

EVALUATION OF DISTANCE LEARNING EFFICIENCY

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Abstract

While planning and executing distance learning activities, organizations constantly face questions, concerning the effectiveness of the education in respect to face-to-face education, from inside and outside the institution. In this work, it is tried to put forth the criterions for efficiency in distance learning and how these should be evaluated. The main purpose in evaluation of distance learning efficiency, just like the traditional education system, is to have feedback about students learning activities. With respect to these, evaluation in distance learning must not be done as the evaluation of solely one lesson but must be done as the evaluation of system structure.

Keywords: Distance Learning, Evaluation, Efficiency

Introduction

Technological improvements have also triggered changes throughout history. (Atıç, 2004). Distance education and learning systems, accommodating new improvements that modern communication technologies presented to the learning-education aimed activity, are an option for people with the abilities like, culture transferring to people, reaching information, evaluating free time, being selective and independent on acquiring information (Barkan ve Eroğlu, 2004). Every individual even ones that are not students demand education all through the world with the effect of lifetime learning philosophy. In response to this demand; importance of distance learning (DL) increases each passing day for reasons of, insufficiency in present education methods, a decrease in education cost of an individual, and the need for effective usage of technology in education. DL having a wide range of application areas, brought out a global education possibility beyond local and national limits. (Girginer, 2002).

Managers of education system are responsible to make the education organizations fresh and effective, to preserve health of organizations and to provide the satisfaction of education people in service, in order to maintain the survival and development of system. In this regard, change gains increasing importance for efficiency and productivity in learning-teaching process. Because education services are one of the biggest item in a nation's expense plan. In present time a society or a

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foundation can not tolerate a high cost and low efficient education for a long period. (Barkan ve Eroğlu, 2004).

Efficiency/Productivity in Education

A problem that modern management gives importance is to provide an organization's efficiency. In this regard, what an organization's efficiency would be must be identified. However, organizational efficiency has many definitions due to the thought that it is a required attribute of an organization. (Başaran, 1992, 134). Efficiency and productivity concepts are mostly used as synonyms in literature. But it is possible to place different meanings on these concepts. Productivity can be defined as proportion or optimum relation of output to the input that is used to achieve the output. In short, if a certain output is obtained with minimum input or maximum output is produced with a certain input, then this activity is productively concluded. Efficiency is related with the materialization of common goal. In short, productivity is making the optimum output from the resources, efficiency is to get the best result by utilizing the resources. (Karakütük, 2006, Aydın, 1998, 223).

If efficiency level of organizations is proportional with the goal realization level, education organization's efficiency is related to realizing organizational, administrative and educational goals as planned. In short, we can define efficiency in education as the best use of education resources in hand for to reach and raise the level of person's and society's educational goals.

Distance Learning Efficiency Indicators

It is pretty hard to find an answer as if an organization or a school is effective. Because efficiency is not bound on one condition, one dimensional evaluation is insufficient. An education foundation can be defined as effective or ineffective according to the criteria used. Because organizations are not same or analogous. This comprehension shows that conditional approach is put out following the system approach from the view of management idea's progress. (Özdemir, 1998, 2).

Distance learning efficiency indicators can be listed as; suitable method/technology, qualification of the personnel in charge, management support, interaction and cost. (Sığırı, 2004, Çuhardar ve Kıyıcı, 2007).

1. Suitable Method/Technology

Technical support is highly important in distance learning applications. If technical support is not on time the learning-teaching activities in a lesson can stop on a sudden. With the help of technological possibilities, rich aural and visual designs make the education attractive and enhance learning. When learning environment is supported with aural and visual informatics easiness, interaction between the learner and learning can be moved to higher levels. Learner controlled even chosen aiding lesson elements increase the learning and understanding speed. It is expected from aural and visual informatics contribution to make the learning permanent.

2. The Personnel in Charge

The personnel in charge must work as a team for the distance learning to be successful. This team must be constituted with people having responsibilities like; requirement analysis of the learner, learning packet's design, learning environment's design, measurement and evaluation processes, and successful execution of the program. Some of the members in the team can be listed as follows:

Manager: The individuals having the managerial duty in distance learning systems must be conciliatory, decision making and having arbitral nature as well as having managerial character. Managers must be perfect in technical matters and human relations since they will be in close relationship with technical and support personnel.

Education Staff: The major role in the success of distance learning systems belongs to education staff. In traditional education systems the responsibilities of education staff is to prepare the lesson contents and meet student requirements. In distance learning educator must, know the student qualifications and requirements very well, develop education styles suitable for student's individual differences and student requirements, and have the role of a helper then a teacher.

Support Personnel: The support personnel employment, that will be in charge of solving technical problems, will increase the success of distance learning systems, which shall make it possible for the teacher to spend more time on education activities other than technical problems.

3. Organization Management Support

Material and moral support of organization management is very important for distance learning applications to be done in an effective way. It must be clearly specified how much management supports the students attending distance learning system lessons. The support of managements affect the success of distance learning greatly.

4. Interaction

Interaction has key role in the name of providing some educational situations in any kind of education environment, face to face or distance. These roles can be listed as follows (Kaya, 2002):

1. Attention exciting, gaining and maintaining,
2. Informing students about learning goals,
3. Representation of information,
4. Questioning and question answering,
5. Feedback about student performance.

No matter what approach is followed in distance learning, student is always in the first plan, in other words at the center. System must be ordered to make it possible for the student to learn all by himself. At the planning phase of distance learning, ways to form and execute the teacher-student and student-student interaction reliably must be searched, and required technologies must be used rooted on suitable educational approaches.

5. Cost

As the start up cost, just like in every investment project, certain amount of financing is needed for DL too. The service quality in DL is closely related to financing capability. The studies directed at education service, presented by DL, must be financed with a certain economical structure budgeting. (Girginer, 2002).

