NecVET

New approaches to strengthened cooperation facilities for VET institutions and labour market

EXISTING SITUATION ANALYSIS FOR VET SYSTEMS IN NECVET COUNTRIES (ESA)

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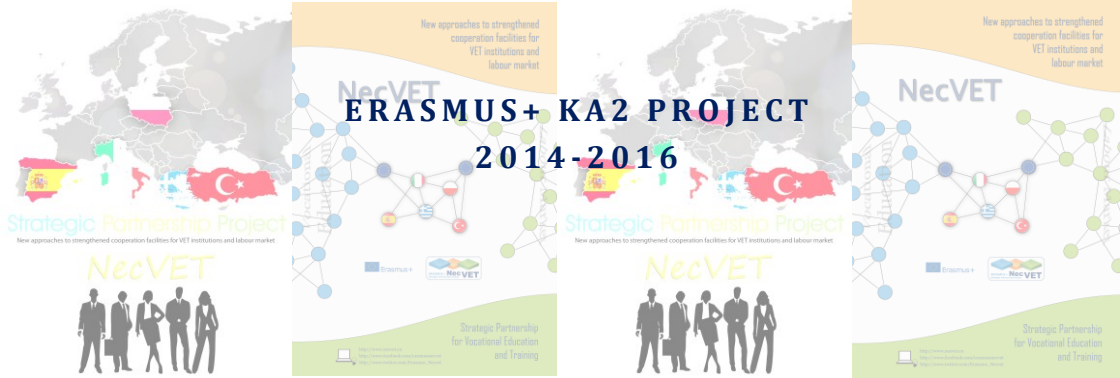

ERASMUS+ KA2 PROJECT

2014-2016

New approaches to strengthened cooperation facilities for VET institutions and labour market

(NecVET)

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NecVET

2014-2016

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CHAPTER ONE

EXISTING SITUATION ANALYSIS FOR VOCATIONAL EDUCATION IN TURKEY

Basic Structure of Turkish National Educational System

The Turkish National Education System is determined by National Education Basic Act No. 1739, consists of two main parts, namely "formal education" and "non-formal education". The initial stage of education system is the pre-school education level, which is optional. Pre-school education is the level of non – compulsory education for children of ages 36 - 72 months and is offered in nurseries, kindergartens and preschool classes in primary schools. The primary education (primary school – lower secondary schol) lasts 8 years (4+4) and encloses age category of 6-14. Within the framework of studies on restructuring the secondary education, the duration of high school education is gradually increased to 4 years beginning from at the 2005 – 2006 academic year. In this context, the secondary education level is a level to enclose ages 14 – 17. As an outcome of the foregoing arrangement realized for secondary education level, the tertiary education level shall theoretically enclose after the age of 18 and lasts 2 years for associate degree level (Vocational tertiary education schools), 4 years for undergraduate level (some disciplines may longer (5 to 6 years)

like medicine, dentistry and veterinary) and minimum 2 years for masters and 3 to 4 years for doctorate.

Obligatory education process lasts 12 years and covers primary, secondary and highschools (4+4+4). This period consist of 17 different type of schools from primary to university (except). School types in Turkey can be seen in following table;

School types of obligatory education in Turkey

Primary	**Lower Secondary**	**Highschools**	**Open/ Special Training Centers**
Primary School	Lower secondary school	General Highschools	Open Highschool
	Religious Secondary School	Science Highschool	Open Secondary School
		Anatolian Highschool	Special Education and Rehabilitation Center
		Anatolian Sports Highschool	
		Anatolian Fine Arts Highschool	Special Education Vocational Education Center
		Social Science Highschool	
		Anatolian Teacher Highschool	
		Multi programme Anatolian Highschool	
		Anatolian Religious Highschool	
		Vocational and Techical Anatolian Highschool	

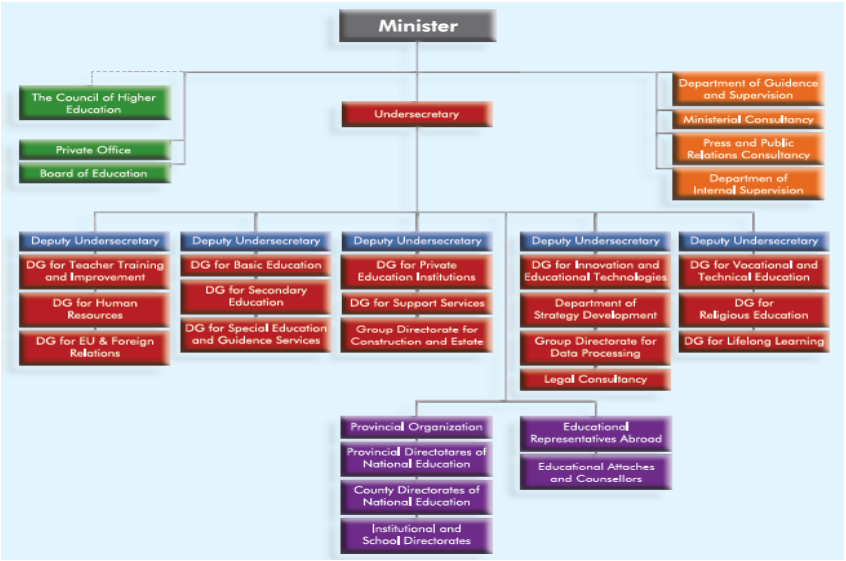


Fig.1: Organization of Turkish Ministry of National Education

Formal Education

Formal education is the regular education conducted within a school for individuals in a certain age group and at the same level, under programs developed in accordance with the purpose. Formal education includes pre-primary, primary, secondary and higher education institutions.

Pre-Primary Education

Pre-primary education; involves the education of children in the age group of 3 to 5 who have not reached the age of compulsory primary education, on an optional basis. Pre-primary education institutions may be established as independent kindergartens or, where considered necessary, as nursery classes within a primary education school or as practice classes affiliated to other related education institutions. The

objective of pre-primary education is to ensure that children develop physically, mentally and emotionally and acquire good habits, that they are prepared for primary education, that a common environment of upbringing is provided for children who come from a disadvantaged background and that they speak Turkish properly and correctly.

Secondary (General&Vocational) Education

Secondary education includes all education institutions of a general or vocational and technical character with duration of at least four years following primary education. The objectives of secondary education are to give students a common minimum overall knowledge, to familiarize them with problems of the individual and society and to seek solutions, to ensure that they gain the awareness that shall contribute to the socioeconomic and cultural development of the country and to prepare them for both higher education and a profession or for life and employment, in line with their interests and aptitudes. The secondary education is handled in two categories as general secondary education and vocational–technical secondary education. Secondary education schools last minimum 4-year including 9th- and 12th grades and cover 14-17 ages. Some institutions have 5–year duration, including foreign language preparation grade (For instance, Social Sciences High School). Some institutions in secondary education and private secondary education institutions employ foreign language preparation classes in compliance with the objectives of curriculum and the courses of natural sciences group and mathematics can be taught in foreign language. The secondary education institutions are in the scope of post-compulsory education. Both general education and vocational–technical education have institutions with predominant foreign language education named as Anatolian High Schools, Anatolian Vocational and Technical High

Schools etc. The basic difference of these institutions from others is the increased number of foreign language courses and instruction of some courses in natural sciences in foreign language. Otherwise, these institutions are completely identical with other institutions.

Higher Education

Higher education comprises of the education institutions at every stage based on secondary education with duration of at least two years. The purpose of higher education is to raise the students in line with their interests, capabilities and skills according to the human force necessity of the society at higher level and various stages and science policy of the country, to conduct research in scientific areas, to make publications illustrating the research and investigation results and promoting science and technology, to provide opinion on researches and investigations requested by the Government, to disclose the scientific data that shall raise the general level of Turkish society and enlighten the public opinion and to provide non-formal education services. Higher education institutions are delivered within universities.

Vocational and Technical Education

The vocational and technical education system in Turkey includes two main dimensions: theoretical (school training) and practical (in-company training). Vocational training policies and activities are mostly carried out by the MoNE within the framework of Law No. 3308, which came into force in 1986 and Law No. 4702 of 2001, which brought about changes to the system, establishing new and strong links of co-operation with industry and commerce. The vocational education system includes:

- Vocational and technical high schools providing training in more than 130 occupations and giving access or leading to the qualification of specialized worker and technician;
- Apprenticeship training, which is a combination of mainly practical training provided in enterprises and theoretical training provided in vocational education centres;
- Informal education can be provided primarily through vocational education centres.

Vocational and technical secondary education includes at least 19 different kinds of schools, in addition to vocational education centres, Open Education as well as special private schools. The MoNE is responsible for oversight of all vocational and technical schools whether or not they are under the jurisdiction of the MoNE. Vocational and technical high schools can be grouped in five categories. Vocational and technical education is officially co-educational and boys and girls attend schools designed for the other gender.

Open Education High Schools render services to students who cannot attend formal education for any reason, who are over the age of formal education, and who wish to be transferred to open education high schools while attending a formal high school. Informal education provides educational services other than the formal education services in line with the general aims and basic principles of national education to citizens who have never entered or who are at a certain level of the formal education system or who have left formal education.

Fig.2: Education System and Transitions

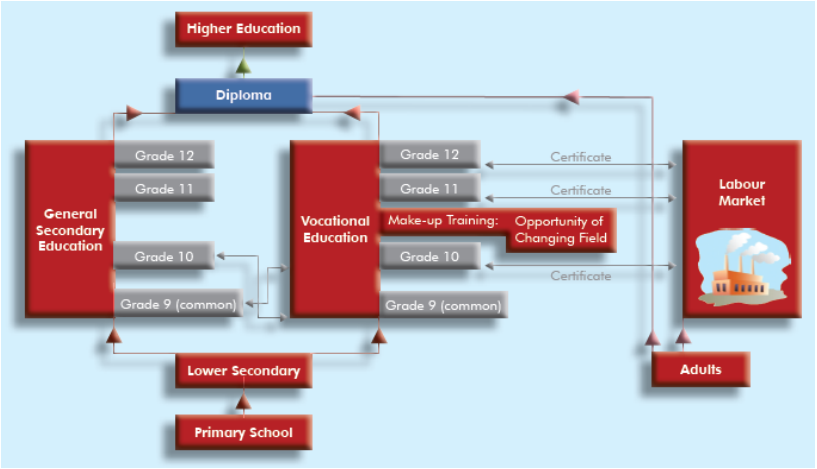
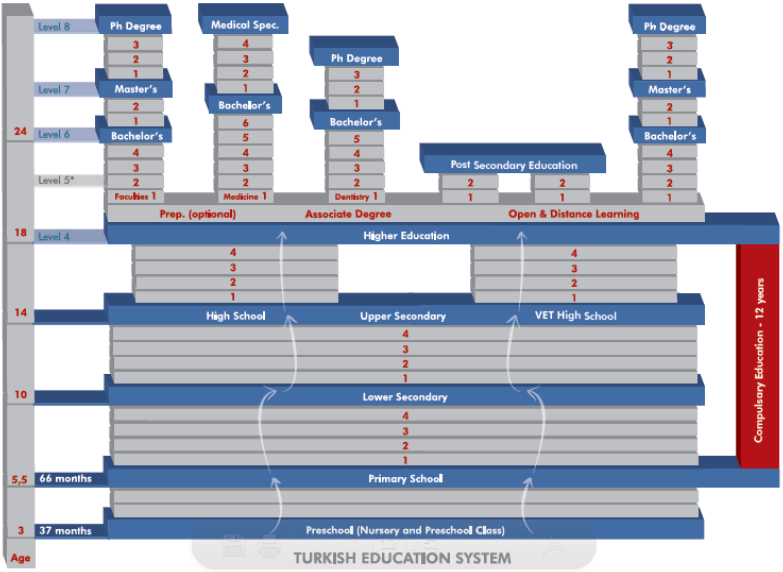


Fig. 3: Turkish Education System



Backgrounds (Statistical Indicators for 5 years)

Vocational Education Training is of historical importance for Turkey and dates back to the Ottoman Empire where vocations were taught in the traditional way from master to apprentice. With the impact of the industrial revolution, while still uncentralized, vocational education was brought within a schooling discipline. However the actual underpinnings of the current centralized system of vocational training were implemented with the creation of the Turkish Republic. The Ministry of National Education of the new republic assumed responsibility for efforts to standardize the vocational education system across the country in 1926. These efforts were augmented with a government act requiring the central state authorities to pay all of the expenses of the vocational schools across the country. In 1923 the existing 20 schools had about 2,558 pupils. Following a gradual yet major increase, there are currently 5,106 schools educating about two million students. The emphasis put on domestic industrial production in achieving economic development in Turkey added special importance to vocational training. A major jump in opening vocational training schools took place during the 1940's and 1950's as a way to educate technical personnel for newly opened factories across the country. As a result of this historical perspective, vocational education carries a symbolic importance for the public and decision makers. This is evident in every attempt to change the system, resulting in controversial public debates. A fine example of this discourse is the motto of a project providing funding to vocational schools and promoting participation in a nationwide innovation competition, called "Meslek Lisesi, Memleket Meselesi", which translates as "Vocational High Schools are a Homeland Matter".

Table 1: Number of schools / units, teachers, students and graduates by type of school and educational year.

Vocational and Technical Secondary Education				
Educational years	**School/Unit**	**Number of Teacher**	**Number of Student**	**Number of Graduated Person**
2010/2011	5 179	104 327	2 072 487	314 448
2011/2012	5 501	113 098	2 090 220	332 154
2012/2013	6 204	135 502	2 269 651	339 270
2013/2014	7 211	161 288	2 513 887	426 866
2014/2015	5 106	175 218	2 788 117	-

Number of staff and Number of student who are in vocational education instituitons have increased gradually in last five years. Number of graduated persons is also increased depending to the number of student.

Fig. 4: Number of Student in Vocational and Technical Secondary Education

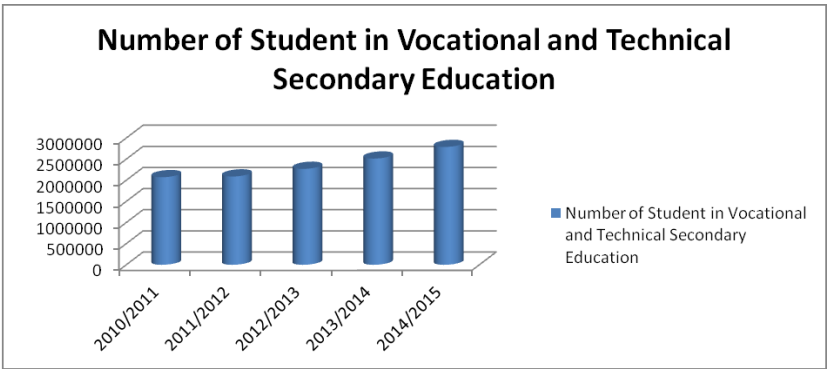


Table 2: Number of students and graduates by type of school and educational year

Vocational and Technical Secondary Education						
Educational Year	**Student**			**Graduated**		
	Total	**Male**	**Female**	**Total**	**Male**	**Female**
2010/2011	2 072 487	1 177 725	894 762	314 448	172 514	141 934
2011/2012	2 090 220	1 151 197	939 023	332 154	175 510	156 644
2012/2013	2 269 651	1 241 481	1 028 170	339 270	181 142	158 128
2013/2014	2 513 887	1 371 445	1 142 442	426 866	220 938	205 928
2014/2015	2 788 117	1 496 275	1 291 842	-	-	-

Number of student according to gender who is already in VET system, is almost equal. 53,66% of total number of students are male and 46,34% of students are female in education year 2014-2015. Whereas this percentage is different during educational year 2010-2011. Male students ratio was 56,82% in educational year 2010-2011.

Table 3: Number of applicants and appointed to tertiary education programmes in 2014 by school type and educational status

Vocational and Technical Secondary Education Students and Graduates					
Applicant	**Undergraduate Programmes**	**%**	**Associate Programmes**	**%**	**Open Education**
710 116	63 782	8,98	188 966	26,61	78 884

710116 persons who are graduated a VET institution, have applied to upper educational programmes in the year 2014. About 9% of total applicants have joined to a tertiary education programmes at the undergraduate level. On the other hand 26,61% of total applicants have started to the Associate Programmes which is called post secondary education and total period is 2 years, in 2014. 11% of total applicant

have preffered to attend open education facilities provided by Turkish MoNE.

Existing Situation in VET Institutions

Table 4: Ratio of MoNE's Budget in Gross Domestic Product and Consolidated/Central Government Budget

Years	/GDP – Gross Domestic Product (TL)	Central Government Budget (TL)	Budget of MoNE (TL)	Ratio of MoNE's budget in GDP (%)	Ratio of MoNE's budget in central budget (%)
2010	1 098 799 348 446	286 981 303 810	27 446 778 095	2,88	10,47
2011	1 297 713 210 117	312 572 607 330	34 112 163 000	2,63	10,91
2012	1 416 798 489 820	350 898 317 817	39 169 379 190	2,76	11,16
2013	1 565 180 961 710	404 045 669 000	47 496 378 650	3,03	11,76
2014	1 719 000 000 000	434 995 765 000	55 704 817 610	3,24	12,81
2015	1 945 000 000 000	472 943 000 000	62 000 248 000	3,19	13,11

Budget of MoNE has significant percentage as a developing county in total budget. Total amount of budget is increased every educational year by government. According to the Table 4 budget of MoNE and percentage in total budget is increased in past five years gradually.

