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OPPORTUNITY COST OF DISTANCE EDUCATION

Recep TÜRKOĞLU
PhD Candidate
Hacettepe UniversityÜniversitesi
Social cience Graduate Institute

Abstract

In this study; opportunity cost (OC) of distance education (DE) has been examined. In addition, Factors, which affect OC of DE, have been investigated according to institute, which develops DE and puts it into practice, student/parent whose target of DE program is and teacher who works for DE program.

Key Words

Distance Education, Opportunity Cost, Foregone Earnings, Online Education

1. Introduction

DE which had been started by letter, had continued to develop by the technology (radio and TV), at last, by Internet technologies, has obtained education which has time and place independently (TURKOGLU, 2003).

One reason of why DE has become widespread so far is that in terms of institute and learner it has cost-efficient and when it is modeled according to mass education it can expose the application which is high cost-effective (GIRGINER, 2001:39). The reason of why Internet based DE has become widespread so far is that it has technologic advantages.

Features of economy of DE are below (GIRGINER, 2001:40-42):

a) Per-system and per-unit expenses are relatively low.
b) Constant and variable cost ratio is higher than traditional education (TE).
c) It is required to invest higher than TE before student enrolling
d) It is more effective than TE in costing
e) In terms of productional inputs, it allows getting various outputs than TE.
f) Main determinative factors in cost structure of system are especially technologic investments and its usages.
g) Cost structures of technologies which is presented to education are different each other.
h) In terms of TE, different between constant and variable costs are especially important.

One of the factors, which effect quality of DE, is that it is cheaper than TE and this quality is obtained by effective planning (TURKOGLU, 2003). When DE is thought in system approach, financing is an important part of the DE system.

Institutional structure and role, used technology, number of student, size and type of program and program period affect the economy of DE (GIRGINER, 2001:43-46).

Decisions of DE investment consist of decisions about constant investment like building, education environment which are mandatory used in designing, developing, applying and executing education phases and about choosing technologies which can be used especially in developing and presenting education (GIRGINER, 2001:96-97). In project decision process which is first process of developing of DE program process (TURKOGLU, 2003), it is important to analyze the decisions about economic, technologic and effective dimensions of DE program (GIRGINER, 2001: i).

When developing DE project, it must be taken into consideration the OC, which is the most important cost type like all investment decisions. OC which is come out outcome of any decisions is abandoned alternative which is resulted from this the decision. The dimension of cost of abandoned alternative is required to take other many standards into consideration in decision process (GIRGINER, 2001:106-107). By looking at direct expenses, which are made from education budged, real economic cost of an educational reform, which is quite suitable, by detailed study, includes fairly secret cost for wide part of society and all economy (Coombs and Hallak, 1994: 100-101).

In this study; after explained the concept of OC, what are the factors, which affect the OC of DE in terms of institute, student/parent and teacher will be explained.

2. The concept of OC

Suppose that you have 25$ and you can buy either a watch or a radio. If you buy a watch, you have to give up the radio. OC of property, which you have bought, equal the value, which you didn't buy. In other words, OC of the watch is the value of the radio. Another example is that you have a free day. You can go either fishing or stay home and you can do repairing. In this case, the cost of fishing equals the cost of repairing (Coombs and Hallak, 1994: 100-101).

OC is the expected monetary value in case the sources are used profitable (Woodhall, 1987: 393; TURAL, 2002: 116; Coombs and Hallak, 1994: 100). In other words, because the sources are scare but needing is plenty and various, to do a choice mean to sacrifice the others, this is called as OC (TURAL, 2002: 115). Added value, which is obtained from the end of alternative investments, which consist of investments and inputs, which are for education and tax income, which comes from the added value, also form social cost (UNAL, 1996: 236). OC is used to mean the real sources, which are represented by spending money. These real sources consist of not only bought sources, but also sources, which cannot be bought and sold. Namely, it consists of all sources without looking at whether it can be bought and sold (TURAL, 2002: 116-117).

Despite OC can not bee seen in the balance sheet and profit-detriment table, cost analysts are aware of the importance (TURAL, 2002: 116; Coombs and Hallak, 1994: 101). In the analyses of profit-detriment, OC is used instead of monetary sources (TURAL, 2002: 117; Coombs and Hallak, 1994: 100-101).

