

# THE MEASUREMENT OF THE EXPECTATIONS OF THE STUDENTS JOINED IN INFORMATION AND COMMUNICATION TECHNOLOGIES CERTIFICATE PROGRAMS

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## Abstract

Technological improvements have been generating changes in business, job creation, and the type of skills needed for jobs. These changes make the current unskilled labor force lag behind new market needs. Acquiring new and updating old skills is a double-sided job, not only a desire for employees but also for employers. Many workers, educated in traditional ways, become interested in certificate programs, in which updated new improvements are taught with modern and high technological methods. These certificate programs are considered much more important than High School and University Diplomas in the job market. In this study, by investigating a sector which needs high skilled labor force, It is tried to show employees' and employers' concerns about certificate programs. It is examined to find out that the percentage of employees, with or without certificates, change their current jobs or continue to work in the same job. Also, It is going to be investigated the importance of certificate programs in terms of how an employee can get a job with their certificates, how these programs affect the employees' levels of skills, wages, careers and the terms of employment.

*Keywords:* Information Society, Information Technologies, ICT Skills, Employment, ALMP

## Introduction

One of the most important problems in Turkey is the nature of employment and unemployment. The transition from the agricultural society to the industrial society required broad education to match needs for mass manufacturing and basic skills. In this process, qualified workforce (white-collar workers) became more important than hand skilled workforce (blue-collar workers). Today's economy, however, is using high level knowledge and skills. Especially, detailed product and customer information substituted basic level specialization to get customer loyalty in the industries. Therefore, the matter of workers' training is the main problem not only for the state institutions and firms and but also private companies. Economic development is not only solution to create job require high skills to match each other for the current unemployed people and newcomers into labor force market. The real solution is to implement active labor employment policies (ALMP) so as to match needed skills and labor force skills and to decrease rate of unemployment in the market.

The aim of this study is to understand the importance of the programs are used to teach and train people who need new or more skills to meet the requirements of jobs and markets or to change their professions. Besides that, it is aimed to find out what are the reasons and expectations of the students to join the programs, if they expect to get a job in national or international, have a higher wage and career, improve their current skills and work flexible. The graduation levels and rates of the participants will be obtained in order to make some projections for the future of the education system of Turkey. It is going to be investigated the relations between graduation levels and working span of time with their expectations.

In this work, the subject is separated into 2 sections. In the first section, the literature is reviewed and some examples are given from the world and Turkey. In the second section of the study, the survey is used to find answers in relation to expectations of the information and communication technologies (ICT) program students. This survey was conducted, in 2008, with 4 training companies which they are especially approved on ICT programs by international companies and spread with many branches and students who are in different regions of Istanbul which is the largest city in population and the biggest trade center of Turkey. The students answered 27 and companies answered 28 questions those were from their career to wages and skills. The SPSS program is used to compile this data which is cross-examined and then interesting results will be obtained to be used in the study.

## 1. The Nature of Employment in Knowledge Society

The most important differences between traditional society and knowledge society is that there is an increasing demand for white collars instead of blue collars so that this demand will be higher in the future to this labor force are good educated and high-tech skilled. The observations show us that there are lots of differences between high-skilled and low-skilled labor force in the process of the knowledge society in

which ICT technologies are much effective. Some people who couldn't improve their skills in line with the knowledge societies' needs are exposed to lower wages, social discrimination and inadequate employment possibilities. However, high-skilled labor force, meets the requirements of the market, will be hopeful for the future and get much higher wages than others.

### **1.1. The Process of the Knowledge Society in the World**

While the emergence of information and communication technologies and the knowledge society have changed the nature of some jobs and some jobs will gradually be changed in the next future. Some workers, who are just graduated from high schools or universities, have to update their skills by going some programs and learning related to either software or hardware skills. Besides that, societies, public and private institutions have been adapting quickly some implementations such as e-commerce, e-business and e-state by means of information and communication technologies. Especially, as a result of this tendency toward ICT skills in developed countries, there are much interest toward both software and hardware skills from demand and supply side in every sector in developing countries and Turkey as well.

Information and communication technologies affected not only individuals' life but also from social arena to all sectors of economy in the last two decades. Information and communication technologies, as an integral part of each sector, became an important necessity to improve current skills or to get ICT skills either in the process of education or in the process of employment. According to the literature, besides the definition of literacy (ability to use language to read, write, listen and speak) there is another definition of literacy which is ICT literacy (ability to use computer and related devices).

