

Importance Of Training Aimed At Production In Businesses: Educational Studies Carried Out By The Turkish Private Sector

Gökhan Ofluoğlu¹, Sibel Buzkan², Sadık Kiliç³

1Zonguldak Karaelmas University

*Faculty of Economics and Administrative Sciences, Department of Labor Economics and
Industrial Relations*

İncivez – Zonguldak, Tel: (0372) 2574010 -

2Zonguldak Karaelmas University

Faculty of Economics and Administrative Sciences, Department of Business Administration

İncivez – Zonguldak, Tel: (0372) 2574010 -

3Zonguldak Karaelmas University

*Faculty of Economics and Administrative Sciences, Department of Labor Economics and
Industrial Relations*

İncivez – Zonguldak, Tel: (0372) 2574010 – 1669

Emails: kilicsadik80@gmail.com, gofluoglu@yahoo.com, sibelbuzkan@yahoo.com

Abstract

There are basically three kinds of educational activities in the World and in Turkey. These are formal/organized education, non-formal education, and informal education. In this age the importance of informal education is increasing. This is due to the inadequacy of formal education and its complementary, non-formal education, for the postfordist contexture of production. In Turkey, businesses do not play a part in any of these three kinds of educational activities. However, their active output are getting larger and larger from formal to informal education. While there is an indirect participation of the businesses on this issue in formal and non-formal education, in informal education there is direct participation. Actually, the core of informal education constitutes the learnings experienced in the work place.

In this study, within the training aimed at production in the businesses, apprenticeship workshops which are implemented within the frame of formal education and vocational training which is the extension of formal education, as well as various educational activities and informal education which are implemented within the formal education are discussed. The necessity of informal education and its further connection to productivity is emphasized.

Keywords: Productivity, Formal Education, Non-Formal Education, Informal Education.

1.INTRODUCTION

There have been studies on the issue of the importance of education beyond measure. Most of these studies emphasized the importance and necessity of education. Indeed, when education is handled efficiently a lot of important development, including productivity follow. In this

study, educational activities in Turkey are argued. Not the full extent of the educational activities, but only the activities which the businesses participate in in the process of education are dealt with. However, educational issues, as they pose an integrated lot, have occasionally been excluded. In the study, it is assumed that there is a closer relation between informal education and productivity and with a presupposition the relation between education and productivity is often assumed to be positive.

Assessment and evaluation is one of the leading issues of economic requirements of our time. Above all, assessment provides focusing and scrutinizing in case there is a problem. Various productivity assessments are made. The assessment applied is shaped according to the goal pursued and data provided. In this manner, classification related to productivity assessment can be made according to its extent, its field of application, and according to the scientific discipline. (Akçay, 2011:37-44). Productivity assessments according to their extent are divided into two as follows: with a single factor and with multiple factors. In single factor measurements, not only labor productivity but also capital productivity is assessed. In productivity assessments with multiple factors, on the other hand, input is evaluated as a whole. At this point, labor and capital are evaluated simultaneously and sometimes inputs such as energy and supplies are also attached(OECD, 2001:12). Speaking of productivity, in essence, we comprehend the input-output ratio.

Labour productivity analysis at macro level is calculated either as amount of productivity or value of yield per laborer or work done per hour. Instead of productivity value, sometimes wage level can be applied in productivity analysis. However, research has been done indicating that sometimes the wage level and productivity level are not the same(Dearden, Reed, Reenen, 2005:22). In Turkey, since 2005, apart from the first quarter of 2009, labour productivity has displayed a steady increase (General Directorate For Productivity, 2012:1).

Table 1: Productivity Charts

Country/District Name	Work Done Per Hour GDP Per capita (USA=100)	Annual Labour Productivity Rate of Increase						
		2005	2006	2007	2008	2009	2010	
Turkey	44,7	5	4.6	4.7	-0.9	-4.4	3.1	
Germany	90,7	1.2	3.6	1.7	-0.1	-2.5	1.4	
France	97,7	1.5	2.8	0.3	-1.7	-0.2	1.7	
England	78,3	1.2	2.2	1.8	-0.5	-2.1	0.9	
USA	100	1.5	0.8	1.2	0.7	2.1	3	
OECD Total	75,3	1.5	1.7	1.6	-0.1	-0.3	2.2	
G7 Countries	87,6	1.6	1.4	1.2	0.1	0.2	2.4	

Source: (online), <http://stats.oecd.org/Index.aspx?DatasetCode=LEVEL>, and

(Online), <http://stats.oecd.org/Index.aspx?DatasetCode=PDYGTH>, 2012.