3. OC in terms of Institute

There are some decisions before making a decision about Institute's DE investment and during putting into practice. If these decisions are made right, OC of the program can be decreased.

When DE project is begun, a part of time, which belongs to institute, must be allocated to develop a DE program. Developing DE program has more time then TE. In this case, institute must make a decision by thinking the lost time (Burton and Robert 1998). OC consists of the cost increase of not doing works due to the lost time, which is assigned to the program by the institute. If institute has other activities than DE, in this case, the institute's OC is higher than the others (Burton and Robert 1998).

While selecting the role (developer, server, supporter and student), which the institute plays in DE project, OC, which is caused by giving up the others, consists of OC, which belongs to selected role. Main sense of this approach is that one community or individual makes a decision for an aim about using a part of limited resources (for example education) which can be used in certain time and gives up wasting the same resources for another aim (Coombs and Hallak, 1994: 100).

During developing the DE project, it is important to use proper technology and to select the cheapest. During selecting the proper technology, OC of selected technology consists of abandoned technology. By using proper technology, this cost is reduced by giving the education, which is given by the institute (Agre, 2003). In addition, there is an alternative for the institute to buy or rent the selected technology. In this situation, there is an OC, which is happened from abandoned alternative.

Determining the target of the DE program is an important key for costing. During determining the characteristics and number of target group, abandoned other target groups, which are possible target group of the program, may form an OC.

During developing the DE project, determining the size and type of the DE program may also be a key component to increase the student's OC because they must have more time.

Because the period of DE program consists of its life, preparation and developing costs, which is used as an investment in this period, are constant costs (GIRGINER, 2001:46-47). But this period play a part for student in selecting the program; this may be a key factor to increase the student's OC.

It is critical to determine a price for the program which lives on by itself. In other words, it may not advantageous and in this respect, the program may not live (Ibrahim, 2003). The students want to know whether taking the online course increase their cost or not and whether they save the cost and/or time (Keynes, 2003). The student's time and foregone earnings should take into account when determining the price of the program (Quenn's University, 2003). When investors evaluate the opportunity of DE, they should evaluate direct costs with OC of investment. In addition, they should evaluate whether it is cost-effective and OC of the program effect direct costs or not (Dodds and Youngman, 1994). In this respect; student's costs of the program and how student affords these cost should be thought in detail (Keynes, 2003).

As a result; the institute should take its alternative usages of sources, which belong to institute into account. Sources, which are used in offer of education, can be separated in real and monetary. Real sources indicate factors (education workers, education materials, classroom, workshop, school building etc.). Monetary sources can be used for buying and calculating these sources (TURAL, 2002:116). Alternative usages (renting etc.) of inputs like building, materials etc. that is used for education form OC of these inputs (UNAL, 1996: 235). If online education investments are more profitable at outcome of calculating the OC of investments, which take part in cost variable of evaluating and carrying on, it can be made a decision about making an investment (Tezcan, 2002).

4. OC in terms of Student/Parent

Student's OC are affected by becoming separated from their work, foregone earnings, lost OC and personal/social risk cost (Fetrow, 1999). In addition, fee, books and materials, working time, lost social activities and effort, which is required for planning and acquired the career affect the student's OC (Malhotra, Sizoo and Chorvat, 2003).

The price which students pay for education equals to directly cost (book, travel, uniform etc.) plus foregone earnings in education period because of not doing a job (UNAL, 1996: 235). That is to say that foregone earnings in education period, namely, wages, which they earn when they work, express their foregone earnings (Ash and Bacsich, 2000). There are two elements of OC in education: first, the student who goes to school abandons employment opportunity and earnings in education period. Second, student and parents abandon earnings, which likely come from sources, which are spent for fee and other direct cost because they don't invest their sources in other profitable area (ERGEN, 2002).