### **1.2. The Employment Nature of Knowledge Society in Turkey**

There is lack of balance and coordination in terms of skills between labor force demanded and supplied in Turkey. That is, there is structural unemployment on the one hand, however, Turkish businesses' skilled workforce needs can not be met on the other hand. The rate of education in labor force is very low in Turkey. 69% of employed labor force graduated from either elementary schools or just literate people who hadn't gone any school. The employment rate with 46% in workable census is very low. This share shows that big proportion of the census is not producing and inactive or unemployed (Han-Erdem, 2004). Rapid increase in census caused some problems which have been becoming less in time; however, governments couldn't achieve increasing the rate of employment and decreasing the rate of unemployment since the harmony between education and employment couldn't be established in Turkey. That is, while the macro planning of labor force, the workforce needs of each sector should be considered and public and private education institutions should make their projections accordingly.

The process of the knowledge society, which has high potential in terms of employment opportunities, has been developing gradually and slowly since the lack of competitive capacity and cooperation between market and education institutions in Turkey. The Ministry of Communications published it's aim related to human resources projections is made such as "developing information and communication technologies must be used effective by current human resources and employment opportunities should be increased by improving current workers' knowledge and skills" on the web site ([www.bilgitoplumu.gov.tr](http://www.bilgitoplumu.gov.tr), 2009).

### **1.3. Certificate Programs as Measures of Active Labor Market Policy**

With the information age, there have been lots of changes in education, social life and labor life. Especially, education and training methods, places and hours has become more flexible than before. Education is being implemented not only at school but also outside of school by using information and communication technologies between individuals, people and institutions either in certain times or when it is needed in the life. Although newcomers into workforce need extra training, as short term and diversified, to meet the current improvements in the complex business cycle. Thus, alternative education possibilities will be intensified as well as increasing flexible working regularities so as to match both of them in the business life. The concentration in basic education is seen, however, changing demands are increasing by diversifying jobs and status at the subsequent years in Turkey has high rate young generation. The certificate programs are offered as diversified and proper for new developments to meet demands by the private institutions rather than classic education institutions.

Certificate programs usually orient their students to labor life in which workers are more flexible and skilled. These skills and standards that are taught in the courses are demanded and acceptable not only in

national but also in international arena. The certificate programs, have international high standards approved by international institutions, provide a transition from developing countries' obsolete systems to systems which implemented by developed countries. With the emergence of these developments in the global arena, the harmony and standardization have been accepted in the programs of the state and private education institutions that give diplomas as well as the institutions give certificate. Thus, the standardization is used to compare students and education institutions as an easy way such as TOEFL exam is accepted for English or MCSI (Microsoft Certified System Engineering) is accepted for information and communication technologies.

#### **1.4. Applications in Relation to the Certificate Programs in the World**

Especially in developed countries such as America, practical solutions are carried out for the same issues mentioned above. The workers needed in industry, are supplied by the state or private community colleges that teach the ICT courses and give certificates for the students in the developed countries. The needed workers are trained and sent to industries with new qualifications by the institutions. Furthermore, the students can use their courses credits, have been taken in the colleges, if they want to go on to the bachelor degree (Nelson, 2007).

The interest for the programs has been increasing in the world. Even this interest has been rising among people graduated from universities. University of Alberta investigates graduated students by communicating with them through the department of career and job placement in Canada. In this investigation, some questions are asked for the students such as whether they find a job, how long does job placement takes and do they go on any training programs after graduation while they work part time or full time. According to results, 6.9% of graduated students are joined a certificate programs and therefore they can get a job easier than before.