In reference to Table 1, Turkey is considerably behind the other countries and regions with regard to productivity of workforce per working hour while sharp increases and decreases are perceived at productivity growth.

This calculation is favourable when we consider labour productivity as input-output ratio. Yet, when we try to focus on reasons of increase and decrease of labour productivity we do not have much data because there are a lot of elements effecting labour productivity. Although some of these may be dependent on other factor productivities such as capital and provisions they may also be independent of them. A business or an economy are each an open system. Labour productivity both at macro economic level and management level are effected by environmental factors extensively. Thereby, the fluctuation of labour productivity takes form by the influence of intermediary factors. At that point it becomes difficult to clarify labour productivity. Multi-factor productivity analyses are developed to overcome this drawback. Moreover calculations are made to indicate which factor is higher (Triplett, Bosworth, 2003:27). However, these are also far from taking environmental factors into consideration. A lot of internal and external environmental factors such as the structure of industrial relations, competition, the international openness of the market and Research and Development activities effects productivity (Dawkins, Rogers, 1998:196).

“Micro economic reforms” implemented in Australia since 1980 are leading sample cases on this issue. For, these reforms are an effective insidence of environmental factors. Privatizations, repealing or reducing the protective taxes against international trade, labour market deregulation, lifting the impediments in getting into the markets are some of these reforms (Borland, 2012). It is argued that these reforms have positive effects on productivity in many researches made in Australia (Mckenzie, 2005). The allegations in these researches are also supported by ampirical data.

Consequently, there are tens of factors that affect labour productivity. Yet, there is such a fact that uneducated society is unskilled at the same time. In this respect, the impact of education on productivity, though it is not possible to prove empirically, has a positive effect.

Education in the World and in Turkey can basically be divided into three. These are formal, non-formal and informal education. Formal education (with diploma); is the term given to the kind of education classified traditionally as pre-school, primary education, secondary education and higher education. Non-formal education (certificated) is qualified as the supplementary of formal education and apprenticeship and vocational training in Turkey can be evaluated in this context. As for informal education, it encompasses the education beyond the two denoted education types above and rather related to educational activities performed by private sector. These educational activities are set up to make up some shortcomings. There is usually no diploma or certificate; even if there is a certificate it does not have much formal value. The core of informal education constitute the kind of training, commonly, denoted by the expression “uncertificated” which refers to on-the-job-training. Nonetheless, educational activities arranged to supply with the interests and requirements of the workers of a business are in the range of informal education (İSO, 2012). Besides, an educational activity sometimes goes under more than one category. Particularly, non-formal and informal education may be confused. Hence, certificate is awarded at some kinds of informal education.

Human Capital Theory also seperates general (formal) and private (informal) education from one another. Formal education is not an education studied solely for a particular employer or work place or work. Throughout an individual’s life formal education has the quality of being used in various jobs. However, non-formal education comprises some special gains and in general these gains cannot be transfered from one workplace to another(Viele, 2010:584).

Formal education which is agreeable with the Fordist production structure and its complementary non-formal education cannot be satisfying enough for today's markets. For, postfordist production structure requires keeping the current workforce appropriate to the volatile market conditions. Similarly, replacement of centralized planning by the market oriented economic system emerged in 1980s corroborated this course. In this context, the sample case presented by Lechner (1999:74) for East Germany is basically feasible to a large extent for the other countries as well. That is; in place of formal and non-formal education funded by state, informal education funding of which is undertaken by those who need the education and private sector organization becomes widespread. There is a common belief that there is a linear and positive connection between education and productivity. Moreover, economists perceive the widespreading of education as the crucial element of economic growth (Vinovskis, 1970:550). A lot of writers, such as Schultz, declare that productivity will rise with the rise of the qualities of workforce (Arrow, 1962:172). As educational level increases, possibility of easy adaptation to the changes that occur and structure that is more suitable to technological developments is constituted. Hence it is a known fact that education also generates a lot of positive externality (Nelson, Phelps, 1965:75). The common belief that relation between formal education and productivity is positive is one of the fundamental hypothesis of Human Capital Theory.

Arrow considers the method of learning named "learning by doing", substituted by the concept of experience, important in many aspects. In view of Arrow, it is not possible not to observe the importance of experimentation in the growth of productivity (1965:156). Romer (1986:1002) articulated that, in long term growth, instead of falling marginal productivity of the classical theory, rising marginal productivity should be debated on the issue of "knowledge". According to Romer, when a company's or an individual's knowledge increases this situation cannot be restored by the company or the individual and the knowledge spreads.

On the issue of decreasing productivities law, which creates indecision, asserting that labor-capital correlation can be positively sloped, there is emphasis on the importance of education, knowledge and learning on the basis of approaches which weakens the basic assumptions of the classical theory.