Unlike the TE, because the DE students don't have to leave their work, OC of DE is less than TE (Curran, 2003; Shrestha, 1997; Bilham and Gilmour, 1995; ANS, 2003).In terms of company, they don't have to bear the lost day cost which result from the worker training (Bilham ve Gilmour, 1995; ANS, 2003). Especially giving an education to student community who is dispersed in wide area makes DE easier. Thus OC of the student's travel and lost work costs become zero (Fetrow, 1999; Tyler, 2001; Chan and Mills, 2003). In addition, when thinking all education cost, fees, boarding school and travel costs, taking DE course is advantageous than locally (Chan and Mills, 2003). But when it compares the half time courses, OC become lower (Curran, 2003). In addition DE increases OC of investment for woman training too (Chawla, 2003).

Because the students take course, which is necessary for them, they become selective persons (Chan ve Mills, 2003). The universities compete for students. The students buy their education for limited period and during this period; they have to select education from many universities. In this situation, when the students select their selection, they take OC into account beside direct cost of education (Agre, 2003).

It is thought that OC of leisure time has zero value (Curran, 2003). Because time has value and it is impossible it to turn back, losing the time is as same as spending our life (ZAMAN, 2001). People spend 89 hours for personal works (sleeping, getting dressed, going-coming work and other personal works), 40-50 hours for earnings and 30-40 hours for leisure time. People spend their leisure times for parents, entertainment, education, reading, hobby etc (BEMOL, 2003). Despite people' works which are done in leisure time has zero value; it is

more valuable for people. If looking as system approach, the works, which are done in leisure time, is important for people to be healthy. If DE targets leisure time, DE program should be important as much as abandoning the leisure time. People don't pass the time for education, which is not seen as important and is not contributed to their performances. In this respect, education program should make people see their education as "it is worthy to keep on" (ENOCTA, 2002).

Generally, in DE, because student's time has more OC, big part of costs consist of time which is used for studying materials by student and it is difficult to measure for it in monetary (GIRGINER, 2001:46-47). Workers have to take the DE program at noon, before sleeping and out of work. In this situation, people may prefer finish the training than learning. In this situation, it is important to inform managers and students about importance of education program and to explain that to spend time for DE is not the lost time. In addition, dividing the education programs into small part prevent long time necessities for students (ENOCTA, 2002).

5. OC in terms of Teacher

The effect of Teachers' indirect works, professional risk cost and lost OC on their other works affects teachers' cost (Design Model, 2003). Teachers' tasks connected with DE program may hinder their other works doing. In this case, they may confront professional risks about their job and OC, which result from not doing other works. Feeling this situation by teacher or having formed this situation occur unwillingness for them about doing their DE tasks or not doing them. To prevent this situation, the tasks connected with DE program, which are given to teacher, should be made formal and made equal to other tasks.

Teachers may use time, which is spent, for education by them for alternative employment possibility, namely better job. Teachers' foregone earnings relevant with better job form OC (ÜNAL, 1996:235; Ash and Bacsich, 2000). If the wages which is earned from DE program less than TE, in this case, teacher prefers relieve of duty at TE program. The wages for teacher in DE program being at least less then TE may prevent this cost to come into existence.

Each teacher may assign their work times to either development of DE program or activities for annual institute evaluation. If institute don't include teacher's activities relevant with DE program into annual evaluation, in this case, teacher's OC increase and they don't want to work for DE (Burton and Robert 1998). Like other activities, including teachers' activities relevant with DE program into evaluation remove their unwillingness.

6. Conclusion

As a result, table 1 shows factors, which effect OC in terms of institute, student/parents and teacher in DE program.

The factors which affect OC in DE program		
Institute	**Student/Parent**	**Teacher**
• Assigning or not institute's time to DE program • Role which is played a part in project • Selecting technology and its	• Selecting program • Leisure time • Fee • Foregone earnings • Foregone earnings of alternative	• The indirect effect of duties relevant with DE program on normal duties • Alternative employment possibility • Not include the DE program into academic evaluation

environment • Selecting target mass • Program size and type • Program period • Fixing the price of the program • Alternative usage of sources	investments	

Table 1: The factors, which affect OC in DE program

As seen at Table 1; like TE, OC reserve an important place in DE. When developing DE program, at project development period, it is more useful that all dimension of OC should be taken into account.

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