As for developing and less developed countries, not only ICT skills are evaluated as an opportunity to invest information and communication technologies but also they are seen an important means to lower the rate of unemployment by spreading the ICT skills. Venezuela emphasized as a national priority in the ICT field by founding the Ministry of Information and Technology. The Ministry has been aiming to reap the benefits of developments, to meet country's needs in line with developed countries by constituting policies, strategies and plans. Especially, Venezuela Government worked together with some companies such as IBM to develop human resources in country. (The Ministry Science and Technology of the State of Venezuela, 2005)

As for companies, Cisco, is an important company in the network products industry, established an institution called Cisco Network Academy Program (CNAP) to train and give certificate its participants in relation to network field. This program aimed to train 11.000 people and give each of them a Cisco Certificate in cooperation with state institutions and private companies. Cisco tries to provide a balance between demand and supply related to ICT skills and to meet required high-qualified network skills with the programs. These trainings have got its aims in the short term in the market and the demand is being increased for the certificate programs called Cisco Certified Network Associate (CCNA) and Cisco Certified Network Professional (CCNP). A survey, which was conducted with trained people and companies in order to measure the effects of the Cisco Programs on the job placement, 72% of the answers were "very effective" for the Certificates (OECD, 2006).

#### **1.5. Applications in Relation to the Certificate Programs in Turkey**

One of the most problematic areas in education is vocational and technical education and training in Turkey. The need for technician is very important and it is being increasing toward high rates in time. The last 10 years, vocational and technical education couldn't be improved because of political maneuvers and projects and they lost their attractiveness. Some students, who preferred vocational schools, however, both couldn't improve their vocational skills because of the lack of technical tools, machines and instructors and they can not easily enter universities due to current system after they graduated from the schools. The need for technician, who is important for the industry, couldn't be met with current graduated people, thus, this need is being met by establishing private institutions which teach ICT and give certificate to prove workers' or students' (participants) qualifications.

Many universities and private companies have been teaching courses which are needed in the industry by using distance learning methods on the internet or traditional methods in the classes. When the students graduate from the programs they get their certifications which approved in international arena and specify students' qualifications. Some universities provide extra benefits like arrangement of the certificate programs

to update knowledge and skills of their students during the education process in Turkey. Suleyman Demirel University aimed to do it and issued on the strategic program catalog that each student and university workers must join at least one certificate program (Suleyman Demirel University, 2006).

## 2. Evaluation of the Survey Results

In this paper, some part of the results has taken place, from the survey which was conducted with 4 companies and 125 students, in the following lines at the different regions of Istanbul. The students answered 27 and companies answered 28 questions those were from their career to wages and skills. The SPSS program was used to compile this data which was cross-examined and gained frequency tables.

In the survey, there are 128 participants of which 88 are male, 33 are female, 7 didn't specify their gender and 1 is didn't specify gender and age. When we leave out these 8 people who didn't specify their age or gender, participants of 73.33 % is male and 26.67 % is female. These ratios indicate nearly the same with the shares of the people are currently working in Turkey. According to the data of the State Statistic Institute of Turkey, there are 26 % female workers and 74 % male workers which make up Turkish labor force (www.tuik.gov.tr, 2009).

### 2.1. The Evaluation of the Participants in Terms of Graduation Level and Post Graduation Period

The participants, who continue to the certificate programs on information technologies, answered the questions shown in **Table 1**. 14,1 % of the respondents are still students, 14,8 % recently graduated, 33,6 % graduated from schools 1-3 years ago, 15,6 % graduated 4-5 years ago and 21,9 % graduated 6 years ago or earlier.

The highest ratio of the participants of this survey is High School graduates including still students. The percentage of this group is 42,2% of the participants. The percentage of the participants, who were graduated 1-3 years ago, is the highest with 19,5% of total. If this ratio is compared with subsequently years, which are 4-5 years, 6 years or earlier and 11,7% and 7% respectively, the numbers should be taken into consideration to understand the current education system in Turkey.

This numbers are very obvious that there are absolute differences between Vocational High Schools and High Schools in terms of graduated students' preferences. In that sense, the survey participants, who joined certificate programs and had recently graduated university with bachelor's degree, have the highest share with 7,8% of total. It is a striking result that why the recently graduated people, from bachelor's degree, need to join these certificate programs instead of working full time in a industry? Is the education system not enough, not updated, or not competitive? It is made inferences that graduated participants, earlier than 1 year, have many expectations such as update and improvement of skills and knowledge.