The internal development model elements consist of surge of knowledge, public expenditures and impact of human capital, constitute the models that are developed as an alternative to classical theory. In this respect, Kar and Ağır (2006) who examined the years between 1926 – 1994 reached the finding that spending on education increased growth. At another study researched between the years 1969 – 2001, it is observed that the impact of human capital on growth is more explicitly highlighted (Taban, Kar, 2006:175). In the same manner, yet in another study researched between the years 1960 – 2004, it is observed that growth and education influence one another mutually (Şimşek, Kadılar, 2010:115). Similar findings are reached in the studies researched between 1950 - 2000 (Serel, Masatçı, 2005) and between 1923 – 2005 (Özsoy, 2009). The impact of formal education on productivity is realized in an adjournment. The return of today's formal education investments are gained after quite a long time. The situation on non-formal and informal education is a little different. In these educational types, as there is the question of supplying certain necessities, the impact on productivity is expected at a much earlier time. We must also take into consideration that education that is not befitting for the necessities, may lessen productivity instead of enhancing it. In essence there are two kinds of education aimed at productivity: the first one is standard (knowledge) and the second one is flexible (aimed at outcome). Today's educational activities tends rather towards the second one. Some of the causes of this are: structural changes such

as: privatization, deregulation, decentralization and authorization; for the companies becoming more international; labour market becoming more flexible, quality and productivity becoming a strategic instrument in engendering a new market; strategic management becoming more valuable than hierarchical management; human resources and human skills being conceived as the most important productivity factor gradually and others (Prokopenko, North, 1997:A-3).

In education – productivity correlation, without doubt, the gainings of education related to work (the informal education) emerges in a shorter time and it has more direct effect (Dearden vd, 2005:23). But, the acquisition provided after any educational investment and its impact on the productivity is quite difficult to assess. Moreover, assessing solely the production encompasses crucial complications. Labour productivity, on the whole, denotes output coinciding employment per hour. To find this output in service sector is even more difficult(Bolino, 1981:5). Service industry is the sector which has the broadest area of the present day. The business evaluations in this sector are more compelling and evaluation outputs less precise. The difficulties endured at performance evaluation in this sector are also valid at productivity evaluation. In this context, Lee’s categoric division between businesses can be taken into account. Lee divides businesses into two as those that can be evaluated definitely and those that cannot be evaluated definitely(1985:324). It is possible to make precise and trustworthy evaluations with works that we can come to a conclusion and count substantially. The second one is the works that we are trying to evaluate the transformation process between input and output or means-end relations. The target is whether the organization is progressing or not and whether it is effective and efficient or not for which the process requires a variety of behaviours to reach the means-end. The expansion of the service sector has increased the number of businesses the evaluation of which is difficult to make. In a research it is found out that education given to industrial sector provided a rate of increase of productivity more than the education given in services sectors(Maglen, Hopkins, Burke, 2001).

Undoubtedly, every country has some educational problems. However, when we compare Turkey with countries such as Germany, France and England, we observe that the problems in Turkey is at a larger dimension.

Table 2: Principal Indicators In Education

Name of Country	Educational Expenditures As GDP Percentage	Participation Of Age Range 18-24 In Education	Rate of Participation Of Age Range 25-64 In Education(Life-long Learning)	Number of students per teacher (2009)
Turkey	2,82 (2006)	26,4	2,5	21,1
England	5,40 (2008)	45,4	19,4	15,8
Germany	4,55 (2008)	55,9	7,7	16,6
France	5,58 (2008)	55,3	5	14,6
Europe 15	4,97 (2008)	53,4	10,4	-

Source: data compiled from EUROstat . (Online)

<http://epp.eurostat.ec.europa.eu/portal/page/portal/statistics/themes>, 2012.

In the context of both formal and non-formal education, it can be observed that with compare to other European countries Turkey has quite unfavourable indicators. Particularly with indicators related to participation to education and educational expenditures there is a distinct difference. When the fact that the population of Turkey is comperatively young is considered, the importance of these negative indicators are doubled.

Further additions can be made to Table 2. The rate of illiterate population, the rate of schooling, ranged from preschool to higher education, financial troubles, crowded classes despite excess supply of teaching staff applicants are some of them. To sum up, Turkey's educational problems are structural. EU membership is a favourable aim at overcoming these problems. Whether full membership to EU is actualized or not it is essential for Turkey to take measures on the issue of education(Gediklioğlu, 2005:70).