Fig. 5: Ratio of MoNE's budget in central budget (%)

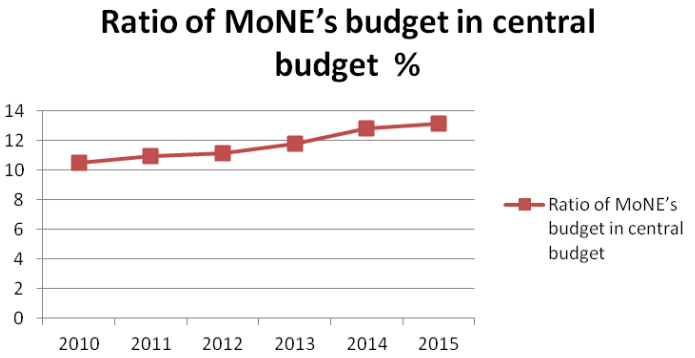


Table 5: Proportion of investments in the budget of MoNE

Years	Budget of MoNE (TL)	Investment Budget of MoNE (TL)	Proportion of investments in the budget of MoNE (%)
2010	28 237 412 000	1 785 327 000	6,32
2011	34 112 163 000	1 995 625 000	5,65
2012	39 169 379 190	2 600 000 000	6,64
2013	47 496 378 650	3 955 000 000	8,33
2014	55 704 817 610	5 192 300 000	9,32
2015	62 000 248 000	5 494 000 000	8,86

Fig. 6: Proportion of investments in the budget of MoNE (%)

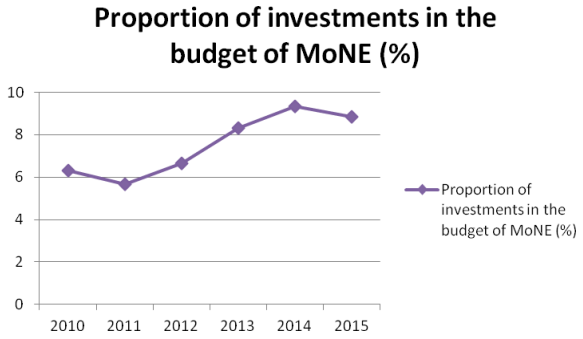


Table 6: The ratio of graduates from vocational and technical secondary education to total graduates from secondary education according to education years (1)

Edu. Year	Secondary Education			General Secondary Education			Vocational and Technical Secondary Education			The ratio of graduates from vocational and technical secondary education to total graduates from secondary education		
	T	M	F	T	M	F	T	M	F	T	M	F
2009 2010	662 894	342 017	320 877	399 478	193 784	205 694	263 416	148 233	115 183	39,74	43,34	35,90
2010 2011	706 512	360 783	345 729	392 064	188 269	203 795	314 448	172 514	141 934	44,51	47,82	41,05
2011 2012	712 702	355 457	357 245	380 548	179 947	200 601	332 154	175 510	156 644	46,60	49,38	43,85
2012 2013	727 792	362 676	365 116	388 522	181 534	206 988	339 270	181 142	158 128	46,62	49,95	43,31
2013 2014	856 809	426 730	430 079	429 943	205 792	224 151	426 866	220 938	205 928	49,82	51,77	47,88

T: Total M: Male F: Female

Employment facilities after graduation

The structural transformation of the global economy has an impact to great extent on the labour markets of the developed and developing

countries. The impact of this transformation changes on the basis of the structural features of labour market and adequacy of government interventions to the labour market.

Turkish economy achieved high and continuous level of growth for the 2002-2007 periods. Macroeconomic stability was ensured in this period and the interventions aiming at increasing employment were made. Although there were positive developments on employment, unemployment rate could not be decreased to the intended level. Main reasons for unchanged rates in unemployment can be explained as followvs: the impact of the previous economic crisis, "not labour-intensive" technological developments and structural problems of the labour markets. These problems have made negative impact on employment, labour productivity and working conditions.

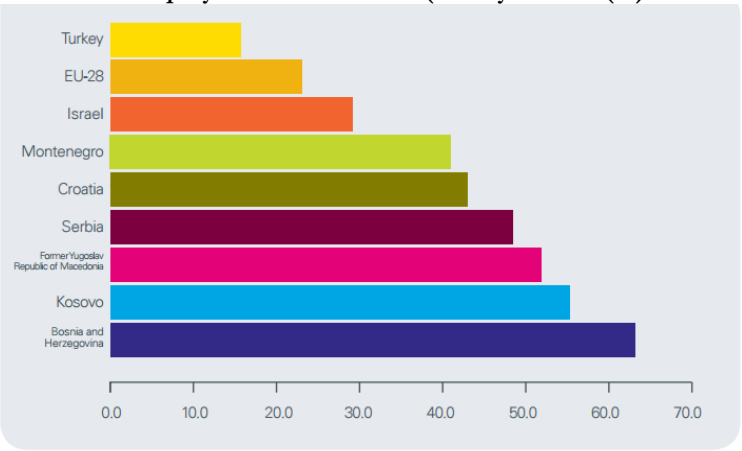
While Turkey was dealing with the structural problems in its labour market, global economy since World War II saw the biggest contraction in 2009. The most apparent impact of the crisis was seen in the labour market. The globally contracting demand resulted in the decline in the employment. Unemployment rate on the other hand increased at a faster pace with new entrants into the labour market together with job losses in the labour market. These developments in most of the advanced countries have led to serious upheavals and Turkey experienced 4 percent increase in unemployment while it previously stood around 10 percent.

Economically and socially unsustainable economic situation in Turkey started recovering in 2010. Unlike in developed countries, economic recovery in Turkey brought about a decrease in unemployment figures. The relatively restricted negative impact of the economic crisis and the rapid economic recovery in Turkey can be

explained by the economic measures as well as employment protection oriented measures such as short work and employment incentives.

A comparative analysis of the recent developments and the current situation in Turkish economy suggests that macroeconomic stability is albeit necessary but not sufficient to create jobs. For this reason, it is also considered necessity to reform the labour market for resolving its structural problems becomes stronger everyday The progress in this area will increase the efficiency of the measures on employment.

Fig. 7: Youth unemployment rates in 2012 (15-24 years old (%)



Source: Eurostat and national statistical offices. All data based on Labour Force Surveys. Note: for Serbia data are for 20-24 year olds.

Policy Framework of the Employment Strategy

Increasing employment is one of the development axes of the Ninth Development Plan. Pursuant to the Plan, improving labour market, increasing the sensitivity of education to labour demand and developing

active labour market policies are identified as policy priorities. It also envisaged preparation of a National Employment Strategy included in Annual Plans of 2010, 2011, 2012, 2013 as a measure. The Tenth Development Plan, covering the period between 2014 and 2018, was published in the Official Gazette dated July 6th of 2013. The plan identifies important targets and policy measures related to employment.

In order to restrain unemployment in Turkey and improve working conditions preserving peace at workplace, three main issues emerges:

- ✓ Maintaining stable and high growth,
- ✓ Increasing growth effect on employment,
- ✓ Reducing unregistered employment.

1. **Maintaining Stable and High Growth**

Tenth Development Plan engenders necessary policies and priorities for establishing high and stable growth environment in order to create adequate jobs in the labour market. İn order to accelerate economic development in Turkey it envisages to maintain stable and high growth with progress in the fields below:

- Macroeconomic stability,
- Human capital and labour market,
- Technological innovation,
- Physical infrastructure,
- Institutional quality

Strategy presumes that the policy framework established here will be carried out in line with European Employment Strategy and Medium Term Programme, Annual Programs and the budget. İt is estimated that

the growth performance of Turkey after the global financial crisis will continue in the medium term. This performance will have an important impact on the job creation and reaching out the targets of the Strategy.

2.Increasing the Effects of Growth on Employment

For the success of the Strategy in terms of reaching the targeted employment rates, it is utmost important to increase job-creating capacity of growth in non-agricultural sectors. The capacity at issue which is constructed as the concept "employment elasticity of growth" can be only enhanced through overcoming the structural problems of the labour market. This subject has been taken into account while identifying fundamental policy pillars of the strategy.

The structural problems such as inadequacy of the education and training in resolving the needs of labour market, lack of qualified labour force, serious bottlenecks for some groups in accessing employment, high unregistered employment, rigidity of labour market, inadequacy of social assistance system in encouraging registered employment emerge as the main obstacles for the effectiveness of the labour market, thus increasing job-creating capacity of growth. The improvements in overcoming these problems will contribute increasing job-creating capacity of growth. Strategy has been prepared with a perspective of eliminating these obstacles.

Reducing Unregistered Employment

In order to achieve targets of the Strategy, it is necessary to reduce unregistered employment which is one of the majör structural problems of Turkey's labour market. The reasons and forms of unregistered

employment may be various and ali segments of society have to be determined in orderto keep it atan acceptable level. The fight against unregistered employment requires using both incentives and disincentives and a coordinated implementation of the actions defined under the following five topics:

Strengthening Registered Sectors

Strengthening registered sectors will decrease unregistered employment demand in Turkey. İn this regard, it is necessary to reduce administrative, financial and legal obligations of enterprises within the limits of state budget; to eliminate excessive procedures and regulations directing enterprises for unregistered activities and unregistered employment. Resolving financial problems of SMEs which provide considerable employment opportunities and at the same time have a high unregistered employment, can increase employment and meantime decrease unregistered employment.

Preventing Unregistered Employment

The measures in fight against unregistered employment such as increasing coordination and cross-check among central and local public institutions, increasing sanctions and accelerating inspections, removing tax and premium amnesties will direct employers and unregistered employees to registered employment. İn addition, as survivor pension receivers and social assistance receivers tend more to work as unregistered, the audit and inspections are to be intensified and legal and administrative measures are to be taken.

Increasing Entrance into Registered Employment System

One of the reasons of having high unregistered employment is inadequate education level and low employability of labour force. Active labour market policies and the measures targeting to increase the general and vocational educational attainment level in the Strategy will affect positively registering every employee, particularly the unregistered young and women for whom unregistered work is high. Furthermore, it is envisaged that the incentives given in the first job and guidance and counseling services in job and occupation selection will increase entrance into registered employment system İn addition, providing the social security rights of flexible employees who are potentially unregistered unemployed, as laid down under the heading of ensuring security and flexiblity in the labour market, will reduce the unregistered employment in this field.

Awareness Raising on Registered Employment

Changing negative attitude and behaviors to the registered employment and raising awareness of the employees on registered employment will have a positive impact on fighting with unregistered employment in the long term. Reducing complaints on the public services will also encourage registered employment.

Preventing Illegal Foreign Work

One of the most important problems in Turkey in unregistered employment is iliegal foreign work. İt is acknowledged that its impact on the labour market is very high. Turkey has become target country for illegal foreign workers while it was previously transit country. İllegal foreign work increase unemployment and unregistered employment. They are mostly employed in micro-enterprises, precarious jobs as they

are less qualified, unregistered labour market and in the sectors where inspections are rarely made.

Strengthning Social Partner Involvement In VET

The Turkish Government attaches great importance to the strengthening of social dialogue. The EU supports these efforts within a number of projects such as 'Strengthening the Vocational Education and Training System in Turkey' which started in September 2002 and completed in September 2007. One of the priorities of this project is to analyse and specify responsibilities, consultative roles and power of decision making of social partners at different levels of the VET system (national, provincial and local level). The project developed a number of activities and initiatives which led to a new level of involvement of social partners in VET in Turkey. Representatives of social partners attend meetings of work groups formed under the project like curricula development, occupational standards, lifelong learning and quality assurance. Social partners play also an active role in the development of a national qualification framework including a law on the establishment of a vocational qualification agency. A wide range of activities have been implemented to strengthen the capacity of social partner organisations. Thanks to the such activities mentioned above it can easily be said that there is now a very well established social dialogue in the country.

Development of competency based and modular VET curricula

Ministery of National Education has been developing modular VET curricula since the year 1993. In particular, through EU funded SVET projects, competency based modular VET curricula development studies have been intensified since 2002. In this context the programmes of grades 9-10-11-12 in 17 job families and 64 branches

have been developed within the context of the Project and approved by the Board of Education. First they were implemented in the 105 pilot schools of the SVET Project. Later, thanks to the further development works, total of 42 job familes and 192 branches which are in line with the educational fields mentioned in ISCED'97 and according to the results of sector survey, have been accepted by 2006 and have been implemented in Vocational and Technical Schools and Institutions throughout Turkey within the 2006-2007 education and training period. At the moment, based on the feedback and changing needs of the labour market, approximately 7000 module booklets covering 58 job families and 224 branches representing all sectors in Turkey are being utilised for VET teaching. Europaen Qualification Framework (EQF) which consists of 8 reference levels has been adopted by the Turkish Ministry of National Education and competency based modular VET curricula haveen developed in accordance with the 8 reference levels of the EQF. First 4 reference levels (1, 2, 3 and 4. levels) of the EQF have been handled by the MoNE and the rest (5, 6, 7 and 8. levels) were under the responsibility of Council of Higher Education (CoHE).

The Provincial Employment and Vocational Education Boards

The contemporary practices indicate that the chances for success are higher if the solutions for employment and education are developed locally by taking into account the provincial conditions in the framework of national policies. The Provincial Employment and Vocational Education Boards are important mechanisms having the potential to produce "local solutions for local problems" by means of social dialogue method. Provincial employment and vocational education boards have been created to mobilize local facilities and resources in the fight against unemployment by providing collaboration

and peer between different institutions and organizations. They consist of the representatives of other public authorities, as well as workers, employers and trade organizations, industry chambers and other local organizations representatives.

The expected priority tasks are:
• to determine and monitor the needs of the local labour market status needs and problems by the related people corncerned,
• to provide vocational courses in the areas of labour force demand and
• to prevent employment loss.

Board decisions are final. The Committee prepares the action plans of the decisions taken, determines the responsible institutions, practices and results. The Board meets quarterly. Secretariat is carried out jointly by the Provincial Employment Agency and the Provincial Educational Directorate with the fields of own to stay limited. Follow-up on the decisions taken and the other researches towards labour market and different activities are performed by the Executive Board.

Skills 2010 Project-Specialized Vocational Training Centers Project- (UMEM Beceri 2010)

Specialized Vocational Training Centres (UMEM) SkillS ' 10 Project has started in June 2010 within the scope of the Protocol signed between Union of Chambers and Commodity Exchanges of Turkey (TOBB), Ministry of Labour And Social Security, Ministry of National Education, and TOBB Economics and Technology University (TOBB ETU). 19 provinces have been started in the first place, that is pointed at the 81 provinces up to date. In this context, the project's components are as follows:

1. To strengthen education infrastructure;
• Machinery-equipment acquisition
• Curriculum revision
• Training of trainers
2. Labour market needs analysis;
• implementation of the labor market needs analysis surveys in 19 pilot provinces
• importing labour-interns claim s from the enterprises of 81 provinces
3. Mapping studies;
• Selection of participants
• intern placement
• job placements of the successful ones.
4. Implementation of the newly designed courses

UMEM project implementation plan
• In the context of "Labor market needs analysis" and labour force-labour-trainee claims collected in 81 provinces determining the vocational and technical training requirements of the labor force in 81 provinces and complementing the trainings of trainers in 81 provinces,
• Providing theoretical training to the unemployed people who are registered to Turkish Empoyment Agency
• Providing practical training to the job seekers by matching them with the enterprises under the coordination of local "Course Managements",
• Certificating the successful ones and employ them in enterprises of the internship.

Achievements up to date;
• In all 81 cities, 100 million TL (app. 57 million USD) is invested on the infrastructure of 140 vocational high schools.

• Local Course Administration councils were established
• The instructors of these schools have been trained to train the unemployed.
• In 19 provinces that constitute 80% of the work force, Labor Market Needs Analyses are performed.
• 5,000 firms are surveyed, their requirements concerning their employees and vacant positions are detected.
• In 5,000 firms, the demand for intern positions is also identified.
• Analysis results were shared with public by meetings in 19 provinces. Problems of labor market were discussed with industrial employers of 19 provinces.
• Central Information System studies have been completed. The labor demands are collected through this system. (www.beceri.org.tr)
• Advertisement activities (posters, brochures, TV programmes, etc.)
• A 7/24 call center was established in order to respond to informational inquiries.
Result: Successful trainees are getting their certificates.

Monitoring mechanism after graduation

E-gradute web page brings together enterprises, young labour force and VET institutions in order to follow gradute students after graduation how relevant sector do they work. On the other hand work announcements and demands are shared in this portal, thus two side of labour market knows each other's expectations mutualy. This web portal is conducted by Turkish Ministry of National Education – MoNE and each VET institutions, trainers and enterprises that give stage opportunities to the young trainers in their body, have user and access

code to sign in this web portal. These technical details is also managed by Turkish MoNE.

Fig. 8: E-Graduate WEB page

General approach to market needs

The structural problems such as inadequacy of the education and training in resolving the needs of labour market, lack of qualified labour force, serious bottlenecks for some groups in accessing employment, high unregistered employment, rigidity of labour market, inadequacy of social assistance system in encouraging registered employment emerge as the main obstacles for the effectiveness of the labour market, thus increasing job-creating capacity of growth. The improvements in overcoming these problems will contribute increasing job-creating capacity of growth.

Structural problem of the Turkish labour market that is unregistered employment went down from 50 percent to 39 percent during the period of 2004-2012 During this period, the share of unregistered employment in agriculture sector declined from 90 percent to 83,6 percent and the share of unregistered employment in non-agricultural sector also declined from 34 percent to 24,5 percent. In the framework of Strategy for Fight Against Unregistered Economy, the measures such as enhanced coordination and cooperation among public institutions, increased inspection and cross-examination controls, incentives on taxation and social security contributions, institutionalization which is the mostly related to the economic development are the main reasons for decline in unregistered economy. However, unregistered employment rate in Turkey is still higher than most of the advanced countries. It is prevalent in agriculture, construction, retailing, commerce, hotel and restaurants and transportation sectors. Furthermore, the unregistered employment is also high among the youth, the elderly and people with low educational attainment. Another fact indicates that the bigger the scale of a company, the less likely the

unregistered work. İllegal foreign work is also becoming an important problem area in the unregistered employment. Turkey has been recently target country while it was previously transit country for illegal foreign workers.

Linking VET provision with labour market needs

Labour market analysis, both quantitative and qualitative, is considered to be of utmost importance for the reform of the VET system in Turkey. A Labour Market and Skill Needs Analysis was conducted among about 5800 employers (companies with more than 10 registered employees) in 31 pilot provinces, implemented in a joint effort of ISKUR and MoNE. Statistical analysis of developments in the Turkish labour market as well as the educational sector was carried out. The aim was to provide VET institutions and policy makers with a background document containing well-analysed data on the long term developments in the labour market in relation to developments in educational output. Special focus was given to the identification of gaps in labour market information in Turkey. A comparison between the developments in the labour market and the educational sector in Turkey and the developments of the EU in view of the Lisbon targets was carried out. A local labour market handbook was finalised in March 2007 on Labour Market Information systems introducing the objectives and methodology of local labour market analysis for periodic monitoring of the labour market. Currently İŞKUR (State Employment Agency) has been conducting similar studies in the area of labour market analysis in order to keep the work updated. The developments regarding the labour market during the period of 2004-2012 are given in Table 1.