**Table 1.** The Comparison of Graduation Level and Post Graduation Span of Time

		How long is Your Post Graduation Period of Time?					Total	
		Still Student	Recently Graduated	1-3 Years	4-5 Years	6 years and more		
What is your graduation level?	Vocational High School	Count	3	0	6	2	3	14
		% of Total	2,3%	,0%	4,7%	1,6%	2,3%	10,9%
	High School	Count	0	5	25	15	9	54
		% of Total	0%	3,9%	19,5%	11,7%	7,0%	42,2%
	School of Prof. Education	Count	1	3	9	5	0	18
		% of Total	,8%	2,3%	7,0%	3,9%	,0%	14,1%
	University Bachelor Deg.	Count	1	10	9	2	10	32
		% of Total	,8%	7,8%	7,0%	1,6%	7,8%	25,0%
	Master	Count	1	1	1	0	1	4
		% of Total	,8%	,8%	,8%	,0%	,8%	3,1%
Doctorate	Count	1	0	0	0	0	1	
	% of Total	,8%	,0%	,0%	,0%	,0%	,8%	
Middle school	Count	0	0	0	0	5	5	
	% of Total	0%	,0%	,0%	,0%	3,9%	3,9%	
<b>Total</b>	Count	18	19	51	24	28	128	
	% of Total	14,1%	14,8%	39,8%	18,8%	21,9%	100,0%	

### 2.2. The Correlation of Graduation Level and Expectation to Get a Job

Table 2 shows that 66,4% of the participants have expectations to get a job when they finish the programs and pass the certification exams. The biggest share among the participants, who have expectations and said “yes”, is High School graduates with 37,5% of total. Besides that, School of Professional Education, University, Vocational High School and Middle School graduates have different shares with 10,2%, 10,2%, 5,5% and 3,1% respectively. If Vocational High School and High School are compared in terms of the numbers of participants, who graduated from High School and said “yes” in Table 1, have much more striking percentage than former. It is inferred from these numbers and ratios is that Vocational High School students don’t much need to go to improve their skills since they learn and practice at the school. Furthermore, these schools’ graduates don’t much need to change the jobs and firms as much as High school graduates do. So the importance of Vocational High Schools will increase in the society if they are encouraged by education system in Turkey.

The graduates of School of Professional Education and University have the same shares with 10,2% answered “yes” in terms of expectations to get a job. However, these participants, who graduated both schools, have different shares with 3,9% and 14,8% respectively. It is inferred from these shares that High Schools as well as Schools of Professional Education and Universities don’t meet the requirements of the market. Especially, High Schools need to be changed from obsolete teaching methods to new methods which meet market needs.

**Table 2.** The Correlation of Graduation Level and Expectation to Get a Job

		Have you any expectation to get a job when you get a certificate?		Total	
		Yes	No		
What is your graduation level?	Vocational High School	Count	7	7	14
		% of Total	5,5%	5,5%	10,9%
	High School	Count	48	6	54
		% of Total	37,5%	4,7%	42,2%
	School of Prof. Education	Count	13	5	18
		% of Total	10,2%	3,9%	14,1%
	University Bachelor Deg.	Count	13	19	32
		% of Total	10,2%	14,8%	25,0%
	Master	Count	0	4	4
		% of Total	,0%	3,1%	3,1%
	Doctorate	Count	0	1	1
		% of Total	,0%	,8%	,8%
	Middle school	Count	4	1	5
		% of Total	3,1%	,8%	3,9%
<b>Total</b>	Count	85	43	128	
	% of Total	66,4%	33,6%	100,0%	

### 2.3. The Correlation of Working Span of Time with Expectation to Get a Job and Grad Level

Some of the participants of the survey are not working, with 20,3%, since some of them still students who may work part time or unemployed. This share is higher than the rate of unemployment of Turkey which is about 10%. Some of the participants, who are working in their job for 6 years and more, don’t have expectation to get a job when they have a certificate from the programs or don’t want to change their jobs. However, the participants, who are working less than 5 years, desire to get a new job after they have a certificate. Generally, 66,4% of the total participants desire to get a new job although 33,6% of total don’t have any expectation to find a job after they have a certificate. On the one hand, to get a job is much important for the participants who are especially short term workers. On the other hand, to improve and update the current skills or career building must be important for long term workers who have been working for 6 years and more.