2.Participation To Educational Activities In Businesses

Turkish private sector administrations participate in educational activities within the frame of some exceptional applications of formal education, the workplace applications of non-formal education and informal education. Contribution to formal and non-formal education shows up in indirect ways whereas informal education is a matter of direct contribution.

3.Formal Education

Businesses participate in formal educational activities in connection with apprenticeship applications within the scope of vocational high schools and vocational colleges of higher education. In this respect, it will be more precise to confine the subject matter to vocational high schools and vocational colleges of higher education. However, not only apprenticeship applications are taken into consideration about this issue, but also the common problems of vocational education is dealth with. For, these issues are interlocking issues and their solution requires an integrated point of view.

There are a lot of vocational highschoools in service. These are basically divided into two; vocational schools like : industrial vocational highschoools, trade vocational high schools, islamic vocational high schools, vocational schools for girls, vocational schools of justice and vocational schools of health constitute the first division and the second division constitutes the technical high schools. There is a relatively negative structure in question from the scope of vocational education when compared to economically developed countries according to the percentage of vocational and technical highschoools in secondary education.

Table 3: The Percentage of Vocational and Technical Highschools Within Secondary Education in Turkey

	1996-97	1999-00	2002-03	2005-06	2008-09	2009-10	2010-11
Percentage of Vocational and Technical Highschools Within Secondary Education	%45,8	%39,56	%32,59	%36,2	%40,7	%42,9	%44

Source : TÜİK, "Educational Statistics", (Online), www.tuik.gov.tr, 2012.

As seen on Table 3, the percentage of vocational and technical highschoools from 1996-1999 school years of 45,8% continuously decreased until school year 2002-03 reaching the bottom

line of 32,59 % . The percentages that are already behind a lot of western countries diminished lesser and lesser, until it turned to rising trend from 2004 on, coming closer to the level of 1996. During this process vocational schools have lost a lot of respectability in the public eye. Without doubt, the changes on the coefficient applied at university entrance exams is the main reason why this process is endured (Şahin, Fındık, 2008:79). The circumstances gave rise to qualitative losses so much so that it overshadowed the quantitative losses that arose in this respect. Vocational highschools, became the primary educational institutions preferred by the students who fell below the level of average. Therefore, even if the coefficient comes up to balance today, it will not be able to solve the problem automatically.

German Vocational Educational System could be an agreeable target to enhance the labour productivity of vocational highschools because Germany holds one of the most successful educational systems in the World. In this system named The Dual System, predominantly, the age groups of 15 – 22 get education. 3 – 4 days a week is spent in workplace and 1-2 days a week at school. Two-thirds (2/3) of the time spent at school is filled by vocational subjects (BMBF, 2003:34). Those who graduate from this system may also carry on with the university education. Approximately 2/3 of the age group is involved in The Dual System (ibid:7). Companies contribute in financing directly, and completely set an example of good corporatism. A large majority of students who graduate take place in working life, gaining the status of being “skilled”.

German dual system virtually displays non-formal educational characteristic. But, majority of vocational education -leaving apprenticeship education aside- materializes within the scope of formal education. When German system is targeted, 1 we can easily affirm that we are far behind this aim.

German dual system is also presented as a leading example model by The World Bank. Hence, this model is even suggested for those countries which are specified as “developed” . It is frequently disclosed that this model also provides a significant amount of cost advantage. Herein, Bennell ve Segerstrom (1998:280)’s comments should be given heed. In their view, German dual system depicts a unique characteristic. Between employers and their uppermost organizations, workers and labour unions and the government an intrinsic corporatism is in question and the roots of this characteristic is extended even to middle ages.

It is, in essence, absurd to determine corporatism as a target because corporatism (the democratic corporatism) is a social structure that occurs spontaneously and is generally related to culture. However, some of the technical characteristics of German dual system may be determined as target. The application side of apprenticeship of formal education in Turkish vocational educational system remains quite primitive with compare to the German dual system. Training period, summer applications of vocational highschools of health the duration is as long as it is determined in their programs and it is stipulated 300 hours in other vocational highschools and between 30 work-days (240 hours) and 60 work-days in vocational colleges in universities. (Vocational Education Regulations, art.59).

One can easily reach to the conclusion that on the whole the implementation applied as two days of school and three days of workshop at workplace is important and necessary in the evaluation with regard to productivity in the final year of vocational schools. Hence, by this

1 See Esin Özdemir, “The Role of German Vocational Education System and Inferences on Vocational Education in Our Country and Chamber System” for further information on determining the German system as an aim and why this system is determined, TOBB European Cooperation Board, (online). www.tobb.org.tr 2012

means the students have a chance to get to know the work environment. But with regard to the length of time it can easily be suggested that it is not sufficient. At the same time, there is grave distrust on the way this short period is put to use.