Table 7: Labour Market Indicators

Indicators	2004	2005	2006	2007	2008	2009	2010	2011	2012 |
Population (Thousand)	66.379	67.227	68.066	68.901	69.724	70.542	71,343	72.376	73.604
Population över 15 (Thousand)	-7.544	-8.359	9.74	49.994	50.772	5'.635	52.541	53.593	54.724
Young Population (15-24 age) (Thousand)	11.840	11.757	11.670	11.583	11.490	11.513	11.548	11.334	11.574
Labour force (Thousand)	22.016	22.455	22.751	23.114	23.805	24.748	25.641	26.725	27.339
- Male	16.348	16.704	16.836	17.098	17.476	17.898	18.257	18.867	19.147
- Female	5.669	5.750	5.916	6.016	6.329	6.851	7.383	7.859	8.192
-Youth	4.474	4.436	4.365	4.364	4.381	4.454	4.426	4.529	4.422
- Agriculture	5.793	5.215	4.978	4.955	5.080	5.350	5.785	6.225	6.178
- Non-agriculture	16.223	17.240	17.773	18.159	18.725	19.398	19.855	20.500	21.161
Labour force participation rate (%)	46,3	46,4	46,3	46,2	46,9	47,9	48,8	49,9	50,0
- Male	70,3	70.6	69,9	69,8	70,1	70,5	70,8	71,7	71,0
- Female	23,3	23,3	23,6	23,6	24,5	26,0	27,6	28,8	29,5
-Youth	37,8	37,7	37,4	37,7	38,1	38,7	38	39,3	38,2
Employment (Thousand)	19.632	20.067	20.423	20.738	21.194	21.277	22.594	24.110	24.821
- Male	14.585	14.959	15.165	15.382	15.598	15.406	16.170	17.137	17.512
- Female	5.047	5.108	5.258	5.356	5.595	5.871	6.425	6.973	7.309
- Youth	3.554	3.554	3.533	3.493	3.484	3.328	3.465	3.697	3.64:
Sectoral Breakdovvn of Employment (Thousand)									
- Agriculture	5.713	5.154	4,907	4.867	5.016	5.254	5.683	6.143	6.097
- Non-agriculture	13.919	14.913	15.516	15.871	16.178	16.023	16.911	17.967	18.726
- Industry	3.919	4.178	4.269	4.314	4,441	4.130	4.496	4.704	4.751
- Construction	966	1.107	1,196	1.231	1.241	1.249	1.431	1.676	1.709
- Services	9.033	9.628	10.051	10.327	10.495	10.644	10.986	11.589	12.266
Employment Rate (%)	41,3	41,5	41,5	41,5	41,7	41,2	43	45	45,4
- Male	62,7	63,2	62.9	62,7	62.6	60,7	62,7	65,1	65,0
- Female	20,8	20,7	21,0	21,0	21,6	22,3	24	25,6	26,3
-Youth	30,0	30,2	30,3	30,2	30.3	28,9	30	32,1	31,5

Unemployment (Thousand)	2.385	2.388	2.328	2.376	2.611	3.471	3.046	2.615	2.518
- Male	1.762	'.740	1.671	1.716	1.877	2.491	2.C83	1.730	1.635
- Female	622	642	658	660	734	979	959	885	883
- Youth	919	881	832	871	897	1.126	961	832	775
- Agriculture	81	61	71	88	64	96	102	82	81
- Non-agriculture	2.304	2.327	2.257	3.238	2.547	3.375	2.944	2.533	2.437
Unemployment rate (%)	10,8	10,6	10,2	10,3	11,0	14,0	11,9	9,8	9,2
- Male	10,3	10,5	9,9	10,0	10,7	13,9	11,4	9.2	8,5
- Female	11,0	11,2	11,1	11,0	11,6	14,3	13	11,3	10,8
-Youth	20,6	19,9	19,1	20,0	20,5	25,3	21,7	18,4	17,5
- Agriculture	1,4	1,2	1,4	1,8	1,3	1,8	1,8	1,3	1,3
- Non-agriculture	14,2	13,5	12,7	12.6	13,6	17.4	14,8	12.4	11,5
Unemployment rate by educational level (%)									
- Illiterate	4,3	4,9	4,8	5,2	6,3	8,0	6,0	4,6	3,9
- Less than high school	9,7	10,1	9,8	9,8	10,7	13,9	11,6	9,3	8,7
- High school including VET	15,2	13,8	13,0	13,0	12,9	16,9	14,6	11,8	10,9
- Higher education	12,2	10,0	9,6	9,7	10,3	12,1	11,0	10,4	10,1
Unregistered employment rate (%)	50,1	48,2	47,0	45,4	43,5	43,8	43,3	42	39,0
- Agriculture	89.9	88.2	87.8	88.1	37.8	85,7	85	83.8	83,6
- Non-agriculture	33,8	34,3	34,1	32,3	29,8	30,1	29	27,8	24,5
- Unregistered employment in wage	32,1	32,0	31,5	29,4	26,4	26.2	25,7	25,1	22,0

Source: TURKSTAT

Table 8: Ratio of participants to vocational training courses to all persons employed by enterprise size group and gender, 2007-2010

Enterprise size group		Participants to vocational training courses					
		Total		Male		Female	
		2007	2010	2007	2010	2007	2010
Total		13,0	15,6	13,0	15,4	13,1	16,2
10-49		8,4	5,2	8,8	5,4	6,4	4,5
50-249		8,3	11,8	8,4	12,0	7,9	11,0
250+		18,0	26,8	17,9	26,9	18,7	26,5

Table 9: Distribution of the most relevant skill targeted in vocational training courses by enterprise size group, 2010

Enterprise size group	General IT	IT professional	Management	Team working
Toplam- Total	**8,5**	**5,7**	**5,4**	**8,0**
10-19	13,5	6,3	1,3	5,3
20-49	6,1	5,2	9,5	6,3
50-249	4,9	5,9	4,9	14,9
250-499	3,4	3,7	5,2	13,0
500-999	4,3	5,8	8,4	11,2
1000+	4,9	2,6	8,2	13,2

Enterprise size group	Customer handling	Problem solving	Office administration	Foreign language
Toplam- Total	**23,2**	**3,8**	**0,9**	**1,4**
10-19	27,5	3,4	0,2	0,4
20-49	18,2	3,0	1,1	2,1
50-249	24,8	6,1	2,2	1,9
250-499	22,0	4,0	0,9	1,5
500-999	21,8	4,5	0,6	2,3
1000+	23,6	2,3	0,4	0,8

Table 9: Distribution of the most relevant skill targeted in vocational training courses by enterprise size group, 2010 (continue)

Enterprise size group	Technical, practical or job-specific	Oral or written communication	Numeracy and/or literacy	Other
Toplam- Total	**38,5**	**1,3**	**0,2**	**3,1**
10-19	38,3	0,5	_	3,2
20-49	42,7	2,2	0,4	3,3
50-249	30,7	1,1	0,3	2,3
250-499	38,7	1,4	_	6,2
500-999	37,8	1,5	_	1,7
1000+	42,6	1,5	_	_

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CHAPTER TWO

EXISTING SITUATION ANALYSIS FOR VOCATIONAL EDUCATION IN ITALY

Basic Structure of Italian National Educational System

The educational system in Italy is overseen by the Ministry of Education, Universities and Research[1]. The first law relate to the Education System in Italy was the Legge Casati (Casati Act) published in 1859. Regional government authorities have exclusive competence for implementing policy for vocational education and training (VET), while at local level the principle of school autonomy is implemented. Schools can exert their autonomy in didactic as well as in their organisation and activities. The competences of the central government are focused on general management and minimum standards to be guaranteed throughout the country. A key role is played by regional governments, according to the fundamental principles that regions share their competences with the central government on education issues.

As described in [1], the structure of the educational system in Italy is the following:

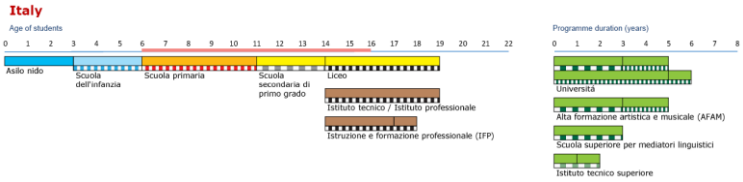
- pre-primary school for children between 3 and 6 years of age;

[1]The Ministry of Education, University and Research (MIUR): http://www.miur.it/

- first cycle of education lasting 8 years, made up of:
  - primary education (lasting 5 years), for children between 6 and 11 years of age;
  - lower secondary school (lasting 3 years) for children between 11 and 14 years of age;
- second cycle of education offering two different pathways:
  - State upper secondary school (lasting 5 years) for students from 14 to 19 years of age. It is offered by *licei*, technical institutes and vocational institutes;
  - three and four-year vocational training courses (IFP) addressed to students who have completed the first cycle of education. As stated this course is managed by the regional government.
- post-secondary non tertiary education offered through:
  - post-qualification and post-diploma vocational courses organized by the Regions;
  - higher technical education and training courses (IFTS - *Istruzione e FormazioneTecnicaSuperiore*).
- higher education offered by universities and the institutes of high training in art and music (Afam - *Alta formazioneartistica e musicale*). Higher education is organised in first, second and third levels according to the Bologna structure.

The following figure[2] provides a structural overview of the educational system in Italy.

Figure 1 **: An overview on the Italian educational system**



[2] Source: Eurydice - The Structure of the European Education Systems 2014/15: Schematic Diagrams (available at http://eacea.ec.europa.eu/education/Eurydice/documents/facts_and_figures/education_structures_EN.pdf)

The red line in figure 1 indicates that the compulsory education in Italy is from 6 to 16 years of age, covering the first cycle and the first two years of the second cycle of education [2]. The first cycle of education ends with a final state exam[3]. After completion of the first cycle of education, the last two years of compulsory education (from 14 to 16 years of age) can be accomplished either in upper secondary schools (*licei*, technical institutes and vocational institutes), or through the three-year vocational education and training courses, falling under the competence of the Regions (law 133/2008). Moreover, the last year of compulsory education can be accomplished by 15-year old students attending the apprenticeship, if foreseen by specific agreement signed by the Regions, the Ministry of labour, the Ministry of education and trade unions (law 183/2010).

Once compulsory schooling has been accomplished, pupils who do not prosecute their studies receive a certification attesting compulsory education fulfilment and competencies acquired; these latter constitute formative credits for the attainment of any vocational qualification.

Access to both university and Afam tertiary education is reserved for students who passed the state exam at the end of upper secondary school. The three-year vocational qualification, as well as the four-year vocational diploma, both obtained at completion of regional vocational training courses, allow access to regional second level of vocational training, which can be access also with an upper secondary education leaving certificate. This latter certificate also grants admission to Higher

[3] Starting from the school year 2008/2009, the assessment of the final examination in the secondary school level is done by assigning numerical marks expressed in tenths (Law no. 169/2008).

technical education and training courses (IFTS - *Istruzione e formazionetecnicasuperiore*).

Italy has both public and private education systems, but schools are mainly state schools. Non-state schools may either have a status equal to state schools (so called: *paritarie*) or be merely private schools. *Paritarie* schools are run by either private subjects or public subjects (e.g. local authorities such as Municipalities and Provinces) and they obtain the equal status after meeting some specific requirements (law no. 62/2000). *Paritarie* schools are public entities and can release all official certifications foreseen by the Italian education system. Merely private schools are not part of the Italian education system and cannot release official certifications[4].

Description of the VET System in Italy

As stated in the previous section the Italian education and training system is divided in pre-primary school, first cycle of education, second cycle of education, post-secondary education and higher education.

On the basis of the reform Law 53/2003, the "right-duty"[5] to education has been raised to 12 years or until the student has obtained a qualification within the vocational education and training system (i.e. up to 18 years of age).

The aim is that young people should not leave education and training without a qualification.

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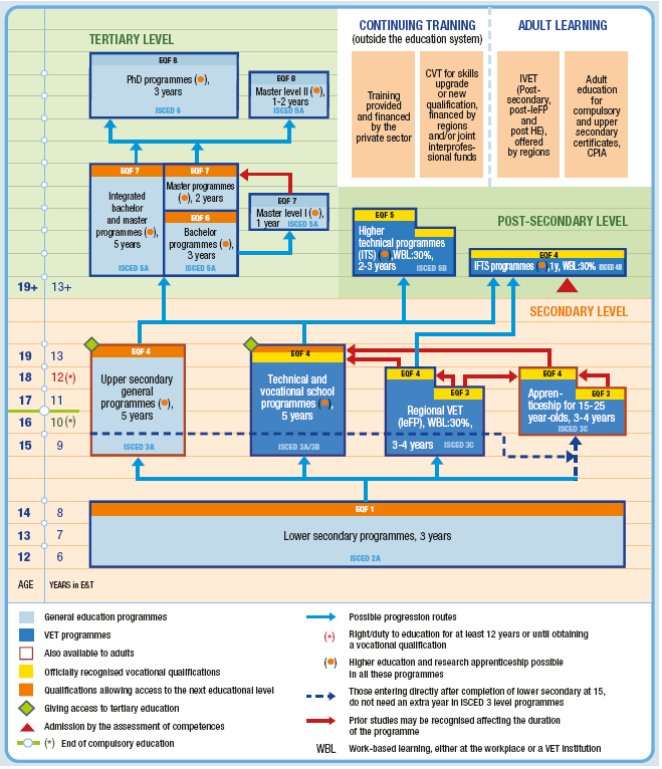
4 https://webgate.ec.europa.eu/fpfis/mwikis/eurydice/index.php/Italy:Funding_in_Education

5 "diritto/dovere" in Italian

At the end of the lower secondary education (at age 14) learners have to pass a state exam to acquire a certificate (corresponding to the EQF level 1) which it is necessary for the admission to the upper secondary level. At this level, students can choose between general and vocational education.

Figure 2 (extracted from [3]) shows how VET programmes are integrated into general education system. This figure helps in highlighting also the connections between the vocational system and general educational paths.

Figure 2: VET programmes and general education programmes (source: CEDEFOP)



After the first cycle of education, the second cycle of education includes pathways of various duration, divided into two main branches: Upper secondary education, under the competence of the Ministry of Education, taking 5 years, and Vocational Education and Training under the competence of Regions, taking 3 or 4 years, in details:

a) five-year programmes which include the two last years of compulsory education and three years (under the right/duty of education and training) in:
   (i) high schools (*licei*);
   (ii) technical schools;
   (iii) vocational schools.

   High schools (*licei*) offer artistic, classical, linguistic, scientific, human sciences, music and dance strands. Within the artistic strand, learners can specialize in figurative arts, architecture and environment, design, audio-visual and multimedia, graphics or stage design in the second period. Technical and Vocational Institutes also offer a wide range of specializations and options in the Economic and Technological sectors (technical schools), in the Services and Industry and Crafts sectors (vocational schools). All Upper secondary school paths lead to a Diploma (Upper secondary education diploma), EQF level 4, upon successful conclusion of a state examination. An Upper secondary school diploma is the minimum requirement to enter Higher Education programs.
b) vocational education and training programmes organised by the regions (IeFP – *Istruzione e FormazioneProfessionale*).
c) apprenticeship-typeprogramme (after age 15).

At post-secondary level, the Italian system features higher technical training (IFTS, ITS) and short programmes or courses (post-IeFP and others). VET courses also exist at post-higher education level.
Tertiary education (ISCED levels 665, 667, 766, 767, 768, 864) is divided into higher education programmes at the university and higher education programmes at non-university institutions:

a) universities: can be public or private and follow the three cycles of the Bologna structure: bachelor (*laurea*); master (*laureaspecialistica/magistrale*); and specialisation or PhD programmes (*masters universitario di secondo livello, dottore di ricerca*);
b) higher artistic and musical programmes (AFAM - *altaformazioneartistica e musicale*) which are non-university programmes based on the three-cycle.

Description of Vocational Education and Training in Italy

As reported in [10] three levels of responsibility can be identified for VET in Italy:

- at national level, the institutional framework is defined;
- at regional level, a direct intervention in the process of defining, planning and provision of VET strategies is implemented;
- at enterprise level, training activities and the elaboration of training plans are defined.

The VET system, which falls under the competence of the Regions, is part of the national education and training system, and is organized in two basic pathways: three-year courses, leading to the award of Professional operator certificate (Attestato di qualifica di operatoreprofessionale) EQF level 3, and four-year courses, leading to a Professional technician diploma (Diploma professionale di tecnico), EQF level 4.

At the end of three-year education and training pathways, after passing a final examination in accordance with regional regulationsa Qualification of Professional Operator is issue. It includes reference to the relevant national professional figure and the regional profile, in addition to the denomination of the qualification acquired.

The Certificate of professional technician is issued at the end of a four-year education and training pathway. It includes reference to the relevant National professional figure and the regional profile, in addition to the denomination of the qualification acquired. These qualifications can be also gained after an apprenticeship period aimed at a vocational qualification or a certification.

VET usually begins with a two-year basic study program, followed by a yearlong (third year) professional qualification in a specific field. The first two years of study provide guidance and awareness for students about vocational specialization, in order for them to be certain about what path to follow professionally during the third year. The study course may be concluded at the end of the third year, with the acquisition of a professional or experience qualification certificate, allowing the pupil to deepen his knowledge and experience in a two-year course, the "post-qualification" (*post-qualifica*), successfully achieved through the completion of the State Exam (*Esame di Stato*).The path to be followed depends on the typology of education followed.

Two types of institutions provide VET in Italy:

- VET centres (*Centri di formazioneprofessionale*), providing a two- or three yearlong study program with subjects mainly related to the field of speciality chosen by the candidate.
- Professional institutes of the state (*Institutiprofessionalistatali*), with a more complex study program. These institutes provide a more

detailed study program that can take up to five years, but providing also intermediate specialities in several fields of study.

The qualifications released under the regional system are recognized at national level. A National Register of qualifications awarded in the VET system was created in 2011. It is made up of two-level professional figures (Professional operator and Professional technician), that can be further subdivided into specializations and regional profiles. The training provision is designed by Regional authorities and implemented by accredited training providers but State vocational schools can provide subsidiary, integrative or complementary, training through specific State–Region agreements. Part of training in all VET courses, national or regional include periods of work-based learning.