**Table 3.** The Correlation of Working Span of Time with Expectation to Get a Job

		Are you working at a job?						Total	
		1-2 years	3-5 years	6-10 years	More than 10 years	Less than 1 year	Not working		
Have you any expectation to get a job when you have a certificate?	Yes	Count	23	16	2	0	21	23	85
		% of Total	18,0%	12,5%	1,6%	,0%	16,4%	18,0%	66,4%
	No	Count	11	10	6	4	9	3	43
		% of Total	8,6%	7,8%	4,7%	3,1%	7,0%	2,3%	33,6%
Total	Count	34	26	8	4	30	26	128	
	% of Total	26,6%	20,3%	6,3%	3,1%	23,4%	20,3%	100,0%	

The graduation level is very important and also an investment for the future not only in Turkey and in the world. That's why, it should be measured in the survey to compare and understand the current situation in Turkey and make some projections for the future. There is no much demand from graduates of Vocational High Schools for the IT programs since they have practice information which meets the requirements of the market. **Table 4** shows that the share of the participants, who are from Vocational High Schools, have much less rate with 10,9% than especially High Schools and others. The rate of unemployment is pretty striking and lower with 1,9% of total among this group. Although Vocational High Schools were established in order to give people much education and practices which meet market needs, they can not work very well and many graduates from these schools want to pass to School of Professional Education according to the statistics in Turkey (Tubitak, 2009).

42,2% of the participants are High School graduates and their share of unemployment in the survey is 10,2% of total. They have the highest level rates since they didn't get any vocational information and practice during education process. That's why, nearly half of the participants are from High Schools and the graduates from these schools desire to have skills and get a job. Although, University and School of Professional Education graduated participant rates are not as much as High School rate, they have high percentages with 25% and 14,1% and unemployed rates 4,7% and 2,3% respectively. High School and University system should be evaluated and reconstructed in order to reach market needs and international standards in the light of **Table 4**. It is necessary that many High Schools should be converted into Vocational High Schools and Universities must be focused on real life needs and market requirements.

**Table 4.** The Correlation of Working Span of Time with Graduation Level

		How many years are you working?						Total	
		1-2 years	3-5 years	6-10 years	More than 10 years	Less than 1 year	Not working		
What is your graduation level?	Vocational High School	Count	3	2	1	0	6	2	14
		% of Total	2,3%	1,6%	,8%	,0%	4,7%	1,6%	10,9%
	High School	Count	19	7	1	0	14	13	54
		% of Total	14,8%	5,5%	,8%	,0%	10,9%	10,2%	42,2%
	School of Professional Education	Count	4	2	3	0	6	3	18
		% of Total	3,1%	1,6%	2,3%	,0%	4,7%	2,3%	14,1%
	University Bachelor Deg.	Count	8	10	1	4	3	6	32
		% of Total	6,3%	7,8%	,8%	3,1%	2,3%	4,7%	25,0%
	Master	Count	0	1	2	0	1	0	4
		% of Total	,0%	,8%	1,6%	,0%	,8%	,0%	3,1%
	Doctorate	Count	0	1	0	0	0	0	1
		% of Total	,0%	,8%	,0%	,0%	,0%	,0%	,8%
	Middle school	Count	0	3	0	0	0	2	5
		% of Total	,0%	2,3%	,0%	,0%	,0%	1,6%	3,9%
	Total	Count	34	26	8	4	30	26	128
		% of Total	26,6%	20,3%	6,3%	3,1%	23,4%	20,3%	100,0%

### 2.4. The Correlation between Job Application and Certificate

43 Students of total 128 participants applied for a job as shown in **Table 5**. However, 25 students of the 43 participants, who applied for a job, were asked if there is any certificate from a vocational program. 18 of the participants weren't asked any certificate by employers. Consequently, more than half of the applicants were asked if there is a certificate or not. That's why it is very important for the students of these programs to get a certificate. The percentages of this participants show that the employers give importance to the vocational programs and the certificate.

**Table 5.** The Correlation Between Job Application and Certificate

			Were you asked if you have a certificate?			Total
			Yes	No	No Application	
Did you make any job application?	Yes	Count	25	18	0	43
		% of Total	19.5%	14.1%	.0%	33.6%
	No	Count	0	7	78	85
		% of Total	.0%	5.5%	60.9%	66.4%
Total	Count	25	25	78	128	
	% of Total	19.5%	19.5%	60.9%	100.0%	

### 2.5. The Expectations of Wages, Career and Benefits

The main motivations of the students to participate in these programs are to acquire a profession or to improve their careers by learning new skills which will meet the requirements of new technological developments. The participants expect higher wages with their new skills and qualifications on completion of the program.