Principally, the best method of learning is learning by practice (Karcı, 2009:101). Turkey must absolutely move vocational education to workplaces in steady paces. At workplace also, it must definitely be operative and forceful. To attain this, both students' and employers' awareness must be raised. Broad responsibilities are conferred upon universities, chambers of industry and commerce and local authorities on this issue.

The concerns of vocational education is not solely confined to secondary education. In higher education (tertiary education) similar problems exist. It is a known fact that two years spent in higher education is insufficient, besides, this period is spent with theoretical subjects. Again if we take the implementations in Germany into consideration, in Germany at higher education institutions equivalent to vocational colleges that take 7 semesters, minimum 2 semesters of apprenticeship training is stipulated. Before training starts, minimum 12 weeks workplace apprenticeship is stipulated as well. Besides, the students who succeed in graduating are entitled a diploma as engineers (Karcı, 2009:104).

4.Non-formal Education

The non-formal education is constituted by Apprenticeship Training Centers (MEM), Community Colleges (HEM) and other non-formal educational establishments in Turkey. There are totally 392 MEM (Apprenticeship Training Centers) in Turkey, nearly 300 thousand students take courses in these centers. There are three formal levels which are respectively apprenticeship, journeymanship and workmanship as a result of which students are granted a workmanship certificate and are allowed to open their own workplace. HEM, on the other hand, arranges three kinds of courses. These are: reading and writing courses, vocational technical courses and social cultural courses. Among these only vocational technical courses are directly related to labour market. Yet, it is observed that even these courses are generally aimed at people outside labour or employment (especially the unemployed are considered). Hence within the body of HEM there are 3,4 million trainees (Turkish Statistical Institute : TÜİK, 2010:2). Within the category of other elements various schools, centers and institutes exist. Advanced Technical Schools For Girls, Applied School of Art and Craft For Girls, Applied Industrial Apprenticeship Schools, Adults Technical Training Center, Adult Training Center of Hotel Management and Tourism, Open Education Vocational – Technical School, Tourism Training Centers are some of them(Kenar, 2009).

In view of Kenar (2009), the most important component of non-formal education is apprenticeship training. Apprenticeship training is a part of vocational education. There nearly 300 thousand participants receiving apprenticeship education, the number of which corresponds to 10 % of the total vocational education. The programs of apprenticeship education that vary between 2 to 4 years is decided by the boards of “provincial employment and vocational education”.

Educational activities done by İş-Kur, The Turkish Employment Organization is within the range of non-formal education. By the establishment of unemployment insurance fund, at the educational activities of the Turkish Employment Organization a huge amount of increase occurred within active employment policies. Hence, in the body of labour training courses, while there was 130 courses and 3868 participants, the amount rose up to 1888 courses and 32 206 participants in 2008 (İş-Kur :The Turkish Employment Organization, 2012). The number of participants reached 224 thousand between January and November in 2011 (General

Management Of The Turkish Employment Organization, 2011). Specialized Vocational Course Centers UMEM Skills'10 project and (apprenticeship) or on-the-job training covers quite reformist practices and it is related to our subject more closely.

The project of Specialized Vocational Course Centers, consists of educational activities which are set up to overcome the existing structural unemployment. However, as the activities implemented lead to acquiring a more qualified workforce, it should be expected to effect productivity. The project of Specialized Vocational Course Centers: UMEM commenced by signing a protocol between TOBB (Turkish Union of Chamber and Commodity Exchanges, Ministry of Labor And Social Security, Ministry of Education, TOBB (Turkish Union of Chamber and Commodity Exchanges University of Economy and Technology and for the time being it is spread to 81 provinces. In this sense, it displays a good public-private sector cooperation. The components of the project is consist of strenghtening the foundation of education, analysis of labour market requirements, matching/replacing implementation (selection of course trainee, placing to apprenticeship and job replacement of the successful participants) and the application of the newly envisaged courses. The target aimed as a consequence of the project is to employ the course trainee in the particular workplace (UMEM Skills'10 project, 2012). The number of course trainees within the context of Specialized Vocational Course Centers Project rose up to 35 thousand between January – November 2011. 20 TL pocket money is given to the course trainees daily.

Another reformist activity by İş-Kur, The Turkish Employment Organization is on-the-job training (apprenticeship). In 2011 5209 participants practiced on this rather new implementation of training, which is very few in number. However, by the objective set by the Ministry Of Labour And Socail Security (MOLSS), deputy under secretary, it is aimed at rising this amount to 400 thousand until 2015 (Tan, 2011:10). There is no doubt that in case this figure is reached, a considerable amount of distance will be covered. İş-Kur provides the participants' financial support (20 TL daily) for on-the-job training which lasts 6 months. Besides, in the context of "Operation to Promote Young Employment", encouraging on-the-job training is planned, again, by the support of İş-Kur :The Turkish Employment Organization (İş-Kur :The Turkish Employment Organization, 2011:92).