Students complete their 10-years compulsory education period after two years in the second cycle of education. From the age of 15 they can fulfil this obligation through an apprenticeship contract for a VET qualification. Students holding a Professional technician diploma can continue into the Higher Technical Education and Training system (IFTS- ITS) or Higher Education, on completion of an additional year and after passing a State exam.

The Italian training provision also offers the following opportunities: Higher Technical Education and Training (IFTS); Post-VET (IeFP), post-upper secondary and post-higher education initial vocational training; Adult education; Continuous training; Private training. Higher Technical Education and Training is regionally based and it can take place in two pathways: Higher Technical Education and Training (IFTS), and Higher Technical Institutes (ITS). These are regionally programmed courses with a specialising nature. At the end of an IFTS course, a Higher technical specialization certificate (*Certificato di specializzazionetecnicasuperiore*) is awarded by Regions. Higher Technical

Institutes (ITS) are established on the basis of Regional Territorial Plans and are managed as a participative Foundation, including State and Regional and other local authorities, universities, enterprises, training centres. ITS can be attended by young people and adults holding an Upper secondary education Diploma. At the end of ITS courses, a higher technical education diploma (*Diploma di tecnicosuperiore*), EQF level 5, is issued. These qualifications, awarded by the Ministry of Education, concern specific, nationally defined areas of high technological innovation.

Regions and Provinces provide other training activities for young people and adults. With regard to IVET, people holding an Upper Secondary or a VET qualification are entitled to enrol in very specific local training courses. Post-Higher Education courses offer an opportunity for those who have completed a University course. These courses are also designed for unemployed young people or adults with previous work experience. Sometimes, initial training courses are exclusively addressed to weak groups (disabled, migrants, Gypsies, special needs youth, etc.) in order to increase the level of work integration.

Backgrounds (Statistical Indicators for 5 years)

In this section are reported the main indicators related to the school system in Italy with particular respect to the vocation education and training sector. The following tables have the aim of providing the current situations as well as the trends in the Italian countries.

The following Table 1 reports the number of School, teachers and student in the public school, for the secondary education in general.

These data have been collected from the ISTAT (Italian National Institute of Statistics) database[6].

Table 1: Number of schools, teachers, students and graduates by type of school and educational year.

Secondary Education			
Educational years	**School**	**Number of Teacher**	**Number of Student**
2008/2009	5291	275173	2573607
2009/2010	5319	264685	2542738
2010/2011	5326	254668	2522451
2011/2012	5420	248941	2521609
2012/2013	5426	248385	2527351
2013/2014[7]	5403	247834	2580007

In the following table 2, the situation for the technical and professional secondary schools is reported:

Table 2 : Data for the technical and professional secondary schools

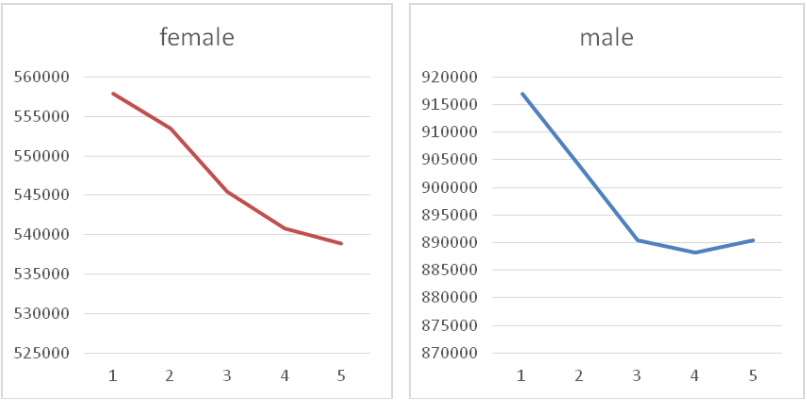
Vocational and Technical secondary education						
Educational years	**Number of School**			**Number of Student**		
	Public	**Private**	**Total**	**M**	**F**	**Total**
2008/2009	3289	660	3949	916998	557938	1474936
2009/2010	3303	664	3967	903701	553485	1457186
2010/2011	3290	658	3948	890422	545502	1435924
2011/2012	3344	696	4040	888261	540850	1429111
2012/2013	3324	708	4032	890417	538878	1429295

[6] http://dati.istat.it/Index.aspx?DataSetCode=DCIS_SCUOLESECOND2#

[7] Data for 2013/2014 have been collected from the report of the Ministry of Education, Universities and Research (available at: http://hubmiur.pubblica.istruzione.it/alfresco/d/d/workspace/SpacesStore/ceafc890-20eb-4c5f-859b-baed726d22d0/avvio_anno_scolastico2013_2014_10.pdf)

The number of school have increased in the period under investigation, while the number of students decreased gradually.

Figure 3: Trend of the number of student in Vocational and Technical Secondary Education for gender



In the period under investigation the total number of students is decreasing. By taking into consideration the influence of gender in the number of students, the percentage of male is almost constant in 63% and female 37% in the whole period.

Existing Situation in VET Institutions

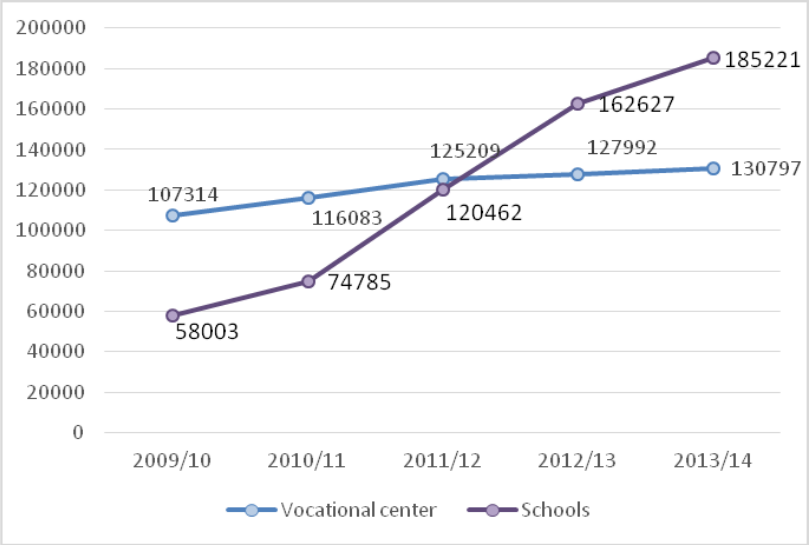
VET educations in Italy is not only implemented at secondary education schools, there are also educational institutions that are enabled to deliver VET course.

From this perspective is extremely interesting to analyse the recent report of the ISFOL[8] institution on the VET education in Italy [4].

The following Figure 4 extracted from the report shows the students participating to VET courses, comparing the data from schools and educational institutions.

The results show that the number of students is constantly increasing in the last five years, and the numbers of students participating to school education has overcome the participants in vocational centers.

Figure 4: Number of students participating to vocational education and training (source: ISFOL)



[8]National Research institute for vocational education and training employment and social policies - (Istituto per lo SviluppodellaFOrmazioneprofessionaledeiLavoratori) http://www.isfol.it/en

In the same report the analysis of the gender distribution in the participants at VET in schools and educational institutions is also taken into consideration. The following Figure 5, compare this distribution in the two typologies of schools.

Figure 2: genre of VET students (source: ISFOL)

This figure highlight an higher presence of male in both school and educational institutions. The percentage of female students is higher in educational institutions.

Employment facilities after graduation

The recent period of crises has had as a consequence an high unemployment rate for young people. In Italy, the strategy to fight this trend is aimed to strengthen VET and toexpand apprenticeship-type schemes has been implemented. Youth guarantee schemes and measures toreduce bureaucracy for enterprises and promote inter-firm cooperation,have been the focus of policy package delivered recently. At the basis of this action, there is the need to link better education and training with thelabour market. In 2014, the Council of the European Unionhas been guided by the Italian presidency. One of the most challenging issue that the Italian presidency had to cope with was the unemployment rate, that has continued to rise. The economic and

financial crisis has led in Italy an unemployment grown by almost six percentage points since 2008, reaching its highest level since the 1970s. This phenomenon has hit mostly young people, indeed their unemployment rate doubling since 2008 and reaching the 40% in 2013.

In Italy the differences in employability opportunities amongst the regions in the north, in the centre and in the south of the country is extremely high. In the north and in the center the manufacturing sector plays a key role constituting a considerable part of the whole economy. In the southern regions the opportunities offered by the labour market are not able to absorb the human resources available. Moreover, there is not a direct connection between the educational choices and the labour market. This condition is reflected in the people that are not encouraged in improving and updating their skills, and, as a consequence of this the enterprises are less competitive. In this context the interconnections between education and training, labour market and economy must to be improved in order to identify potential areas of growth. A positive trend in the development of one of these sectors (education, labour market and economy) is strictly connected to the others and at the same time, the development of one sector will influence the others. For these reasons the vocational education and training is central to provide more employment opportunities. The definition of the adequate levels of qualification, the skills and competences needed by the enterprises, will open new opportunity for people to acquire theoretical and practical skills needed for a specific employment.

Italy has recognize the role that VET has in supporting enterprises and influence the unemployment rate, especially in young people. For this reason, the objective of strengthening VET has been prioritized. Particular emphasis has been given to the need to link education and training better with the labour market. In this perspective the

apprenticeship programme has been introduced in secondary education thus implementing an innovative approach. In terms of employability and salary Italy hasa low rank with respect to the most relevant Europe 2020 benchmarks. For instance 17% early leavers from education andtraining (EU target: 10%), and with respect to VET, almost half of the learners are at leastone year behind in their training, which, as evidence shows, increases theprobability that they will leave prematurely.

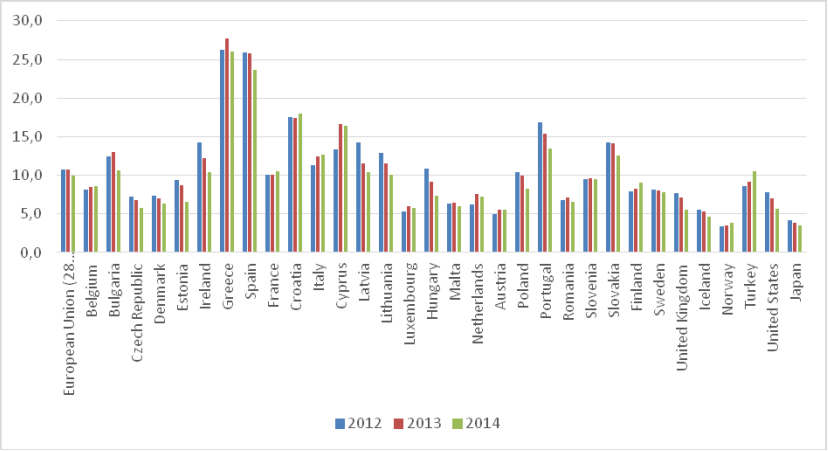
Table 3: Youth unemployment, 2012-2014 (%) (Source: Eurostat http://ec.europa.eu/eurostat/product?code=une_rt_q&language=en&mode=view)

Country	2012	2013	2014
European Union (28 countries)	10.8	10.7	10.0
Belgium	8.2	8.5	8.6
Bulgaria	12.5	13.0	10.6
Czech Republic	7.2	6.8	5.8
Denmark	7.3	7.0	6.3
Estonia	9.4	8.7	6.6
Ireland	14.3	12.2	10.4
Greece	26.3	27.7	26.0
Spain	25.9	25.8	23.7
France	10.1	10.1	10.5
Croatia	17.5	17.4	18.0
Italy	11.3	12.4	12.7
Cyprus	13.3	16.6	16.4
Latvia	14.3	11.5	10.4
Lithuania	12.9	11.5	10.1
Luxembourg	5.3	6.0	5.8
Hungary	10.9	9.2	7.3
Malta	6.3	6.5	6.0
Netherlands	6.2	7.6	7.2

Austria	5.0	5.5	5.6
Poland	10.4	10.0	8.3
Portugal	16.9	15.4	13.5
Romania	6.8	7.1	6.6
Slovenia	9.5	9.6	9.5
Slovakia	14.3	14.2	12.6
Finland	7.9	8.3	9.0
Sweden	8.1	8.0	7.8
United Kingdom	7.7	7.1	5.6
Iceland	5.6	5.3	4.6
Norway	3.4	3.5	3.8
Turkey	8.6	9.2	10.5
UnitedStates	7.8	7.0	5.7
Japan	4.2	3.9	3.5

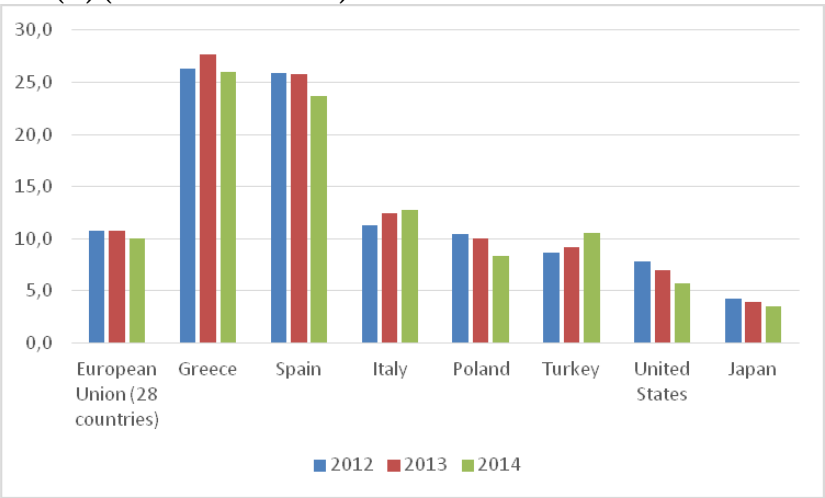
Regarding the youth unemployment, the table 1, reports the percentage of youth unemployment in the last three years. In Figure 6, data contained in the table are shown.

Figure 3: Youth unemployment, 2012-2014 (%) (source EUROSTAT)



In Figure 7 the comparison between the countries involved in the NecVET project and the European Union, United States and Japan is hishlighted.

Figure 4: Youth unemployment in the NecVET project countries 2012-2014 (%) (source EUROSTAT)



In December 2014, the Italian parliament approved, the 'Jobs Act' law with the aim of reforming the labour market. The report of the EU commission [5] describes the main effects of this law, in terms of decisive changes in employment protection legislation, the unemployment benefits system and wage supplementation schemes. Moreover, the 'Job Act' has the objective of providing more flexibility to employ opportunities for young people and reducing the bureaucracy for the enterprises. A novelty introduced by the 'Job Act' is the establishment of a national coordination agency. The agency will support the implementation of a national strategy on employment

services, aimed at providing a better integration between public and private sectors.

In order to increase the employment opportunities for job seekers and improve balance between jobs available and qualified employees, the Italian government has posed in its priority the implementation of the Active Labour Market Policy (ALMP)[9]. In particular the 'Job Act' strengthens ALMPs and creates a National Employment Agency. The Agency will be responsible for coordinating ALMP policy, currently the responsibility of local governments, including co-ordination with social benefit providers. The data on school student provided by the PISA (Programme for International Student Assessment) programme as well as the data on adult skills provided by the PIAAC (Programme for the International Assessment of Adult Competencies) programme, show that in Italy knowledge and skills needed in the labour market are not sufficiently provided by the education system. This is supported by the fact that the education system has been often hindered by the funding cuts, thus making more difficult the development of post-secondary technical schools and improving vocational schools, in co-ordination with industry's needs.

Monitoring mechanism after graduation

Monitoring VET initiatives is of primary importance to determine their effectiveness. As stated in [7] 'adequate and consistent data and indicators are the key to understanding what is happening in VET, to strengthening mutual learning, to supporting research and to laying the

[9] European Commission report (available at: http://ec.europa.eu/europe2020/pdf/themes/24_almp_and_employment_services.pdf)

foundations for evidence - based training policy'. In Italy, the Ministry of Education, University and Research (MIUR) has several bodies and agencies operating at national level for monitoring. In particular for three-year vocational training courses, the Institute for the Development of Professional Training for Workers ("Istituto per lo sviluppodellaformazioneprofessionaledeilavoratori", ISFOL) is the reference body for research and monitoring.

Figure 5: ISFOL web site

Established by law in 1973, Isfol has been then (1999) formally recognized as national research institute subject to the supervision of the Ministry of Labour, Health and Social Policies. The current Statute, approved (2003) by the Presidency of the Ministries Council, strengthens Isfol traditional role in the field of training, social and labour policies in order to contribute to the growth of employment, the improvement of human resources, social inclusion and local

development. In such a framework, the Institute conducts and promotes activities of study, research, experimentation, documentation, information and evaluation, consultancy and technical assistance. As regards the implementation of co- financed policies, Isfol supports the system actions of the European Social Fund through the definition of methodologies, tools and experimentations aimed at supporting the planning, the monitoring and the dissemination of the co-financed actions. Furthermore, the Institute is National Agency for the Lifelong Learning Programme - Sectoral programme Leonardo da Vinci. Over the last decadeIsfol is being operating in partnership with the Cedefop and its networks. In particular, relevant commitment has been formalised within the ReferNet, the network of reference and expertise in the field of VET in Europe. ReferNet comprises a national consortium in each Member State made up of organisations representing VET institutions at national level. Each consortium is led by a national coordinator responsible for constructing the consortium and ensuring the implementation of the networks' tasks. Isfol is currently the leading organization and coordinator of the Italian ReferNet Consortium, made of institutions and organizations with common interests in developing VET and related issues[10]. Over the past 10 years, ISFOL on behalf of the Ministry of Labour and Social Policies (Ministero del lavoro e dellepolitichesociali, MLPS) has been managing and promoting an information system to support actions designed to prevent skill mismatches. The system contains data from a wide range of studies and surveys, among which it is worth mentioning:

[10]The description of the ISFOL institute has been extracted from http://www.isfol.it/isfol-europa/reti/refernet/rapporti/PolicyReportItaly_final_2010.pdf

- survey on occupations (*Indaginecampionariasulleprofessioni*): a sample survey on the 800 occupation units listed in the national occupation classification (Level 5), started in 2007. The survey involved around 16 000 workers and covered about 300 variables clustered in a 10-section questionnaire. The 2013 results are available online;
- permanent audit of occupational needs (*Audit permanentedeifabbisogniprofessionali*): a sample of 35 000 enterprises selected by size, sector and geographic area, it provides qualitative information on workers' skills needs. The training needs identified will be subsequently listed in the occupation unit profiles included in the information system. Conceived as an annual survey, its first results are available online and the second-edition ones will be delivered in July 2014;
- other studies and research to forecast medium-term sector skills needs using scenario-based methodologies;
- forecast studies on mid-term recruitment needs (five years) conducted at national and regional level using a model based on the Energy-Environment- Economy Model of Europe (E3ME Model). ISFOL's information system is connected to other systems managed by public bodies such as the National Institute of Statistics (*IstitutoNazionale di Statistica*, ISTAT), the Workers Compensation Authority (*IstitutoNazionale per l'AssicurazionecontrogliInfortunisullavoro*, INAIL) and the MLPS. This enables users to access information on occupations (including ISTAT's workforce survey, INAIL statistics on industrial accidents and the MLPS portal helping match labour demand and supply.