The correlation between the expectation of increasing of wage and the demand of certificate programs can be changed in terms of participants' working span of time. 32% of total participants have expectations to increase their wages on completion of the program. When it is compared with 68% of total participants, don't have any expectation related to wages, the participants, who have expectation, are higher than anticipated.

Among the participants, who said "Yes" in response to the question about expectation, the rate of students have been working for 1-2 years (13,3%) and less than 1 year are higher than long-term students have been working for at least 3 years (5,5%) and earlier. The long term workers may have expectations for the wage increasing in their jobs on completion of the programs; however, the numbers of the participants of these workers are much less than short term workers. So it is very difficult to measure and say related to expectations of the wage increasing for long term workers.

**Table 6.** The Correlation of Wages and Working Span of Time

			Have you expectation to increase your wage when you finish this program?		Total
			Yes	No	
How many years are you working?	1-2 years	Count	17	17	34
		% of Total	13.3%	13.3%	26.6%
	3-5 Years	Count	7	19	26
		% of Total	5.5%	14.8%	20.3%
	6-10 years	Count	5	3	8
		% of Total	3.9%	2.3%	6.3%
	More than 10 years	Count	2	2	4
		% of Total	1.6%	1.6%	3.1%
	Less than 1 year	Count	8	22	30
		% of Total	6.3%	17.2%	23.4%
	Not working	Count	2	24	26
		% of Total	1.6%	18.8%	20.3%
	Total	Count	41	87	128
		% of Total	32.0%	68.0%	100.0%

According to the answers related to the expectations of career of the participants, the results are different in terms of their working span of time. The rates of the responses from the participants who said “I expect to raise my career” and “I don’t expect to raise my career” are nearly equal to each other with 34,4% and 39,9% of total respectively. **Table 6** shows about half of the participants of the programs, working less than 2 years, expect to raise their careers on completion of the programs. However, a small percentage with 2,4% of the total participants who are working more than 10 years, expect to raise their careers. If they are compared with short term workers, the rate of the expectation of the long term working participants is much lower than short term ones. Because, the long term workers prefer to improve for their skills rather than raising careers. Besides that, some of the participants, who are jobless and working less than 1 year, don’t expect to raise their careers. The reason may be the need a job for the jobless people and to improve the skills for the participants who are working less than 1 year.

The participants of the survey were asked a question to find out their preliminary on completion of the program. It is compared with the working span of time of participants in **Table 8**. Some of the possible answers, are very important in terms of the markets requirements, were chosen to understand which benefits the students want to reap from. The most striking result is that 28.9% of the total participants want to get a job and 11.7% in this share is unemployed which is almost the same Turkey’s unemployment rate. The unemployment has been increasing especially for last ten years and the global crises started in 2008 makes it getting worse. That’s why; these courses should have been considered an important complementary means to get a job for jobless people and to provide a significant decline on the rate of unemployment in Turkey.

The other noticeable share of the answers is related to skills. In today’s world, skills need to be changed not only to meet the requirements of the high technology and changing demand of the market and people but also to come into prominence in the competitive environment. In a similar way, the type of work done by Turkish workers is changing, with the globalization of economic structure of world. Especially, with the information and service sectors being the main resource of new employment in the last years. The way people work is also changing with a strong movement in sectors (Tatlidil, 2006). That’s why; the participants of the programs want to improve current skills or to get a new one. Although 2.3% of the participants, a small share, want to change their professions, 16.9% of the participants desire to improve current skills in line with the knowledge economy and society as shown in **Table 8**.

**Table 7.** The Correlation of Career and Working Span of Time

		How this program will affect your career?				Total	
		Absolutely to raise	Absolutely no hope	I expect to raise	I don’t expect to raise		
How many years are you working?	1-2 years	Count	0	5	15	14	34
		% of Total	.0%	3.9%	11.7%	10.9%	26.6%
	3-5 Years	Count	3	3	11	9	26
		% of Total	2.3%	2.3%	8.6%	7.0%	20.3%
	6-10 years	Count	2	0	2	4	8
		% of Total	1.6%	.0%	1.6%	3.1%	6.3%
	More than 10 years	Count	0	2	1	1	4
		% of Total	.0%	1.6%	.8%	.8%	3.1%
	Less than 1 year	Count	6	4	9	11	30
		% of Total	4.7%	3.1%	7.0%	8.6%	23.4%
Not working	Count	3	5	6	12	26	
	% of Total	2.3%	3.9%	4.7%	9.4%	20.3%	
Total	Count	14	19	44	51	128	
	% of Total	10.9%	14.8%	34.4%	39.8%	100.0%	