Evaluation of Distance Learning Efficiency

Distance learning systems, besides the advantages of problem solving, are much more sensitive to quality compared to traditional classroom applications, on the subject of reaching to the crowd for education. In this regard, distance learning foundations must be questioned for quality of the services they produce, not only the quantity. (<http://www.uzem.sakarya.edu.tr/Admin>). Furthermore efforts to evaluate distance learning must involve if lessons in system are being effective and how they are perceived by students.

Just like in traditional education, as the base of success, defined on scope of reaching efficiency criterions for targets set in distance learning, besides having large number of “information”, there must be variety and getting rich at sharing environment. In traditional education models determinative worry is to generate the most effective and productive information, meanwhile in modern education models main worry is to improve the sharing and circulation channels of the most effective and productive information. (Barkan ve Eroğlu, 2004).

DL structuring process and decisions in DL applications are evaluated from the view of economical and cost efficiency. Thus efficiency, cost and technology dimensions of DL and in connection with this the evaluation of foundation’s transition process to DL can be done. Economical evaluation of DL models, developed according to target people and lesson content within conceptual model, will also evaluate the efficiency and technology usage. Educational efficiency comparisons can be done with the use of efficiency criterions, in result of application of education presented by production functions that are developed considering DL targets. A foundation can control itself by working on correction and arrangement issues according to the results of evaluation. Every decision in this sub system, suitability examined according to foundation, tries to meet structural and economical perspective criterions. (Girginer, 2002).

In evaluation of efficiency at education, it is an important method to examine system model and the model elements(input, process, output, result) separately. While evaluating the efficiency of distance learning we can mention the Utah Model, Alaska Model and Nirengi Model which are accepted by literature. Main purpose on evaluation level of these models has differences. Utah model is devoted to effective realization of education services. Alaska Model is based on clarifying the education programs and requirements of the employees. Nirengi Model suggests the usage of different technics as quantitative and qualitative in light of scientific studies. (İşman, 1998, 24).

If these evaluation models are synthesised, evaluation phases can be determined as follows (İşman, 1998, 24, Özen ve Karaman, 2001, Girginer, 2002):

Reviewing the purpose and targets: This is the first evaluation operation right after application. On this phase efficiency of education is evaluated by reviewing as if the educational method and materials can fulfill the educational purposes. An aim of evaluation is to understand if educational method and material is suitable for the required purpose and targets. The application of education is first real test of developed material. Education material should be pre-tested with a small group before the application if possible. If this is not possible, the first usage of material will also be used as field test to determine its effect.

Evaluation of design and working: One of the important aspect of evaluation is constituting and evaluating visual tools and messages, expressions, images. In this regards, design of TV and computer screens, expression of messages and visual concepts in educational means, readability is important. Besides as to be technic, it is important to know the effects of these on visual learning and thinking. For the designs to be supported with suitable technologies, materials must be developed and developed materials must be tested in regard of “multimedia and hypermedia” development usage. This process forced, high quality education programs like Interactive Video (IV), Computerized Education Program (CEP) and new technologies to be used. With the advancements at education design process, social requirements that appear in the light of new technological improvements will be fulfilled. In other words, information, technology and design will be used side by side in distance learning.

Process Evaluation: As in every system the new system, formed by means of transition to DL, must be watched, problems must be solved and correcting activities for any matter must be done constantly. This can be achieved by having an effective feedback in every process phase all the time. (Girginer, 2002).

Process evaluation provides data for to reorganize and improve the education by determining the disorganized aspects. These feedbacks not only support the foundation tend on different applications, but also can channel the foundation to new visions.

Process directed evaluation can be used at development and application phases of lesson content for to improve the education. At this point, as the educational changes of student is the product of education; it would be appropriate to evaluate the institutional quality variables primarily with the view point of processes leading to behaviour change. (Uluğ, 2000).

Product directed evaluation: To determine the efficiency of learning at the end of education is the evaluation of success. Product directed evaluation helps lesson reorganization after education completion and planning for future. Students discussing for how to make the lesson better after lesson completion can be an example for this. Product evaluation is done for the purpose of indicating how effective the applied education program has been in actual fact. Data for this evaluation can be obtained by analysing student’s exam results, observing graduates in business and taking opinions of student and teacher about the program. Data is collected with quantitative and qualitative methods for process and product directed evaluation. Quantitative evaluation depends on answers and arises with experimental research done on collected

data. On contrary, qualitative evaluation examines answers in deep. Evaluation data is collected after lesson material application is over. Careful study of the results is used to identify the unambiguity and weak points. The analysis of evaluation results are used as a stepping stone for correction plan preparation.

Correction Phase

Even the most carefully organized DL lesson may need to change and to be corrected. A lesson that is carefully reorganized, in first use, is much safer than a lesson that is thought to be perfect. The best correction resource about the decent and poor aspects of lesson is the thoughts of the lesson's teacher. For this reason, correction plans should be prepared right after the end of lesson. Generally little arrangements like, breaking the big units into manageable smaller pieces or increasing the interaction between students are being done. Applying field test to the changes done is an important and not to be missed keypoint. The corrections done must be tested on a group of student, field experts and other teachers. The result of this process must be evaluated regarding varying properties of every farther class. A correction acceptable for a student group may not be suitable for another group.

In Place Of Conclusion

Applying the measurement and evaluation technics of classic education system alone in distance learning education foundations will lead to mistakes in student's success evaluation and the result of evaluation process will be misleading. Evaluation in distance learning must be done as evaluation of system structure, not as evaluation of solely one lesson. For this reason, foundations and organizaitons that apply distance learning education must execute their evaluation studies using scientific research methods.

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