Quality Assurance

The quality assurance systems applied by Italy in the education and training system essentially revolve around the quality of provision. However, until 2006 quality assurance was mainly viewed as a quality control rather than an improvement measure. Consequently, practitioners regarded attention to quality as a constraint instead of an opportunity. At the national level, there is now greater interest in quality assurance models and mechanisms as tools of continuous and comprehensive improvement in training provision. The multitude of initiatives launched at institutional and practitioners levels and systems testify to this turnaround.

As far as quality assurance in VET is concerned, ISFOL – (The Institute for the Development of Vocational Training of Workers) - supports the work of Ministry of Labour, Ministry of Education and Regional Governments in the field of vocational education and training. It covers all parts of VET. Statistical data is provided by the Italian national statistics office, ISTAT.

An Italian Reference point for Quality Assurance in VET has been set up, under coordination of ISFOL. The main goals are to inform main national stakeholders about the activities of the EQAVET, to provide active support for the development of this programme, to apply methods to ensure and develop quality in VET, to raise awareness among stakeholders of the benefits of QA tools and indicators and to coordinate organized national activities.

As far as this national reference point is concerned, its main tasks are:

- Informing key stakeholders on the national activities for the European Network;
- Actively support the development of the program for the European Network;

- Promote initiatives to improve the use of methodologies and tools for the development of quality assurance;
- Raise awareness of the benefits from the methodologies developed for quality assurance;
- Coordinate the organization of national activities carried out vis-à-vis to participation in the European Network for Quality.

Representatives from the Ministry of Education and Labour, their regional sub-divisions, training bodies, schools, trade unions and enterprises participate in the Italian Reference Point. However, there are many needs to adapt Quality Assurance to the Italian VET system, as Italy still needs to build up its own National Credit System for VET.

General and vocational schools have to send their data through the web, and the system gives them back their indicators (context, input, process and outputs) compared with provincial averages. A self-evaluation report must be presented by schools.

At national level on March 2012 a "National plan for quality assurance" was approved by Ministries of Labour and Education and its implementation is in progress; it is meant to be gradually implemented starting from the existing quality assurance models and tools for QA both at national and local level. The national plan will adopt some indicators, with reference to those suggested by the European Recommendation, without missing qualitative evaluation able to take into account the complexity of training activities and the great number of stakeholders involved. The use of indicators and other statistical parameters can be considered as a support to a more comprehensive assessment. The plan is targeted to the whole national education and training system.

General approach to market needs

The following table reports the labour market indicators for Italy. This table has been elaborated from Eurostat data reported in [8].

Labour market indicators: Italy

All	2008	2009	2010	2011	2012
1. Total population (000)	59 336	59 752	60 051	60 328	60 515
2. Population aged 15-64	39 182	39 406	39 546	39 659	39 603
3. Total employment (000)	25 259	24 839	24 660	24 739	24 662
4. Population in employment aged 15-64	23 011	22 650	22 497	22 583	22 481
5. Employment rate (% population aged 15-64)	58.7	57.5	61	61	61.0
6. Employment rate (% population aged 20-64)	63.0	61.7	57	57	56.8
7. Employment rate (% population aged 15-24)	24.4	21.7	21	19	18.6
8. Employment rate (% population aged 25-54)	73.5	71.9	71	71	70.3
9. Employment rate (% population aged 55-64)	34.4	35.7	37	38	40.4
10. FTE employment rate (% population aged 15-64)	55.1	53.9	53	53	52.5
11. Self-employed (% total employment)	23.6	23.4	23	23	23.1
12. Part-time employment (% total employment)	14.3	14.3	15	16	17.1
13. Fixed term contracts (% total employees)	13.3	12.5	13	13	13.8
14. Employment in Services (% total employment)	67.8	68.3	69	69	70.1

15. Employment in Industry (% total employment)	28.3	27.7	27	27	26.2
16. Employment in Agriculture (% total employment)	3.9	3.9	4.0	3.9	3.8
17. Activity rate (% population aged 15-64)	63.0	62.4	62.2	62.2	63.7
18. Activity rate (% of population aged 15-24)	30.9	29.1	28.4	27.4	28.7
19. Activity rate (% of population aged 25-54)	78.1	77.2	76.9	76.9	77.9
20. Activity rate (% of population aged 55-64)	35.5	37.0	38.0	39.5	42.6
21. Total unemployment (000)	1 690	1943.9	2102.0	2108.0	2 744
22. Unemployment rate (% labour force 15+)	6.7	7.8	8.4	8.4	10.7
23. Youth unemployment rate (% labour force 15-24)	21.2	25.3	27.8	29.1	35.3
24. Long term unemployment rate (% labour force)	3.1	3.5	4.1	4.4	5.7
25. Youth unemployment ratio (% population aged 15-24)	6.6	7.4	7.9	8.0	10.1

Male	2008	2009	2010	2011	2012
1. Total population (000)	28 849	29 047	29 181	29 304	29 401
2. Population aged 15-64	19 574	19 670	19 719	19 755	19 724
3. Total employment (000)	15 178	14 876	14 699	14 669	14 475
4. Population in employment aged 15-64	13 755	13 500	13 347	13 327	13 119
5. Employment rate (% population aged 15-64)	70.3	68.6	72.8	72.6	71.6
6. Employment rate (% population aged 20-64)	75.4	73.8	67.7	67.5	66.5
7. Employment rate (% population aged 15-24)	29.1	26.1	24.3	23.1	21.9

8. Employment rate (% population aged 25-54)	86.7	84.7	83.5	83.4	81.6
9. Employment rate (% population aged 55-64)	45.5	46.7	47.6	48.4	50.4
10. FTE employment rate (% population aged 15-64)	68.9	67.3	66.3	65.9	64.6
11. Self-employed (% total employment)	27.4	27.4	27.6	27.5	27.4
12. Part-time employment (% total employment)	5.3	5.1	5.5	5.9	7.2
13. Fixed term contracts (% total employees)	11.6	10.8	11.4	12.3	12.9
14. Employment in Services (% total employment)	59.8	59.9	58.5	59.1	59.7
15. Employment in Industry (% total employment)	35.8	35.6	36.8	36.3	35.7
16. Employment in Agriculture (% total employment)	4.4	4.5	4.7	4.6	4.6
17. Activity rate (% population aged 15-64)	74.4	73.7	73.3	73.1	73.9
18. Activity rate (% of population aged 15-24)	35.9	34.0	33.2	31.6	33.1
19. Activity rate (% of population aged 25-54)	91.0	90.0	89.4	89.2	89.4
20. Activity rate (% of population aged 55-64)	47.0	48.5	49.6	50.7	53.6
21. Total unemployment (000)	821	1 001	1 114	1 114	1 469
22. Unemployment rate (% labour force 15+)	5.5	6.8	7.6	7.6	9.9
23. Youth unemployment rate (% labour force 15-24)	18.9	23.3	26.8	27.1	33.7
24. Long term unemployment rate (% labour force)	2.4	2.8	3.6	3.9	5.1
25. Youth unemployment ratio (% population aged 15-24)	6.8	7.9	8.9	8.6	11.1

Female	2008	2009	2010	2011	2012

1. Total population (000)	30 488	30 705	30 871	31 024	31 114
2. Population aged 15-64	19 608	19 736	19 827	19 904	19 879
3. Total employment (000)	10 081	9 963	9 960	10 070	10 186
4. Population in employment aged 15-64	9 256	9 151	9 150	9 256	9 362
5. Employment rate (% population aged 15-64)	47.2	46.4	49.5	49.9	50.5
6. Employment rate (% population aged 20-64)	50.6	49.7	46.1	46.5	47.1
7. Employment rate (% population aged 15-24)	19.4	17.0	16.5	15.5	15.0
8. Employment rate (% population aged 25-54)	60.2	59.1	58.7	58.9	59.1
9. Employment rate (% population aged 55-64)	24.0	25.4	26.2	28.1	30.9
10. FTE employment rate (% population aged 15-64)	41.7	40.9	40.6	40.9	40.9
11. Self-employed (% total employment)	17.9	17.3	17.2	17.0	17.0
12. Part-time employment (% total employment)	27.9	27.9	29.0	29.3	31.1
13. Fixed term contracts (% total employees)	15.6	14.6	14.5	14.7	14.9
14. Employment in Services (% total employment)	80.8	82.0	84.0	84.0	84.5
15. Employment in Industry (% total employment)	16.0	15.0	13.2	13.3	12.9
16. Employment in Agriculture (% total employment)	3.2	3.0	2.8	2.7	2.6
17. Activity rate (% population aged 15-64)	51.6	51.1	51.1	51.5	53.5
18. Activity rate (% of population aged 15-24)	25.7	23.9	23.4	22.9	24.0
19. Activity rate (% of population aged 25-54)	65.2	64.5	64.4	64.6	66.4

20. Activity rate (% of population aged 55-64)	24.7	26.1	27.0	28.9	32.2
21. Total unemployment (000)	870	943	989	994	1 275
22. Unemployment rate (% labour force 15+)	8.5	9.3	9.7	9.6	11.9
23. Youth unemployment rate (% labour force 15-24)	24.7	28.7	29.4	32.0	37.5
24. Long term unemployment rate (% labour force)	4.0	4.3	4.8	5.0	6.5
25. Youth unemployment ratio (% population aged 15-24)	6.3	6.9	6.9	7.3	9.0

The OECD report [9] states that the labour market has to take into account the condition of unemployed persons. In particular, regional governments have to provide incentives to job search by means of training and job search institutions. Another important step supported by the labour market is "*a more inclusive approach to labour market policy*". Italy is characterized by a very high unemployment rate for youth people. Actions performed in this direction have to be focused in order to limit this phenomenon. As supported by the last economic survey the school-to-work transition has to be improved since education plays a key role. In 2009 the development of Higher Technical Institutes (ITS – IstitutiTecniciSuperiori) has had the aim of improvinginterconnections between vocational schools and companies by promoting certification of existing competences for people with low formal education as included into the legislative decree adopted on 11th January 2013.
Moreover, Italy is also coping with a low rate of participant in the labour market of female. A motivation is that public spending on families with children is well below the OECD country average and more and more often women have to provide care functions.
The same OECD report [9] contains the following recommendations for labour market reform in:

- Promote a more inclusive labour market, improving employability with more support for job search and training, linked with the broader social safety net, rather than preserving existing jobs.

- Promote the widening of the current agreement among the social partners so as to better align wages compared with productivity, to help restore competitiveness.
- Use the monitoring provisions of the labour market law to evaluate its impact and to plan possible future policy measures.
- Consider lowering the minimum monetary compensation for unfair dismissal and setting it as a function of length of service.
- Improve the vocational education and training system through more employer engagement and work-based training to better bridge the transition from education to the labour market.
- Within overall budget constraints, give more priority to increasing the supply and coverage of childcare, consider redistributing part of the parental leave right to fathers and reducing marginal tax rates on second earners, to reduce the disincentives to female labour market participation.

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CHAPTER THREE

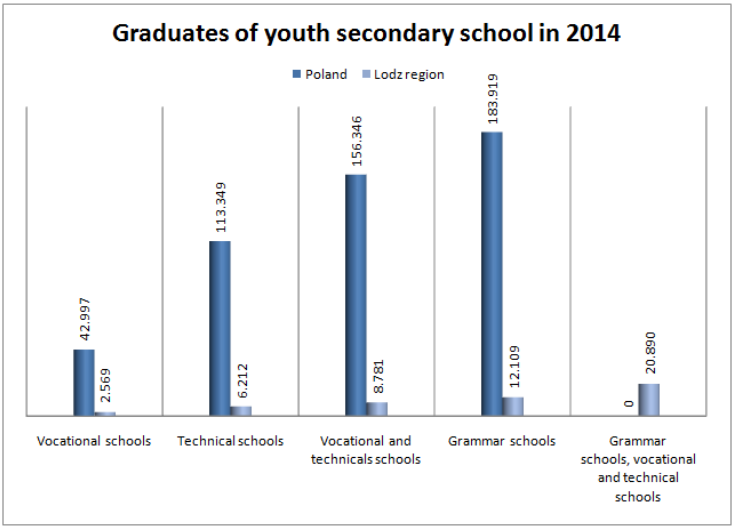
EXISTING SITUATION ANALYSIS FOR VOCATIONAL EDUCATION IN POLAND

Basic Structure of Polish Vocational Educational System

In Poland, vocational education is conducted in secondary schools: technical and vocational ones (blue collar workers). The technical and vocational schools teach young people aged 16 - 20. Adult vocational training is conducted in the form of exam preparation courses for specific qualifications. The courses are taught by schools and other educational institutions

Graduates of youth secondary school.

Until 30th September		Vocational schools	Technical schools	Vocational and technicals schools	Grammar schools/ Higher secondary school	Grammar schools, vocational and technical schools
2010	Poland	76 987	116 947	193 934	218 382	412 316
	Lodz region	3 952	6 080	10 032	14 658	24 690
2011	Poland	74 989	124 357	199 346	208 271	407 617
	Lodz region	3 958	6 753	10 111	13 653	23 764
2012	Poland	70 924	121 817	192 741	202 040	394 781
	Lodz region	3 622	6 646	10 268	13 991	24 259
2013	Poland	67 251	117 890	185 141	197 397	382 538
	Lodz region	3 393	6 540	9 933	13 061	22 994
2014	Poland	42 997	113 349	156 346	183 919	340 365
	Lodz region	2 569	6 212	8 781	12 109	20 890

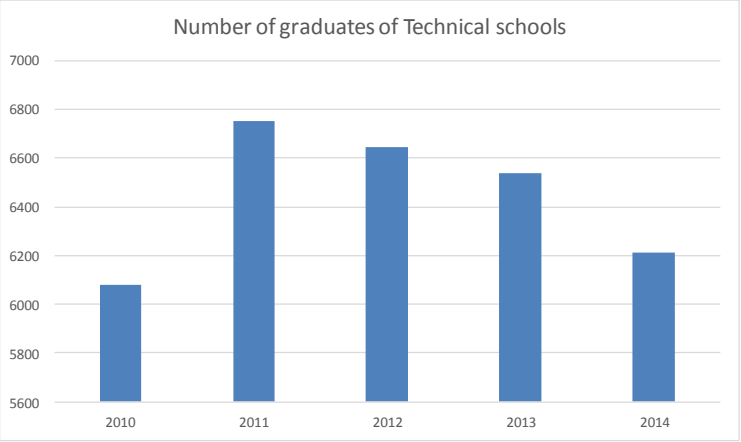


Graduates of youth secondary school - POLAND.

Until 30th September	Vocational schools	Technical schools	Vocational and technicals schools	Grammar schools	Grammar schools, vocational and technical schools
2010	76 987	116 947	193 934	218 382	412 316
2011	74 989	124 357	199 346	208 271	407 617
2012	70 924	121 817	192 741	202 040	394 781
2013	67 251	117 890	185 141	197 397	382 538
2014	42 997	113 349	156 346	183 919	340 365

Graduates of youth secondary school – Lodzkie region.

Until 30th September	Vocational schools	Technical schools	Vocational and technicals schools	Grammar schools	Grammar schools, vocational and technical schools
2010	3 952	6 080	10 032	14 658	24 690
2011	3 958	6 753	10 111	13 653	23 764
2012	3 622	6 646	10 268	13 991	24 259
2013	3 393	6 540	9 933	13 061	22 994
2014	2 569	6 212	8 781	12 109	20 890

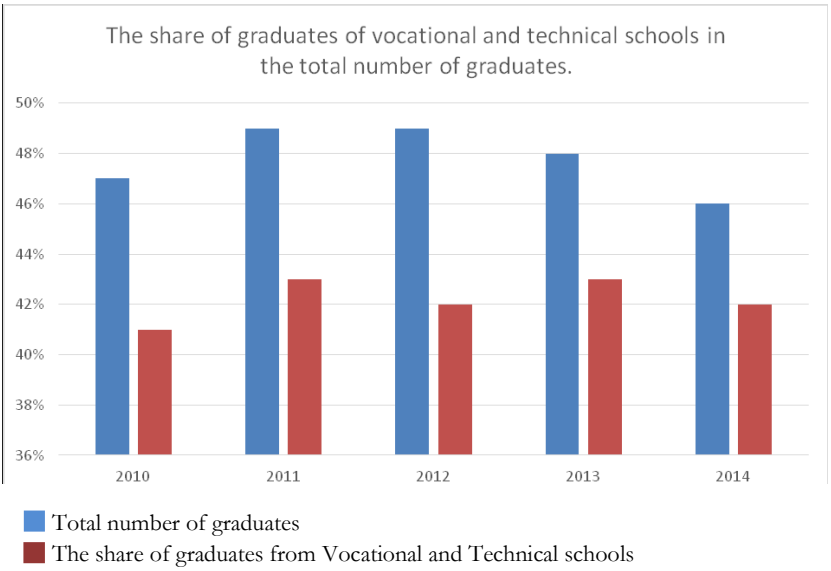


Analyzing the number of graduates over the last five years in Poland, the following trends can be observed.

1. The total number of graduates is decreasing, which is associated with demographic changes observed in Poland over the last 25 years (decrease in the number of births). Graduates in 2014 accounted for 83% of the number of graduates in 2010.