The advantages of flexible working are becoming widely known. Both employers and employees can easily reap the benefits of flexible working. Especially, information and communication technologies make the flexible working easier than it was before. In this sense, 21.1% and 13.3% of the total participants are chosen respectively to work flexible and to establish their own businesses. Besides that, **Table 9** proves that



78.1% of the participants expect to work flexible on completion of the programs. Although this ratio is not participants' first reason to join these programs, it should be taken into account for the planning of the future training and education system. The importance of these programs may only be considered in terms of getting new skills and opportunities to work flexible and independent working. These benefits will create cause and effect relations not only in micro economics also in macro economics such as employment opportunities by creating new jobs and skills.

**Table 8.** The Correlation of Expected Benefits and Working Span of Time

			How many years are you working?						Total
			1-2 years	3-5 years	6-10 years	More than 10 years	Less than 1 year	Not working	
What is your first aim when you graduate from this program?	To work flexible	Count	11	4	2	0	6	4	27
		% of Total	8.6%	3.1%	1.6%	.0%	4.7%	3.1%	21.1%
	To establish my business	Count	6	3	1	0	3	4	17
		% of Total	4.7%	2.3%	.8%	.0%	2.3%	3.1%	13.3%
	To get a job	Count	6	6	0	0	10	15	37
		% of Total	4.7%	4.7%	.0%	.0%	7.8%	11.7%	28.9%
	To continue at the same business	Count	3	4	2	3	2	0	14
		% of Total	2.3%	3.1%	1.6%	2.3%	1.6%	.0%	10.5%
	To improve my skills	Count	5	8	2	1	5	0	21
		% of Total	4.0%	6.3%	1.6%	0.8%	4.0%	.0%	16.9%
	To change my job (profession)	Count	3	0	0	0	0	0	3
		% of Total	2.3%	.0%	.0%	.0%	.0%	.0%	2.3%
	To be more productive	Count	0	0	1	0	1	2	4
		% of Total	.0%	.0%	.8%	.0%	.8%	1.6%	3.1%
	To get a job with new career	Count	0	1	0	0	2	1	4
		% of Total	.0%	.8%	.0%	.0%	1.6%	.8%	3.1%
To support my education	Count	0	0	0	0	1	0	1	
	% of Total	.0%	.0%	.0%	.0%	.8%	.0%	.8%	
<b>Total</b>	Count	34	26	8	4	30	26	128	
	% of Total	26.6%	20.3%	6.3%	3.1%	23.4%	20.3%	100.0%	

**Table 9.** Have you expectation to work flexible on completion of the program?

		Frequency	Percent	Valid Percent
Valid	Yes	100	78,1	78,1
	No	28	21,9	21,9
	Total	128	100,0	100,0

### Conclusion

In the last years, because of the increasing demand for the ICT programs there are many courses, approved by the international and national institutions, prepare for the certificate exams. Emerging high demand can not be met by current accredited courses. The most important part of these courses is either they teach for the IT sector about information and communication technologies courses which are also an integral part of the other sectors mostly strategic.

In these courses, there is no any guarantee to get a job for the participants are educated to improve their current skills to catch up new developments or to change existing profession with a new one by learning new skills. Moreover, an important share of the participants expects to have higher wages, to get a job and to work flexible or independent on completion of the courses. Diversified education and fit in demand, deep specialization in an area and making the flexible working easier which are taught in the courses by using most striking systems different than traditional methods.

Nearly 60% of the participants want to get a job outside of Turkey at the end of the courses. So the graduates of these programs can find a job both in Turkey and around the world. From different point of view, current workers or job seekers can set their skills with the international standards by joining to the courses and increasing their qualifications to be able to compete on the global arena. Amongst participants of the survey, the share of vocational high school is much less than other schools since they have skills. It can be inferred from the survey that Turkey must rise the number of vocational high schools to meet the requirement of the market. Otherwise, more graduates will apply the vocational courses to get a job or a profession than before. Furthermore, these courses should be considered as a complementary means to decrease the rate of unemployment, to meet the requirements of markets, to improve skills to be able to compete in international arena and to work flexible.

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