These are pivotal activities because we believe that on-the-job training is the kind of education that has the biggest impact on productivity. This should not come to mean that theoretical education should be totally disregarded. The necessity of certain basic theoretical study is an undeniable reality. Thus, we should avoid making a generalization for all occupational groups because in some occupational groups, intensive theoretical discussions are necessary. In this generalization rather the professions in the context of the occupational education is emphasized.

4.Informal Education

The significance of informal education is increasingly better understood in Turkey,like in the World. Informal education comes out with two of its aspects. The first one is a completely informal education (i.e. uncertified), where there is no setup of any kind for education. All sorts of knowledge and skills a worker in any workplace learns on his/her own is in this coverage. The second one is not totally informal. In case of resolving the educational demand of some or all of the workers of a business on any subject, the education acquired by means of purchasing a service is also informal education. This is because in the end of the training, on the whole, either a certificate that may not be transfered to another business is given or else, no certificate of the sort is given at all.

For the informal education to have a positive effect on productivity, before all, this education has to be productive, itself. The minimum terms for this kind of education to be productive are as follows:

- a) Need-base education analysis: An educational activity done when there is no need to do it may cause the fall of productivity. what is targeted in analysis is to determine the absence of any of the three characteristics of an employee. These are knowledge, skills, and attitude. There is no need for education if there is no inadequacy with any of these characteristics.
- b) Instructional design: In line with the specified necessities, first the present situation is examined. At this point, the matter of circumstances concerning what to learn and by whom and the learning medium and its limitations (such as time and money) are important. These are called educational conditions. The present situation as well as other circumstances are related to the motivation of the participants and the desired output. After these conditions are assessed, a method of teaching is selected and practiced (Reigeluth, 1999:9).
- c) The evaluation of the results: Undoubtedly the most complicated stage is this one. Business managers and their co-workers wish to know the impact of the educational investment on productivity. An investment has costs. These costs are consist of direct and indirect costs. Educators' pay, cost of organisation are direct costs. On the other hand, as the worker is away from work for that period of time, this causes a loss of labour. Besides, an opportunity cost also arises at this point. Managers make educational investment with the expectation that these costs will be covered by means of a productivity increase. When faced with the difficulty of calculating the productivity increase, with their intuition, they perceive whether the cost is covered or is not covered. The way to bring this beyond a thought is to activate the process which is known as chain of impact. After an educational investment the following stages must be evaluated respectively (Philips, 1997:5-6):
 - Reaction: Whether the anticipation of participation to an educational program is met or not, is a concern of the satisfaction gained from the program. The level of satisfaction is usually assessed by a post educational survey. However, in the end of this survey whether new knowledge or skill is acquired or not cannot be determined.
 - Learning: It is the study of the evaluation of what the participants gained by the end of the program. The evaluation, although other methods are also used, is assessed by an examination by the end of the program. Yet, the result achieved does not reveal any information about the application of the acquired knowledge about on-the-job practice.
 - Job applications: The skills learned must be practiced on the job. At this stage, it has to be evaluated whether the acquired skill is applicable on the job or not by various methods. Commonly, this is actualized in a few months period after the program. The outcome of this stage, is a significant assessment that reveals the success of the program. Still, this also does not give a clue whether the job application of the skills contributes to organizational success.
 - Business impact: At this stage, whether the organizational objectives are achieved or not is scrutinized. For instance, customer satisfaction, quality, outputs and costs are some of those. However, these also do not reveal information about the amount of the cost of the program.
 - Return on investment: This is the final stage of the assessment. In this, the financial profit is tried to be calculated. That is, answer to the question: " Does the program meet the costs?" is searched. The other name for this assessment is cost-benefit analysis.

In the book that Philips wrote in 1994 there were only four levels (1994:7). In 1997, by the addition of “business impact” the levels rose up to five. As it is summed up on Table 4, the value of the knowledge acquired at the assessments increase by the rise of the level. Similarly, the power of displaying the actual results and the difficulty of evaluation is growing. But the rate of usage diminishes.