2. The ratio of graduates of vocational schools to the total number of graduates remained at a fairly stable level - for the whole Poland over 45% (the highest level reached 49% in 2011 and 2012).

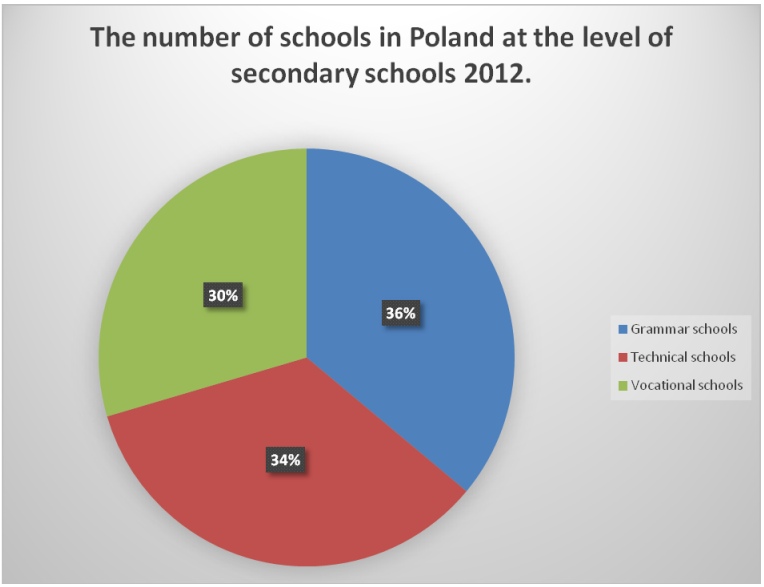
Year	The share of graduates of vocational and technical schools in the total number of graduates (Poland)	The share of graduates of vocational and technical schools in the total number of graduates (Lodz region)
2010	47%	41%
2011	49%	43%
2012	49%	42%
2013	48%	43%
2014	46%	42%



3. The share of graduates of vocational schools in the total number of graduates of vocational schools is decreasing, in 2010 to 40%., in 2014 to 28%. This is due to changes in the structure of educational choices of students. Fewer and fewer students indicate the vocational school as a school so called 'first choice'. The students of vocational schools are the ones who did not get to technical schools or had problems with learning, especially general technical subjects, which was the reason for the change of school.

The number of schools in Poland at the level of secondary schools (as of 30.09.2012):

No	Kind of school	Number
1.	Grammar schools	1867
2.	Technical schools	1779
3.	Vocational schools	1530



In the Polish system of education grammar schools operate as separate educational institutions, vocational training in the technical and vocational schools is carried out in the so called ‘ teams of schools’.

Currently (2014/2015 school year) in Poland, there is vocational education in 194 occupations in which there are 255 qualifications. Blue collar workers’ occupations (basic vocational school) are characterized by one qualification. The occupations at the level of technical schools have 2-3 qualifications. The qualification at the level of blue collar workers is included in the set of technical level qualifications. In related occupations there is one, the same qualification, in order to facilitate the subsequent retraining. For example, workers' qualification in the profession of a "shop assistant" is also a component of the qualification in the occupation of a "technical trader" and "bookseller"

In the school year 2014/2015 training is conducted in 1957 and 1684 technical vocational schools for young people. In the last 2-3 years, the number of vocational schools has been rising again because of the situation on the labor market (increase in demand for mid-level technical staff) and actions promoting vocational education carried out at the level of ministries and local school authorities (cities, districts). 2014/2015 school year was declared the Year of the School of Professionals. A number of steps has been taken to encourage young people to take up training in vocational schools.

In Lodz there are 18 'teams of vocational schools' where education is conducted at the level of technical occupations (secondary education and it is possible to take final exams) and basic vocational education (at the level of workers' skills). Over the last 5 years 4 'teams of vocational schools' have been closed down. The main reason for it was the demographic decrease in 2001. in upper secondary schools (general and vocational) in Lodz more than 45 000 young people were being educated, now it is less than 20 000. The demographic situation in the whole country looks alike. 'Teams of vocational schools' offer education in Lodz in 42 occupations at the technical school level and 28 at the vocational school level.

The occupations at the level of technical schools

Analyst Technician

Technician of landscape architecture

Construction technician

Digital technician of graphic processes

Road construction technician

Technician of roads and railway bridges

Electronics technician

Economics technician

Electrical technician
Energetics technician
Photo technician
Technician Surveyor
Geologist technician
Gas Technician
Technician of trade
Hotel management technician
IT technician
Forestry technician
Logistics technician
Mechanical technician
Mechatronics technician
A technician of tourism services
Optics technician
Environmental Technician
Technician of advertisement organizing
Garden Technician
Technician of vehicles
Technician of printing processes
Technician of restoration of architectural elements
Forwarder technician
Technician of systems and renewable energy equipment
Technician of wood technology
Clothing technology technician
Food technology technician
Information and communication technician
Technician of rail transport
Sanitation technician

Hairdressing technician
Veterinary technician
Textile technician
Textile technician of decorative
Technician of nutrition and food services

The occupations at the level of the workers (basic vocational school):
Car tinsmith
Confectioner
Roofer
Printer
Electrician-mechanic
Electrician-mechanic of vehicles
Electrician
Photographer
Barber/hairdresser
Bookbinder
Tailor
Cook
Painter
Mechanic - machinery and equipment fitter
Car mechanic
Electronics specialist
Building and finishing works in construction specialist
Network installation and sanitation specialist
Mechatronics specialist
Cutting machine operator
Mason-plasterer
Gardener

The operator of machinery and equipment of food industry
Baker
Craftsman of textiles
Meat processing specialist
Seller
Carpenter

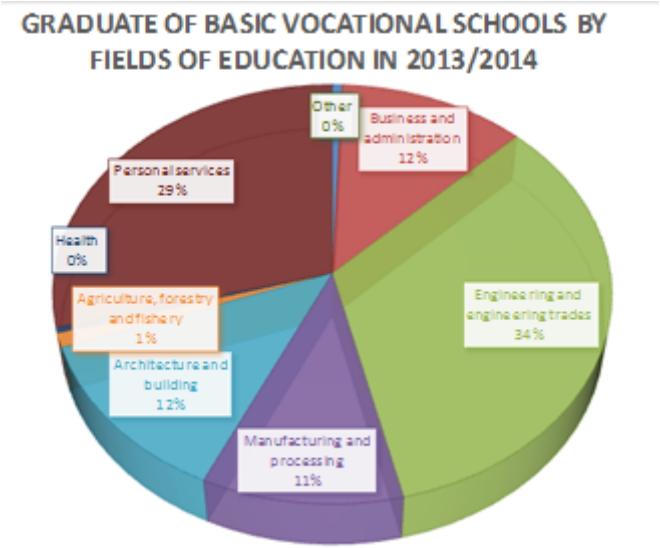
The training is conducted in both the traditional occupations as well as the ones resulting from changes in the economic structure of the region, new investments and new economic face of the city. For example, developing education in the profession of logistics techniques due to the proximity to the motorway junction and the construction of a number of logistics centers. Similarly education in professions related to the railways was introduced because of plans to build modern railway lines in the region, in the field of hotel services due to the construction of many new hotels in the city. In the school year 2015/2016 the offer will be enriched with new professions: horse breeding technicians (creation of the Horse Track in the region of Lodz), technicians of port and terminal handling (the development of the transport and logistics), a motorcycle mechanic (new profession in the classification of occupations).

Similar trends can be observed in other Polish regions.

Graduates of Basıc Vocational Schools by Fields of Education.

Graduates of Basıc Vocational Schools by Fields of Education.						
ROK SZKOLNY/ SCHOOL YEAR:	**2013/2014**		**2012/2013**		**2011/2012**	
Grupy Kierunków Kształcenia Groups of Fields of Education	Zasadnicze szkoły zawodowe Basic vocational schools		Zasadnicze szkoły zawodowe Basic vocational schools		Zasadnicze szkoły zawodowe Basic vocational schools	
	ogółem total		ogółem total		ogółem total	
	graduates	of which females	graduates	females	graduates	females
Total by group of fields of education	**68 865**	**23 354**	**72335**	**24384**	**76361**	**25272**
Art	425	231	519	278	545	225
Business and administration	8 224	7 161	9142	7913	9833	8557
Engineering and engineering trades	23 220	35	24412	36	25935	39
Manufacturing and processing	7 324	1 736	7738	1847	8768	2359
Architecture and building	8 594	14	9350	26	10158	32
Agriculture, forestry and fishery	757	166	808	195	912	247
Health	280	261	140	137	117	110

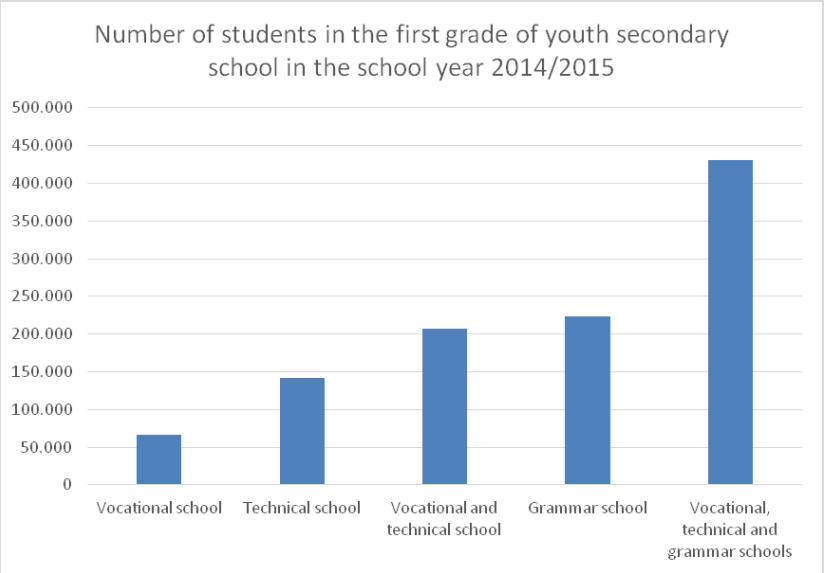
Personal services	20 037	13 747	20225	13951	20083	13698
Other	4	3	1	1	10	5



Existing Situation of Vet institutions.

Analysis of the number of students in the first grade of youth secondary school in the school year 2014/2015.

	Vocational school	Technical school	Vocational and technical school	Grammar school	Vocational, technical and grammar schools
Poland	66 042	141 236	207 278	223 869	431 147
Lodz region	3 270	8 482	11 752	15 222	26 974



Vocational and technical schools were chosen by 207 278 students , in 2014 in Poland, representing 48% of all students of grade I. In the Lodz region vocational schools were chosen by 44% of lower secondary school graduates.

The basis for admission to the selected secondary school is the amount of points obtained from secondary school exams, grades obtained at the end of study in the lower secondary school and the points awarded for outstanding achievements in science, sport and / or a social activity.

In Lodz, lower secondary school graduates who decide to take up vocational training usually choose professions in the field of gastronomy, hotel and tourism industry, logistics, gas (the only school in Poland), computer science, energy, electronics and hairdressing. Schools

offering education in these occupations do not have problems with recruitment.

In Poland, education can be carried out in 201 occupations included in the Classification of Occupations of Vocational Education. In order to organize the education market in the school classification, occupations are ranked in the areas of education, which contain sets of occupations grouped in terms of common or similar qualifications required to carry out professional tasks within a given profession. When grouping occupations Polish Classification of Activities was used. There are eight separate areas of study:

1) administrative service (marked A),
2) building (B),
3) electric and electronic (E),
4) mechanical and metallurgical mining (M),
5) agro-forestry and environmental condition (R),
6) tourist-catering (T),
7) medico-social (Z),
8) Art (S).

The classification is carried out by the Ministry of Education, and the occupations are added, modified or deleted at the request of industry ministers responsible for the occupations. In the last year 3 occupations were added to the Classification: motorcycle mechanic, refrigeration and air conditioning technician and crane machines technician.

Characteristics of upper secondary education system. Analysis of the fields of upper secondary education.

Key information relating to upper secondary education:

- Firstly, it is a sector that has been extensively reformed for the last 20 years (decentralization of education management, the introduction of lower secondary schools in the school year 2001/2002, etc.) In the

school year 2012/2013 supplementary general secondary schools and technical schools were liquidated, and the suspension of recruitment to profiled secondary schools will lead to their gradual elimination.

- Within this sector both general and vocational education can be gained. By far the most popular among students are grammar schools, which educate almost half of secondary school students. There is also an increased tendency to complete education by graduates of vocational schools in complementary grammar schools.

- Interest in vocational education has remained fairly stable for several years vocational schools train a similar proportion of people as a few years ago). However, the total number of students in these schools is decreasing, which could have important consequences for the labor market (however, this decrease is due to demographic changes, and not less interest in this type of education). In contrast, there has been a declining interest in specialized secondary schools for a long time, which do not give permission to do certain jobs, and only a general orientation to the profession.

- You can see clear differences in choices of educational paths based on gender. Men are more likely to decide to continue their education in vocational schools (net enrollment rate of 19%) and technical schools (33%) than women (vocational schools - 9%, machinery - 23%). Women often choose general education(net enrollment rate at 59%, compared to 35% for men).

The percentage of students within individual fields of education in secondary schools in 2011. (N = 1,106,643)	
Field of education	% students
IT technician	7,8
Economics technician	5,9
Musician	5
Hotel industry technician	4,2
Administration technician	3,7
Mechanical technician	3,6
Building technician	3,6
Car mechanic technician	3,6
Nutrition and food services technician	2,8
Logistics technician	2,7
Cook	2,7
Barber/hairdresser	2,3
Beauty parlour service technician	2,2
Safety and occupational hygiene technician	2,1
Hairdressing services technician	2,1
Car technician	2
Trade technician	2
Shop assistant	1,9
Landscape architecture technician	1,7
Electronics technician	1,7
Cooking and catering services technician	1,7
Tourism industry technician	1,5
cook	1,5
Framer technician	1,5
Mechatronics technician	1,3
Electricity technician	1,3
Advertising technician	1

The most popular fields of education in vocational schools in 2011r. (N=221873).	
Field of education	% students
Car mechanic	17,7
Cook	13,2
Barber/hairdresser	11,3
Shop assistant	9,7
Bricklayer	4,2
Building finishing works specialist	4,2
Carpenter	4,0
Confectioner	4,0
Locksmith	3,6
Electrician	3,0
Car electric-mechanic	3,0
Sanitary equipment specialist	2,4
Baker	2,2
Mechanic and operator of farming machinery	1,9
Car tinsmith	1,5
Electrician-mechanic	1,4
Machines and appliances fitter	1,3
Cutting machine operator	1,2
Painter – wallpaper specialist	1,2
Refinisher (car painter)	1,1

It is especially important to note that the four most popular fields of study in vocational schools essentials concentrate over a half (52%) of vocational students. These are: car mechanic, small catering chef, hairdresser and salesman, so, first, occupations related to services, and second - most importantly - give good prospects for their own business.

Above-average popularity can be seen in the case of occupations in the service vehicles. Occupations in this group (mechanic, electrician, tinsmith, painter) focus almost ¼ of vocational students, the undisputed leader here is the car mechanic (17.7%).

Among the least popular fields of study offered by vocational schools in 2011 there are occupations of industry workers, including installers and operators of machinery and equipment in the textile, chemical, glass, ceramics; crafts and professions, including goldsmith-jeweler, textile craftsman, basket weaver, shoemaker, chimneysweeper, optician-mechanic, watchmaker, potter.

General characteristics of the employment situation of graduates of vocational schools and technicians

Graduates of workers' education courses in vocational schools are the second group in terms of monthly wages. The attractiveness of this path, however, detract from the fact that it is a group with the highest percentage of the unemployed. This can be associated with the considerable internal diversity of the group, in which there are both occupations in demand in the labor market and "fading" fading. Those choosing other (but not services) vocational learning paths are relatively less prone to unemployment, but also relatively more non-active and constitute the NEET category (called. Not in Employment, Education or Training), which - according to studies - may result in permanent loss of connection with the labor market.

The definitely outlier group, characterized by the most difficult position in the labor market are service professionals who are graduates of vocational schools (including a chef, a hairdresser, a seller). It is very

worrying that - as mentioned - they are occupations which sustained more or less equal level of popularity in recent years. Importantly, the vast majority of them are taken by women. This group is characterized by the lowest percentage of employed people (for any of the listed occupations the rate of employment does not exceed 53% of the entire group covered by the analysis), high rates of unemployment (for example, 23% of the cook, barber/hairdresser 20%) and highest in the case of secondary schools analyzed the percentage of economically inactive, reaching 30% (in the case of shop assistants: 33%).

Employment facilities after graduation.

Unemployment rate according to age in the fourth quarter of 2013 and the first quarter of 2014. (quarterly survey)

age	Unemployment rate – 4th quarter 2013r.	Unemployment rate – 1st quarter 2014r.
total	9,8%	10.6%
under 24	27,3%	27,2%
25 - 34	10,3%	11,6%
35-44	7,5%	8,0%
45 and above	7,0%	7,8%

In the fourth quarter of 2013 the unemployment rate among graduates (12 months after graduation) living in rural areas was 36.8%, and among graduates living in the city 28.4%. The lowest unemployment rate was among the graduates of schools of higher education - 22.0%, the highest among grammar school graduates - 49.0%. Within the group of graduates with vocational education

unemployment was at the level of 48.3%, and secondary vocational education (technical) - 42.8%.

Facing such a high rate of unemployment among graduates in Poland there are actions undertaken to support young people in entering the labor market. The assistance program may cover a person under 30 years of age registered at the employment office.

Support instruments:

1) Voucher of employment - giving a voucher of employment on the basis of the Individual Action Plan. A graduate who received a voucher of employment is seeking work. An employer who will hire him for at least 18 months gets a refund of a part of remuneration with social security contributions for a period of 12 months.

2) Internship voucher - giving an internship voucher is based on the Individual Action Plan. An employer who will give a job to a graduate for a 6-month internship and employ them for the next six months receives a bonus of 1500PLN from the governor. During the internship the apprentice/ graduate receives a scholarship.

3) Training voucher - within a training voucher the unemployed person may be funded 100% of the cost of training or necessary medical examinations as well as commuting and may also receive a scholarship.

