Faculty of Law of the Pazmany Peter Catholic University Budapest. In this latter project we had the opportunity to test and implement the Evaluation System's parameters like: effectiveness, flexibility, usefulness.

This paper summarises the outcomes of the research, and achievements of the development implementation.

„Premia” project: The model

This project (1999-2000), initiated and financed by the Hungarian Open Vocational Training Foundation which ensured from public resources the determining proportion of funding for ODL development in 1998-2000, was implemented by a wide consortium of actors from the Hungarian education and training sector, co-ordinated by the BUTE DE Centre. The aim of the project was to develop a model and working mechanism on:

- evaluation and analysis of open learning programmes
- using elements of quality management in ODL

The approach of the project to produce its objectives was to work with an invited panel of experts from the project partner institutions, and form an Operative Evaluation Committee (OEC) to co-ordinate the research work, then the draft output was circulated in the circle of relevant professional and social partners, after which the system was revised, and finalised.

„Szamtav” Project: The practice

This project was financed by the National Communications Authority and implemented by a consortium led by the BUTE DE Centre with project partners, the beneficiary Pazmany Peter Catholic University (PPKE) School of Law, and the IT provider Compax Ltd. The project started in the year 2000 and finished in 2001.

The aim of the project was to improve, design, and implement the technical and methodological background of the e-learning system of the PPKE

The objectives were:

- To provide description, external evaluation on the existing system and to work out a detailed development proposal
- To evaluate the IT background and services applied and to work out a detailed further development proposal on them

The implementation of the project included the evaluation of the PPKE e-learning practice, the survey of recent related international development of e-learning, searching for good practice in the relevant area, then to elaborate recommendations on the development of the University. The draft of the evaluation and the recommendations were discussed with the beneficiary University, then the recommendations were modified, and then finalised.

The evaluation policy

The research group reached an agreement that the evaluation process must be

- in conformity with the following criteria:
 - objectivity
 - parallel evaluation
 - validity
 - reliability
- complete and flexible
- efficient in the delegation of evaluation work (expert, evaluator, administrator/clerk)
- applicable for the planned programmes as well as those already implemented public
- quantitative
- cost effective
- quality managed for the factors of
 - objectivity
 - training of the evaluating staff
 - parallel evaluation
 - public control
 - handling complaints

The evaluation system

In the system of aspects there is a set of attributes, which are defined, and before using the system some of them can be modified. The attributes are the following:

The name and number of aspect

Example: Definition of the target population.

The method of measurement

In this attribute we have three sub-attributes:

- Who is doing the measurement? Example: clerk.
- When may the measurement take place? Example: before the delivery of the course.
- How is the measurement done? Example: upon learner questionnaire. In some cases this attribute is further explained in the Guide for evaluation.

Measure

This attribute is designed for quantifying the findings. Most of the aspects have three values:

- 0: No information in the documentation, or no conformity with the aspect.
- 1: The aspect is fulfilled in a defined quantity e.g. 30% of criteria is reached.
- 2: The aspect is fulfilled totally.

Weight

This attribute gives a high flexibility in the system. The weight is a multiplying factor that modifies the points' importance in the whole system. The weighting process is discussed later, but must be systematic, and serving a certain philosophy of the evaluator body.

Basic (sinequa non)

This attribute is a flag: Yes-no. If an aspect is basic, then the conformity is obligatory. No conformity leads to cancel the process. Example: Regulation of the learning process. If there is no learner contract, or other type of regulation on the process before the learner starts, the evaluation is cancelled with no success. In those cases either the provider presents additional information, or the whole system will not be quantified.

Characteristics of the evaluation system

The main groups of aspects of evaluation

The following table is summarising the main groups of aspects, and the number of aspects in the different groups. The aspects in many cases contained sub-aspects.

	Group of aspects	Number of aspects
0.	Documentation (available)	-
1.	Aims and Objectives	4
2.	Professional content	4
3.	Structure of the programme	14
4.	Materials	13
5.	Learning support system	39
6.	Quality management	10
	Total	84

Basic (sinequa non) aspects

The following table is summarising the number of aspects in the groups, which are necessary for completion:

	Group of aspects	Number of aspects
0.	Documentation (available)	1
1.	Aims and Objectives	2
2.	Professional content	1
3.	Structure of the programme	-
4.	Materials	-
5.	Learning support system	7
6.	Quality management	3
	Total	14

Expert evaluated aspects

The following table summarises the number of aspects in the groups which are evaluated by experts: During the research project, the group of researchers aimed to keep the number of this kind of aspects low, due to the evaluation policy to be (cost) effective and flexible. The more expert time is needed, the more the system is depending on expert availability. The demand of objectiveness requires that all expert aspects must be assessed by two independent evaluators.