Table 4: Chain Of Impact

Chain of Impact	Value of Knowledge	Power of Exposing The Results	Rate of Usage	Difficulty of Evaluation
Level 1 (Reaction)	The least Valueable	The least powerful	Too Frequent	Easy
Level 2 (Learning)	↓	↓	↑	↓
Level 3 (Behavior)				
Level 4 (Results)	The Most Valuable	The Most Powerful	Very Rare	Difficult

Source, 1994: 7)

Human Resources managers or experts assume significant responsibility in informal education as the unit that determines the educational requirement of the employers are Human Resources Managements. The duty of Human Resources management is to keep the staff in the required number and the qualification available for the business. To this purpose providing workers outside the workplace may be in question as well as the preparation of the present workers to prospective positions by being trained. The latter is more recognized and a more preferred alternative. In respect to this, education is one of the primary duties of the human resources management.

The in-house trainings that are implemented in businesses and educational activities that they materialize by the method of purchasing services from private educational institutions play an important role in informal education in Turkey. But besides this, it is known that they contribute in the process with seminars, conferences and many other educational activities at universities by the collaboration of universities and the industry. Apart from this, it is viewed that institutions such as Small and Medium Industry Development Organization (KOSGEB) also take part in informal education . Hence, KOSGEB (Small and Medium Industry Development Organization) provides financial support for the firms that require education and these educational activities are appraised within informal education.

Findings in the research named “Occupational Education In Enterprises Research Results” made by The Turkish Statistical Institute (TUİK) in 2007 have significance from the

perspective of our subject. In this research, it is possible to get an idea about the rate of informal education in Turkey. But there are no completely informal, that is, unplanned educations here. Unplanned informal education is continuously effective anytime anywhere.

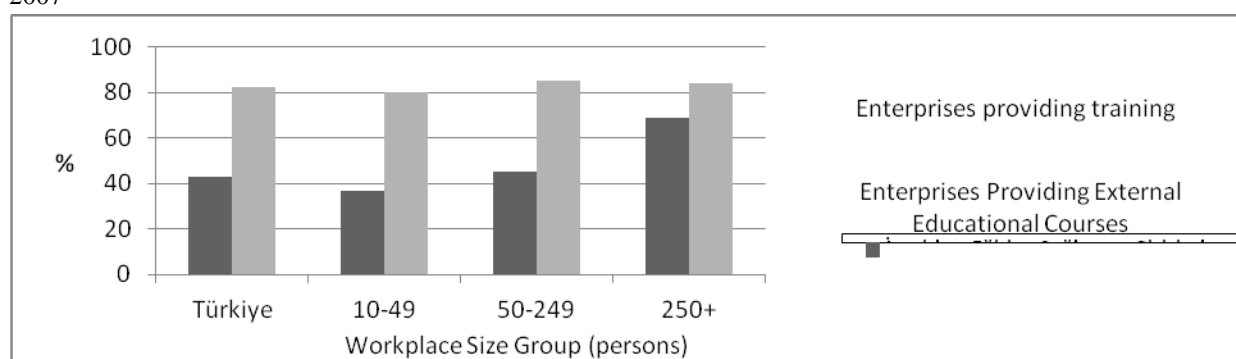
Table 5: Rate of Businesses That Provide Training For Their Employees Among All Businesses, 2007

The Size Of Workplace Group	Case of Producing Occupational Training		Kind Of Occupational Training Activity	
	The Rate of Enterprises Providing Occupational Education Activities	No Providing Occupational Education Activities	The Rate of Enterprises Providing Occupational Education Courses	The Rate of Enterprises Providing Other Forms Of Occupational Education
Total	68,0	32,0	17,1	23,7
10-49	70,6	29,4	14,7	21,7
50-249	59,7	40,3	23,7	30,0
250+	53,4	46,6	35,6	34,2

Source: TÜİK (The Turkish Statistical Institute).

When Table 5 is studied, as the the size of workplace grows, it is seen that the rate of providing occupational education increases. It is a known fact that The Human Resources Management units in larger, more corporate firms are more effective. Yet, it is seen that, including even half of those whose workplace is over 250 employees and 32% of the total businesses organize educational activity.

Graph 1: The Rate of Enterprises Providing Occupational Education According to Course Types, 2007



Source: TÜİK(The Turkish Statistical Institute).

The educational activities of (TÜİK) The Turkish Statistical Institute are extended to two divisions, as “courses” and “others”. Courses can be provided internally, organized by the businesses as well as externally, by paying for the services. The other activities are on-the-job guided training, rotation and exchange in offices, employment visits, quality and learning

circles, self-directed learning, participating in conferences, workshops, commercial fairs, seminars etc. All these are typical examples of informal education.

On Graph 1, the provision of education according to course types and the size of workplace is outlined. It is observed that in Turkey providing an external course is preferred rather than the others. As the workplace gets larger, especially when the number of employees it holds becomes more than 250, it is seen providing internal courses is preferred close to 70%.