4) Grant to set up their own business - after completion of the training, "ABC Entrepreneurship" the unemployed person may receive a grant in the amount of not more than 6 times the average wage in the country.

Students graduating from upper secondary schools are also able to call upon the assistance of professional advisors, who can be hired at the school. Availability of the career counselor depends on the financial and organizational authority for the school. In Lodz, the career guidance system is run by the Teacher Training Centre in Lodz and is provided

for lower secondary schools (choosing the field of education) and upper secondary schools (entering the labor market or continuing their education). Students participate in workshops and can take advantage of personalized advice guidance counselor at school or the point of the consultation.

With regard to the declarations of employers concerning the need for workers to specific positions, it can be said that new people are now the most wanted in three occupational categories:

- Skilled workers and machine operators and installers (48% of employers who are looking for new people to work wanted to hire workers for such jobs);

- professionals and technicians and middle management staff (29% of demand);

- shop assistants and service workers (24% of employers who declared willingness to employ new people).

Occupational activity of students of vocational schools and basic vocational schools.

More than a half of all students in the last year implemented some form of work.

- ¾ of vocational school students took paid work in the last year;

- and 66% of students from technical schools took jobs in the last grade.

- in the case of 56% of the students remuneration activity is associated with the profile of their education.

Obstacles to the commencement of employment in the last grade:

- The first is the fact of being a day secondary school student which makes it difficult or impossible to undertake employment. The key external cause is, in the opinion of the students, the lack of jobs (56%).

The best ways to find a job, according to students, are: the use of contacts and acquaintances, that is, recommendations and references. At the same time, there is a low level of confidence in the effectiveness of institutional labor market services –the job search path chosen by the labor office were followed by only 11% of students and another help in job searching by only 8%.

Monitoring mechanism after graduation

In Poland, there are obligatory studies of the schools of higher education graduates' careers. This is stated in the Law on Higher Education of 2005r.- "the university monitors careers of their graduates in order to adapt courses of study and education programs to the needs of the labor market, in particular after 3 and 5 years from the date of graduation." The act does not specify, however, standards, methods or techniques for collecting, processing and the use of data.

At the upper secondary school level, including vocational education in Poland there are no requirements for monitoring the paths of graduates. Such studies are taken by schools for their own needs or other educational institutions of the region. In Lodz the survey of graduates has been conducted since 1999 by the Labor Market Observatory for Education in the Lodz Center for Teachers. A recent survey was conducted in 2013 in 7 'Teams' of Vocational Schools in Lodz. The study included graduates who completed their education in 2011, 2012 and 2013, representing 15 occupations: economics technician (72 people), hotel management technician (96), trading technician (32), car electrician-mechanic (35), car mechanic (35) technician of motor vehicles (91), electrician-mechanic (2), electrician

(7), mechatronics technician (24), construction technician (16), the technologist of finishing works in construction (20), confectioner (80), food technology technician (39) , barber/hairdresser (76), the technician of landscape architecture (37). In order to test the graduates a special questionnaire containing 33 questions was prepared. Due to the diversity of professional study of the group, one of the questions was varied depending on the field of education of respondents (question related to the ability to perform tasks in a given occupation). The method of direct interview was used and it was conducted by a team of trained interviewers using PAPI - Paper and Pencil Interview. They interviewed 459 graduates . The questions covered the following topics:

- the reasons for the choice of the field of education,
- professional activity during school,
- assessing the knowledge and skills acquired at school,
- assessment of the chances of finding a job,
- undertaking further study,
- supplementing professional qualifications,
- factors important in the search for their first job,
- competencies to support the implementation of the first job,
- declared mobility of graduates,
- period of searching for your first job,
- the current status of graduates (employed / unemployed)
- registration at the employment office,
- forms of assistance offered to graduates by the employment office,
- how to find the first job,
- reasons for the difficulties in finding work,
- expectations for their first job,
- the commencement of the first job search,
- learned profession and occupation,

- the period of doing the first job,
- forecasting their own professional situation,
- assessment of the situation on the labor market.

Selected conclusions from the research.

1. Graduates analyzing their preparation for work after graduation highly evaluated the acquired theoretical knowledge (90% positive ratings), lower were practical skills (66% of positive responses). Over 30% claimed that they were not prepared by the school to look for work.

2. More than a half of the respondents continued their education, usually in the same professional area.

3. 16% completed their qualifications on courses, usually getting certified specific technical skills.

4. About 60% of respondents do not work in their profession.

5. Graduates emphasized the importance of motivation and job seeking skills in difficult economic conditions in the country and the world.

The survey of graduates can be an excellent tool for monitoring the effects of training, identifying strengths and weaknesses and offering customization facility to the actual needs of the labor market. The methodology developed and used in Lodz is now being presented in other Polish regions.

Recommendations for schools and vocational schools leading authorities for adapting their offer to the needs of the labor market.

1. Providing schools with accurate information on current and projected changes in the local and regional labor markets (especially information about new investments).

2. Cooperation between vocational schools and enterprises.

a) The creation of classes of patronage,

b) The organization of internship holiday etc. by enterprises for students enrolled in education in specific occupations,

c) the participation of employers in the creation of such school programming e.g. specializing in the field of activities that can be created individually by the school in accordance with the needs of the regional labor market

d) the organization of specialized training completed with certificates of skills.

3. Improving the system of vocational guidance for students in the programmatically highest grades.

Tasks performed by professional counselors in secondary schools are:

- Diagnosing students' needs for education – training information (surveys, survey interviews with students and teachers).

- The collection, updating and sharing of educational and occupational information specific to a given level of education (organizing bookshelves), identifying additional sources of information.

- Systematic diagnosing students' needs for information on occupational knowledge.

- Coordinate the activities of information - advisory school.

- Cooperation with the teachers in the creation and ensuring the continuity of the system of vocational in-school counseling, including: training teachers to teach the students in relation to their occupational

orientation, sharing with teachers scenarios preparing to teach students to consciously make career planning and take their professional role.

- Individual help for students in planning their education and career, creating job application documents.

- Information on factors affecting the career, changes in the labor market and shortage occupations.

- Assistance in finding apprenticeship for places students, cooperating with the employers of vocational schools' students, the control and progress in education skills, control practices.

- Conducting activating group activities, preparing students for career planning and conscious professional work (workshops on interpersonal communication and negotiation, group activities to prepare for an interview and self-presentation, activities exploring preferences and aptitudes).

- Teaching in the field of labor law (rights of employer and employee, the Labor Code).

- Provision of information relating to the choice of further education or to acquire new skills.

- Providing individual educational and career advice to students and their parents.

- Organize informative events for students and teachers on educational opportunities (education fairs) or presenting interesting professions (a meeting with a beautician, representatives of the army, etc.).

- Providing information about the possibility of obtaining funding from various sources when making business, taxation rules and how to exercise statutory relief.

- Organization of contests in the field of labor market knowledge.

- Organize student participation in education fairs and job fairs.

- Organize meetings with employers, representatives of universities, government organizations and institutions dealing with job placement.

- Organize trips to factories operating in the local community to get to know the occupations.

- Conducting lectures devoted to the characteristics of occupations and qualification requirements in relation to labor market needs.

- Information about the possibilities of occasional employment during the school year or holidays.

- Cooperation with institutions supporting the activities of the school guidance counselor (Mobile Vocational Information Center VLC, Labor Office, universities).

- Information about the educational programs of the European Union.

- Information on the regional, national, European and global education and the labor market.

4. Introduction of mandatory series of workshops improving job searching skills (now such classes are conducted in grade I and II).

5. Upgrading the technological base of vocational education, teacher training and proper organization of the education process. The use in the educational process of modular curricula, multimedia techniques, introduction of specializations adjusted to meet the needs of employers (e.g. power electronics, smart wiring, programming CNC machine tools, equipment operation environment, computer aided design) into the vocational education, enabling students to obtain additional qualifications (e.g. electric powers SEP 1kV, ECDL certificate, forklift operator, the operator of industrial trucks, the crane, welder).

6. Apprenticeships are important activities which approximate the reality of the work environment to students, the realization of practical training and the organization of visits to different workplaces.

Currently, employers are increasingly entering into cooperation agreements with schools pursuing vocational training. In the course of apprenticeship and the practical job education students are not only prepared to carry out professional tasks in the conditions of the workplace, but the process of education is also accompanied by creating the students' l attitudes expected by employers from their future employees. Vocational schools also cooperate with technical universities. On the basis of cooperation agreements they use the scientific and technical support of the university and university lecturers improve math and language skills of vocational school students. The winners of contests and competitions are accepted as university students.

7. The activities of the Ministry of Education to support vocational training.

Minister of Education, together with the Ministers of Economy, Labor and Social Policy and the Treasury signed an interdepartmental agreement on cooperation in the development of vocational training. Ministers committed themselves to work together for the development of vocational training, adapted to the needs of employers, local labor markets and a modern and innovative economy. Cooperation will address, among others, activation of vocational schools to adapt their education and training to the needs of modern economy and activating employers to join in the process of vocational training in vocational schools, technical and post-secondary schools, which may rely, for example, on:

- participation, under the law, in the formulation of the curriculum for the occupations;
- the development of curricula in collaboration with schools;

- accepting students for vocational training, particularly for apprenticeship; - participation, under the current law, in examinations of formal qualifications in the profession and the development of examination tasks;

- supporting vocational school students in the acquisition of additional non-school program, and useful in enterprises, skills and professional qualifications;

- helping teachers in vocational schools in updating and improving their professional skills;

Cooperation of vocational schools and employers will also be helped by actions co-financed from EU funds, planned for the years 2015-2020 in the framework of the Operational Program Knowledge-Education-Development and the Regional Operational Programs.

At the central level, activities will include, among others, involvement of employers, more than ever before, the review and update of the classification of occupations for vocational education and the core curriculum for vocational education and adapting it to the changes in the labor market and emerging of new technologies, more intensive than ever before employers' participation in the creation exam tasks and conducting exams. Moreover, at the central level, they are going to develop mechanisms to enable employers to participate in the process of training and establish close cooperation with vocational schools, with particular emphasis on companies operating in special economic zones.

At the regional level, they have planned, among others, the organization of internships and apprenticeships for vocational students, especially students of technical secondary schools. Employers organizing these apprenticeships will receive a refund of the costs, students will receive scholarships during the time of apprenticeship. At

the regional level it was also planned to equip vocational schools with equipment and teaching aids which will also serve to conduct professional examinations.

Adapting training to the needs and expectations of the labor market will also serve to monitor the future of graduates of vocational schools. Tools for this monitoring will be prepared as a part of a project financed with European funds.

Improving the system of vocational guidance for students in programmatically highest grades

Legal acts in force in the Polish educational system for conducting vocational guidance

1. Regulation of the Minister of National Education and Sport of 15th January 2001. " On detailed principles connected with operating of the psychological - pedagogical and other public specialist clinics and the framework statute of these clinics. It is emphasized that the clinics provide assistance to students to make choices concerning education, choice of profession.

2. Regulation of the Minister of National Education and Sport of 21 May 2001. "On framework statutes of public kindergartens and public schools." School head teachers are required to identify in the statute the school professional counseling and activities related to the choice of study.

3. Regulation of the Minister of National Education and Sport of 7 January 2003. On the principles of providing and organizing psychological –pedagogical help in public kindergartens, schools and institutions.

It contains a provision that school career guidance can be provided by, in addition to the teacher and psychologist, the school counselor. It

defines the tasks and requirements of professional advisers, as far as his qualifications are concerned.

4. Ministry of National Education ordinance dated for November 17th, 2010. on the principles of providing and organizing psychological – pedagogical help in public kindergartens, schools and institutions.

a) the psycho-pedagogical assistance (including vocational guidance) is organized by the head teacher of kindergartens, schools and institutions.

b) the psychological - pedagogical help at school in the field of career counseling is provided to students in the form of activities related to the choice of the occupation and the education and training planning and career - in the case of lower and upper-secondary school students and as well as advice and consultation.

c) Activities related to the choice of the occupation and the education and training planning and career organized to support lower and upper -secondary school students in making educational and professional decisions, using active methods of work. Classes are taught by teachers, teachers of educational groups, and guidance counselors.

d) Advice and counseling for students and advice, consultations, workshops and training for parents of students and teachers are conducted by teachers, educators and teachers of educational groups and guidance counselors

e) The functions of a professional counselor also include: systematic diagnosis of the needs of individual students' educational and occupational information and assistance in planning education and career; collecting, updating and sharing of educational and occupational information appropriate for a given level of education; conducting classes to prepare students for conscious career planning and taking the

professional role; coordinating the activities of information - counseling conducted by the school and institution.

f) In the absence of a guidance counselor at the school or institution the head teacher of the school appoints a teacher who prepares and performs the tasks in the field of education and vocational counseling.

Rules applicable in the Polish educational system do not impose employing a guidance counselor in the school, but they impose the obligation to conduct some advisory workshops within the framework of the school system of vocational counseling.

Depending on the understanding of the severity of the problem and the financial capacity of the school authorities conducting these activities is carried out by employees of guidance counselors, who take care of often students from more than one school, by psychologists and educators working in schools, by trained teachers - leaders of the school career guidance system or by career counselors employed in the school career counseling centers. The latter solution is implemented in Lodz. Career counselors employed by the Centre for Vocational Guidance School in Lodz Center for Teachers includes care of all lower and upper secondary schools and conduct classes with professional orientation in primary schools. Basic actions taken by professional counselors in lower and upper secondary schools:

a) special classes for students at various educational levels (sample topics: recognition of interests, strong points, analysis of the labor market, job requirements competition, preparation of application documents, etc.)

b) meetings with parents of lower secondary school students titled 'parent-the counselor of their own child' and other

c) individual advice to students and parents about the selection of educational and professional paths,

d) organization of occupation oriented trips,

e) the organization of occupation oriented contests,

f) the organization of meetings of students and parents with employers.

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CHAPTER FOUR

EXISTING SITUATION ANALYSIS FOR VOCATIONAL EDUCATION IN GREECE

Secondary Technical Vocational Education in the Greek educational system.

The Technical Vocational Education is an important component of development for each country as it combines the creation of medium – skilled professionals to staff the business and production units beyond general educational objectives. Thus, it constitutes a form of education that combines the development of personal talents and skills, and provides a way into the professional arena as well. Young people graduating from vocational schools with their innovative thinking, creativity and desire to join the professional activity are a living capital for any society that even in times of economic crisis can be strength of defense, progress and development.

But in Greece inefficient policies applied in the field of Technical Vocational Education, led to a contraction of pupil resources with negative social and economic consequences. Nevertheless, the national strategy for education and training should focus on the need to develop and implement policies at a national and regional level in a way that allows the growth of a modern, flexible, dynamic, competitive, efficient

and fair education and vocational training system, within the European Union which will be able to meet modern conditions, need and challenges.

Brief history

In the mid 1950s, due to the need for the reconstruction of Greek economy and society after the Second World War, and under the pressure to introduce a new era of scientific and technological data, the Education Committee in 1957 made proposals for a wide educational reform which opened prospects for the secondary Technical Vocational Education (TEE), surpassing the hitherto practice to meet the needs of technical education exclusively by private initiative.

By act of the Cabinet (1035 / 12.20.1958) technical schools were established, which nevertheless were not classified in any of the levels of education. Shortly thereafter, the measures of 1959 (N. 3971 and 3973 of 1959) were considered to have made a turn to the technical education with a distinctive affiliation of all technical schools in the Ministry of Education, the establishment of SELETE and others.

Then, there was again care and upgrading of Technical and Vocational Education with one of the most important reform sections attempted in Greece, the reforming of 1964 (Law 4397/1964), which remained in common consciousness as the one separating secondary schools in three - year junior high schools and three – year senior high schools and moreover introduced the Academic School Diploma (Apolytirion) in the place of entrance examinations for Universities.

This reform effort was stopped because of the disorderly political situation (after 1965) and the imposition of the dictatorial regime in 1967. But it continued ten years later, when the new Constitution of the country was voted in 1975. Article 16 guaranteed for all Greeks the right to free education at all levels of the State educational institutes and

Article 9 stipulates that the years of compulsory schooling "may not be fewer than nine." The reform of 1976-1977 with the two basic laws 309/76 and 576/77 established the single three-year junior high school and three-year senior high school which have been the backbone of the secondary education. In this reform among others, the Technical and Vocational Education was established as equivalent to General Education, and it consisted of the Technical Vocational High Schools and Technical Vocational Schools (TEL, T.E.S.); these schools included the Vocational High School, were accommodated in the cities where they worked, under single administration Centres of Vocational and Technical Education (K.E.T.E.).

Higher professional education was provided in the centers of Senior Technical and Training Education -K.A.T.E.E.- (which in 1983 evolved to the Technological Educational Institutions -T.E.I.-) and in the Senior school of Engineering and Technology Teachers (A.S.E.T.E.M.) of SELETE. "National exams" (Panhellenic) were introduced. (N. 1035/1980) for admission to higher education.

As for the Special Needs Education, it is noted that the Vocational School of Disabled Children in Liosia of Attica was founded in this period.

The second after the political restoration reform effort was made in 1985 by Law 1566/85, which attempted to combine the two older laws 309/76 and 576/77 and it is partly valid today. Among the biggest changes this reform introduced were the abolishment of introductory exams to Senior High School, change in the examination system of introduction in the Tertiary Education and replacement of entrance exams by the General Examinations with simultaneous calculation of the students' school performance in all grades of Senior High School and many other measures; the establishment of the Single Multisectoral

High School (EPL) appeared, aiming at the organic connection of General and Vocational Education and providing opportunities for all students with the purpose of the balanced development of their capacities, cultural interests and skills. All other types of Senior high schools were kept equal to each other.

Many laws followed regulating Secondary Education issues (1674/85, 1824/88, 1892/90, 1943/91, 2009/94 ....). But at the end of the 90s (Laws 2525/97 and 2640/98), the third after the political restoration, significant reform intervention in secondary education was attempted. Relevant to this subject interventions were, among others, the establishment of the Single High School (senior) by incorporating in it all types of High Schools (General, TEL, EPL and Classical), the introduction of Single High School Diploma (Apolytirion) for admission to Universities and TEI and the establishment of the Technical Vocational Schools (TEE) for granting vocational training degrees of Level 2 and 3 specialties.