	Group of aspects	Number of aspects
0.	Documentation (available)	-
1.	Aims and Objectives	-
2.	Professional content	4
3.	Structure of the programme	5
4.	Materials	4
5.	Learning support system	-
6.	Quality management	-
	Total	13

Proposed weighting system

During the research project the group defined two systems: The first was called „natural”, where the multiplying factor is 1. This system represents the focus of the research group, by listing a number of aspects in a certain group.

The other system is called „proposed”. This system already holds the agreement of the expert group on importance of every group of aspects. This proposed system holds a consensus of experts of a given time, and circumstances. (On this field further research is promising.)

Therefore the evaluation guide emphasises: Before every specific use of the system, the weighting policy must be revised and modified if needed.

	Group of aspects	Natural %	Proposed %
0.	Documentation (available)	-	-
1.	Aims and Objectives	5,00	4
2.	Professional content	2,86	4
3.	Structure of the programme	15,71	20
4.	Materials	16,43	24
5.	Learning support system	46,43	28
6.	Quality management	12,14	20

Method of scoring

- The proposed action plan of the evaluation is the following:
- Searching for the basic aspects in the documentation
- Quantification or scoring (evaluator, expert)
- Weighting
- Classification:
 - 0-30% not sufficient
 - 31-80% sufficient
 - 80-100% excellent

The implementation

During the Szamtav project the above described system of evaluation was implemented and used. During the implementation process the system was adapted and piloted.

The adapted evaluation policy

During the adaptation the structure of evaluation was not modified, this approach gave integrity to the process. During the implemented evaluation the implementation group emphasised more the objectivity, and the cost effectiveness.

Therefore the number of aspects evaluated by experts was lowered to 7 from 13. This fact can be derived from the role of evaluation in this project: In the project there was a dual evaluation system, an internal one made by the Pazmany University, the other was called external evaluation.

The set of aspects were modified for the special purpose.

Further simplification was made when unifying the role of clerk and evaluator. The original system had the feature of cost effectively evaluating large numbers of programmes, for example upon a call for tender in a foundation.

The accessibility of the details of the pilot was limited due to the fact that the whole project was a technical support to a private University.

The adapted system of evaluation

During the implementation all aspects were revised, and some of them were omitted. Those aspects were specific to vocational education, or were about professional content.

The most important omitted aspects are:

- professional content of the material
- aspects of the employer
- aspects on the type or manner of education as they are already defined in the curriculum.
- Some of the structural aspects as they are already defined in the curriculum.

At the end of the revision process, 72 aspects remained from the original 84.

The method of implementation

1. Revision and modification of the evaluation system with weighting
2. Designing and sending out questionnaires for some special aspects (after delivery type of aspects)
3. Designing an Excel table representing the system (limits of points, weights, totals)
4. Revision and collection of necessary documentation
5. Assigning job to evaluation staff with time pacing indication (deadlines)
6. Accomplishing the scoring process
7. Preparing the first draft and circulating it
8. Finalising the evaluation

Outcomes of the process

The evaluation system fulfilled the aims of the evaluation policy. The process appeared to be straightforward, flexible enough, rapid, and cost effective. Among the aspects designed, only

a few were fuzzy, modification was easy. The final scoring was acceptable to the beneficiary University, and the findings were meaningful for them. The system was flexible enough to be a part of a bigger evaluation system, and has the feature of „importing” data of different evaluation systems. This feature was originally not in the policy. The piloted system additionally helped the whole project to give recommendations to the University in a manageable, quantifiable way.

Summary and conclusion

During the period of 1999-2001 BUTE DE Centre elaborated a new and flexible way of evaluating Open Learning Systems. The group of experts from different fields of education could design and develop a working framework of evaluating materials, programmes and institutions, from a specific aspect, e.g. ODL service. This system was piloted and has proven to be a properly functioning system.

In the future there is a big challenge to continue the research to work out a databank of different aspects, and to offer more weighting systems representing different educational policies.