By and large, the rates commonly indicate that informal education in Turkey is yet at the phase of development. Without doubt, informal education compared to other education types has a more effective potential for productivity. This potential has to be used as productively as possible. Educational need analyses are held in informal education in Turkey.

Generally, educational activities are initiated according to the analyses results. It is gradually understood better that when the issue of education, which brings out substantial costs for the businesses that operate by the rules of market economy is governed effectively it has a beneficial potential that exceeds the costs. By the information obtained from Chamber of Industry In Istanbul², as to whether businesses provide the education in their own organizations or get external education, educational need-base analyses are held. No information has been received on educational planning. However, as an educational activity cannot be implemented without planning, this has to be initially reconciled. That is, no matter what kind of education is talked about at a certain rate a well-designed educational planning is made.

The last stage of informal education is evaluation. In Turkey, just like in the world we are confronted with the same chart (Table 4). In the end of the interview with Istanbul Chamber of Industry, a finding of impact assessment after all of the types of education organized is reached. After the impact assessment, the findings show that transition to learning level is fifty percent less. It is concluded that the third level (job application) is rarely a matter and no data are reached in the fifth level application.

In essence, it is natural that chain of impact process works in this manner. Hence, each stage of chain of impact process, although carries on complementing one another, adds some cost. In this respect, the calculation of the return of informal education is a concern of academics rather than firms. To conclude, the calculation of investment return seems to remain as an academic activity-area for some more time to come. By means of some research, it is proved that this return is at quite a high level. (McLinden, Davis, Sheriff, 1994:140).

Life-long education in particular is a concept which covers formal, non-formal as well as informal education within its scope. By concept, it is indicated that rather informal education is emphasized. In accordance with the law no. 5544 issued in 2006, Vocational Qualification Authority is established. The aim of this institution is to determine the fundamentals of competence in national technical and vocational areas by taking national and international occupational standards as a base, and to establish and administer the national competence system necessary to implement assessment and evaluation, and to inform and certify related activities. The professions that require minimum bachelor's degree are excluded by this law (Law No.5544, article. 1).

² Istanbul Chamber of Industry Expert Hakan Çoban is interviewed. We are obliged to extend our thanks to Hakan Çoban, Expert and to İSO, the biggest chamber of Industry in Turkey for the invaluable information given on informal education.

One of the most important functions of Vocational Qualification Authority (Professional Competency Board) is to award professional competence certificate. Definitions of all existing professions, standards of duty, operation and success, competence related to the instruments used, knowledge and skills requirements, manner and behavior requirements and finally assessment and evaluation criteria are presented in detail. Although completing these impressive studies in a short time is difficult, its progress is known to be rapid. Professional competence certificate is awarded to the labourers who could achieve these standards. All of these are formed within the framework of national competency. The congruence of National competencies to European Qualifications Framework (AYÇ) still continues. European Qualifications Framework is made up of 8 stages and certification is awarded by these stages. These certifications mean legalizing informal and non-formal education.

Via the life-long learning process, a rough calculation is made for an individual who goes through all stages of formal education and is included in the nonformal education regularly every year and is found that the time spent for formal and nonformal education remains 15% and 85% of the time is spent in informal education (Borat, 2009:12). Endeavours for the extension and legalization of this sort of education of no-cost to the public result in noteworthy developments.

5.CONCLUSION

Although the interdependence of productivity-education is subject to debate, the impact of education on productivity is an undeniable reality. In Turkey, formal education has multi-dimensional structural problems. Problems concerning vocational education constitute one of the central problems of formal education. The rate of vocational education is comparatively lower. Apprenticeship application is inadequate quantitatively and is undetermined qualitatively.

Within the scope of non-formal education, apprenticeship education and a lot of certificate awarding educational activities are conducted. Apprenticeship education is the most effectively administered area of on-the-job training, which is the best way of learning. Yet, it has been aimed at a comparatively restricted area and a comparatively restricted amount of people. İş-Kur, The Turkish Employment Organization, increased its efficiency by using unemployment insurance fund, which produced significant outcomes for nonformal education. The project of Specialized Vocational Course Centers, UMEM, and on-the-job training practices are recognized as extremely successful projects.

Informal education in the World, as well as in Turkey, is widespread. As the effort to overcome the shortages of knowledge, skills and attitude of employees in informal education outweigh, it has to be emphasized that these kinds of education are more attached to productivity. The establishment of Professional Competency Board (Vocational Qualification Authority) and the acceptance of European Qualifications Framework is an important development at the point where the knowledge and skills learned for informal education are officially acknowledged.

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