If the purpose of the Senior High School was described as a) providing high level general education b) developing skills, initiative, creativity and critical thinking of students, c) providing students with skills and abilities necessary to continue their studies into the next level of education and d) developing skills that will facilitate access, after further specialization or training to the labor market (Law. 2525/97), the purpose of TEE was referred as a combination of general education with specialized technical and vocational knowledge leading to the professional integration in the labor market (Law. 2640/98).

It is worth noting that:

• with all reform efforts made from 1960 to1987, the total number of pupils studying at all levels of vocational and technological education almost quadrupled. Particularly, in 2001/02 for various reasons, 40% of

the post secondary junior high school population attended TEE, compared to 25,5% of students attending Technical Vocational High Schools (TEL) and Technical Vocational Schools (TES) in 1982 / 83.

• As regards the Special Education, it has been recorded that besides the four general senior high schools for pupils with special educational needs, with emphasis on sensory (vision, hearing) and movement disabilities, two TES (In Athens and Thessaloniki respectively) and three TEL functioned as well.

However, by 2006 things had changed again in everyday school reality of TEE. The student population of TEE had again started to wane. According to the thinking of 2006 and onwards, it was considered that TEE "despite the hopes originally created, as an institution failed to convince society's increased need for orientation to Technical and Vocational Education in order to attract students. They were not able to offer their students an effective way to the labor market, and the possibility of their continuous adaptation to the prevailing conditions in the new field of business and finance. At the same time, they did not provide the necessary general knowledge to contribute with symmetrically shaped citizens and then did not offer full access to higher education institutions on an equal basis with graduates of the Single Senior High School. The great number of specialties provided did not respond to real labor market needs, while overlapping with those of the training system created serious concern about the possibilities and professional employment opportunities for their graduates.

Finally, TEE was not supported as an institution opposite the Senior High School by the changes in the educational system in recent years, while necessarily they based their training on a constantly decreasing and non-modernized infrastructure. So, instead of becoming the second pillar of the secondary education equal to the general education, it was

led to depreciation addressed to a constantly decreasing student potential of moderate performance and efficiency.

Based on this analysis and before the dilemma that TEE should either be upgraded by a range of improvement measures or transformed with a new reform, the second aspect which was selected, led to N. 3475/2006, however without economic support and without simultaneous changes in the general secondary education. In this Act with the subsequent Explanatory Report on the law for the organization and function of the secondary vocational education (N. 3475/2006). 11 articles, the (technical) Vocational High School transformed from two-cycles TEE into EPAL and EPAS with New data and promises, referred as following:

The EPAL provides relevant general education, a range of vocational training with a range, giving basic professional knowledge in a broader economic activity, competence in a particular profession and not specialization, so that all graduates have the capability to follow the developments of technology and adapt to new labor market conditions, thereby avoiding unemployment and social exclusion. The curriculum will provide the necessary knowledgeable basis for:

a) Smooth and creative integration in professional and social life

b) Claims of posts in Universities and TEI

c) Re - training and effective lifelong learning

The Diploma (Apolytirion) of EPAL will be equivalent to the one of Senior High School, both on access to higher education and recruit in the broader public sector.

The EPAS enable those who wish to attend specialties that do not require extensive theoretical support, but focus mainly on practical training so that their graduates are directly included in the labor market as specialized craftsmen. The teaching programs in EPAS include only

technical-vocational courses and laboratory exercises. The general education required is provided in the first grade of high school from which the EPAS students come from. There is also provision for establishing EPAS within other institutions, apart from the Ministry of Education.

But with subsequent terms of the law, courses were limited drastically. Some specialties shifted to the EPAS and in the view of many, A class was particularly difficult for low performance students.

The Law of the Secondary Education (N. 4186/2013) provides that training is provided by Vocational High Schools (EPAL). Either public or private EPAL are established exclusively by the Ministry of Education and divided into daytime and evening. The minimum age limit for enrollment in evening vocational schools is 16 years.

Public schools provide professional specialties, which have already been foreseen by law. The programs offered are structured in areas, sectors and specialties. Most sectors offer two or more specialties. The sectors currently offered are: computer science, mechanical engineering, electrical engineering, electronics, automation, structural works, environment and natural resources, administration and economy, agriculture-food technology and nutrition, ship masters and merchant navy engineers.

At the same time the new law provides that the specialty ratings should be formulated in accordance with national and regional needs of the economy, the proposals of the regions, ministries and social partners. The curricula are expected to be formulated along the directions of the European Credit system for Vocational Education and Training (European credit system for vocational education and training, ECVET), and take into consideration related job profiles, if any,

certified by the National Qualification Certification Agency and Vocational Guidance (EOPPEP).

During the period 2001-11, the schools of vocational education decreased by one third. The decline was particularly strong in the case of private schools (86.5%) (ITYE, 2011).

At the same time, the student population in vocational education had a marked decrease, which exceeded the 35%. Especially in the case of private schools, the reduction of their pupil potential was continuous throughout the period 2001-11, showing negative change of 91%. The participation of girls was steadily decreasing. Between 2001 and 2011 the negative change exceeded the 50%. The percentage of immigrants and returning students to EPAL in the school year 2009-10 was 16% and 15% in the EPAS (ITYE, 2011).

In the same year (2009-10), the most popular sectors for students of EPAL was health - care (20.3%) and computer science (14.4%) according to the study surveying the ITYE (2011, p. 113). Sectors and specialisations, both in the EPAL and in the EPAS, which appear to show higher growth trends belong to the service sector. Specilisations orientated towards manufacturing industry, construction, and agriculture are absent or barely functioning, as noted in the same study (ITYE, 2011, pp. 149-150). Areas that are particularly important for the economic development of the country in 2014-20 according to a study of the Federation of Enterprises and Industries (SEV) must be taken into account when determining the specialties ratings provided by vocational education and training (health, energy, supplies chain , information technology, food, environment, metals and building materials) (cf. Sec. 3.1). However, among the 52 specialties removed from public EPAL and EPAS in 2013 by the Minister of Education, some belong to popular and dynamically growing sectors.

Thus, a first conclusion on the relationship between the technical - vocational secondary and the general secondary education which, as it seems, is commonly accepted, is the following: In all reform efforts, TEE never ceased to be in the official version, a school equivalent to the General High School but in common sense and reality, a school (all types) inferior to it and discredited. The secondary T.E.E., whatever form it has taken in each educational reform, has been defined by its relationship with the General High School, which has almost always been a deficiency relationship against the TEE. Although at the level of higher education, polytechnic schools with their positive direction departments won, for various reasons, a real equivalence with the theoretical University Schools, and although the network of KATE, then in KATEE, and TEI today (despite their problems) enshrined in common consciousness, nevertheless at the secondary level, despite the fact that many efforts have been made (sometimes with more and sometimes with little success) in order to enhance the TEE in a substantially " equal fellow member" to the general education, it never came to be a truly equal to it. The effort of EPL (single Multisectoral High School) which introduced the Technical Education in the single multidirectional Education course in a finite number of school units is now considered the boldest. And yet, this type is absent from the current educational reality.

This observation loads with even greater responsibilities the entire educational world of secondary education, at any point of the hierarchy.

It is therefore absolutely asserted that although the Dialogue about education is still ongoing, and despite the fact that operators often express times opposing views, it has become common sense that the rightly prepared interventions are directed towards the following, namely:

a) the need to strengthen the educational autonomy and cultural character (dimension) of the Senior High School

b) the desirability of revising the introductory system in higher education,

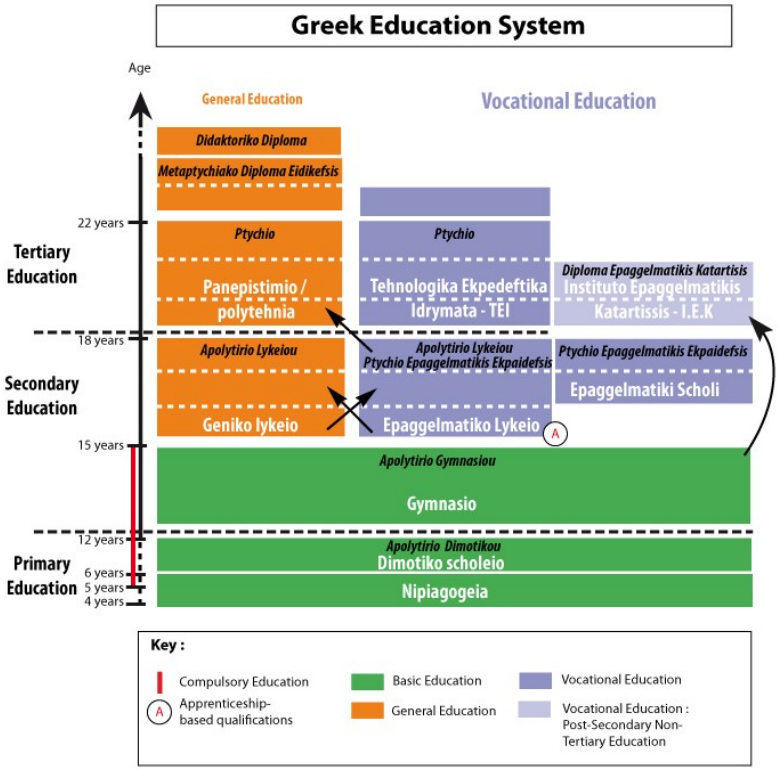
c) the necessity to enhance the credibility and effectiveness of Vocational Training as well and d) the need to take appropriate development measures for the benefit of students with disabilities, measures to provide the necessary special education and training to this sensitive, but perfectly equivalent, part of the student population

Description of vocational education and training within the Greek educational system

Education in Greece is compulsory for all children between 5-15 years. It includes primary education (kindergarten-one year, primary-six years) and lower secondary education (junior high school-three years, day or evening, when it concerns working students).

Upon graduation from junior high school, compulsory education ends up and students can choose whether to follow general or vocational education. If they choose to continue their studies in general education, they will attend classes in the general high school that is up to three years and belongs to upper secondary education. There are also evening schools addressed to students and employees; attendance at these lasts four years. Students enter high school at the age of 15 and graduate at the age of 18. The first high school class is an exclusively general education class, while the second and third high school classes beyond the general education courses include specific direction lessons. The choice of these courses by the students is based on the educational or vocational guidance provided through decentralized structures (SEPED) of the Ministry of Education (see. Sec.4.2). Students who take

the general high school diploma (apolytirion) can begin studies in the Tertiary education through national exams.



Under the new law of secondary education (N. 4186/2013) which aims, among other things, to attract more students to vocational education and training, in addition to the selection of the general high school, students now have the following options:

(A) initial vocational training within the formal educational system, in a vocational high school (day or evening) of the upper secondary education.

(B) initial vocational training in the non-formal education, in vocational schools (SEK), vocational training institutes (IEK) or in lifelong learning centers and colleges.

"Typical educational system" means the system of primary, secondary and tertiary (or higher) education. National legislation uses the term "formal vocational training" exclusively for the upper secondary education programs of second - cycle (EPAL) that allow access to (tertiary)higher education after exams. Although they are recognized fully or partially by the state and offer officially recognized qualifications, other programs of this level or the post secondary level are considered non-formal (EEK).

In Greece 'initial vocational training' means the training offering basic professional knowledge, abilities and skills in specialties and specializations for the integration, reintegration, occupational mobility and advancement of human resources in the labor market as well as occupational and personal development.

Initial formal professional education: professional school (EPAL)

According to the law of lifelong learning (N. 3879/2010), 'formal' means the education provided within the formal education system, leading to a certificate recognized by the state authorities and it is part of a graded educational scale. The adult education is also included in formal education.

The vocational high school (EPAL) leads to two levels: (a) the three-year program, (b) an additional year of apprenticeship. The secondary cycle in daily EPAL includes three years of study. Diploma (Apolytirion) or other equivalent qualification school owners can be enrolled in the

first class without examinations. The promoted from the first class of EPAL are eligible to enroll in the second year of general high school, ie there is a possibility of horizontal mobility.

In the fourth year, the apprenticeship class (workplace training), which is an optional innovation of the new law, accepts the diploma (apolytirion) holders and those of the secondary cycle three-year study of EPAL. The apprenticeship class, which implements the dual education system (apprenticeship) of the Employment Agency, includes workplace learning, specialty course and certification preparatory courses in the school respectively. The EPAL and the Employment Agency are responsible for the performance of apprenticeship class, placement of those enrolled in the workplace and all about it.

Graduates of secondary cycle are granted the diploma (apolytirion) of the vocational upper secondary vocational school (equivalent to a general high school diploma) and level 4 specialization degree after school examinations by the EPAL. Graduates of EPAL "apprenticeship class" receive level 5 specialization degree from the Ministry of Education and the Employment Agency together, after completing the certification of their qualifications by the National Body. Graduates of evening vocational high schools have no access commitment in apprenticeship classes for their attendance in the qualification certification process if they have completed at least 600 wages working in the same specialty.

The body responsible for the qualification and certification procedures for granting specialty degree (Ptychio) to graduates of "apprenticeship class" is the National Board for Qualifications Certification and Vocational Guidance (EOPPEP), either exclusively or in conjunction with the Employment Agency. These who have succeeded in the certification exams, along with the anticipated specialty

degree (Ptychio), obtain the corresponding professional license. Where appropriate, other ministries issuing respective professional types of license participate in the organisation and the conduction of certification exams.

Also, graduates of the secondary cycle of EPAL and those with equivalent qualifications from prior school forms are entitled to participate in specific national exams for admission to schools of higher technological education (TEI), in equivalent or related specialties of their degree at a special rate of posts. Furthermore, they can participate in national exams for admission to universities and colleges, with the same terms and conditions applicable to graduates of general high schools.

For the apprenticeship classes, the responsibility for placing the under - graduates in a working environment, lies in both EPAL and the Employment Agency. The financing of "apprenticeship class" is expected to be done by national or EU funds while, unlike what happens in most European countries implementing apprenticeship schemes, companies do not participate in the financing.

Structure of Vocational High School Studies

The Business School offers two cycles of studies (courses):

• The Secondary Cycle (Daily EPAL A ', B', C 'classes - Evening EPAL A', B ', C', D' classes).

Post-secondary cycle of studies (courses) - apprenticeship Class

Vocational Lyceum (Daily) Timetable a Class				
General Education Courses and Hours			Hours	
1.	Greek Language	Modern Greek Language	3	4
		Literature	1	
2.	Mathematics	Algebra	3	4
		Geometry	1	
3.	Physics		2	
4.	Chemistry		2	
5.	Policy (Political) Education (Economics, Political Institutions and Law Principles, Sociology)		2	
6.	History		1	
7.	Religious History		1	
8.	Project(research and synthetic work) - Non writing test		2	
9.	Foreign language (English or French or German)		2	
10.	Physical Education - non writing test		2	
AREA OF TECHNOLOGY APPLICATIONS				
1.	Principles of Engineering		4	
2.	Principles of Electronic and Electrical Engineering		3	
3.	Technical Drawing 2		2	
4.	School Vocational Guidance - Work Environment - Health and Safety		2	
5.	Computer Applications		2	
AREA OF ADMINISTRATION & ECONOMY				
1.	Organization and Management		4	
2.	Principles of Accounting		3	

3.	School Vocational Guidance - Work Environment - Health and Safety	2
4.	Computer Applications	4
AREA OF AGRICULTURE, FOOD TECHNOLOGY & NUTRITION		
1.	Principles of Agricultural Production	3
2.	Principles of Food Technology	3
3.	Principles of Nutrition Science	3
4	School Vocational Guidance - Work Environment - Health and Safety	2
5.	Computer Applications	2
AREA OF MARITIME PROFESSIONS		
1.	Seamanship	2
2.	Shipping Knowledge	2
3.	Machine Elements Ship	2
4.	Technical Drawing	1
5.	School Vocational Guidance - Work Environment - Health and Safety	2
6.	Computer Applications	4
	Total hours::	35
Source: Article 9 para. 1 of Law 4186 (Government Gazette *193/17.09.2013)*		

Vocational High School (Daily) TIMETABLE B 'Class				
GENERAL EDUCATION COURSES			HOURS	
1.	Greek Language	New Greek Language	2	3
		Literature	1	
2.	Mathematics	Algebra	2	3
		Geometry	1	
3.	Physical Sciences	Physics	1	2
		Chemistry	1	
4.	Introduction to the Principles of the Computer Science		1	
5.	Religious History		1	
6.	Foreign Language (English)		1	
7.	Physical Education - non writing test		1	
		Courses of Sector	**23**	
		Total hours**:**	**35**	
Source: Article 9 para. 2 of Law 4186 (FEK193 / 17.09.2013)				

Vocational High School (Daily) TIMETABLE C' Class				
GENERAL EDUCATION COURSES			HOURS	
1.	Greek Language	New Greek Language	2	3
		Literature	1	
2.	Mathematics	Algebra	2	3
		Geometry	1	
3.	Physical Sciences	Physics	1	2
		Chemistry	1	
4.	Introduction to the Principles of the Computer Science			
5.	Religious History		1	
6.	Foreign Language (English)		1	
7.	Physical Education - non writing test		1	
		Courses of Sector	**23**	
		Total hours:	**35**	
Source: Article 9 para. 2 of Law 4186 (FEK193 / 17.09.2013)				

VOCATIONAL HIGH SCHOOL DEFINITION OF AREAS & SPECIALTIES	
AREA OF ENGINEERING	
SECTOR OF COMPUTER SCIENCE	
1.	Technician of Computer Science Application
2.	Technician of Computers and Computer Networks
3.	Technician of Software Application
SECTOR OF MECHANICAL ENGINEERING	
1.	Technician of Mechanical Installations & Constructions
2.	Technical Engineer of Thermal Installations and Engineering Technology of Oil & Gas
3.	Installers of Refrigeration, Ventilation and Air Conditioning
4.	Vehicle Technician
5.	Technical Mechanic of Aircraft
SECTOR OF ELECTROLOGY, ELECTRONICS & AUTOMATION	
1.	Technician of Electronics and Computer Systems
2.	Technician of Electrical Systems, Networks and Telecommunications
3.	Automation Technician
CONSTRUCTION SECTOR	
1.	Designer of Structural Works and Geoinformatics
SECTOR OF ENVIRONMENT AND NATURAL RESOURCES	
1.	Technician of Management and Recycling
2.	Technician of Pollution Control and Plants
AREA OF ECONOMICS AND ADMINISTRATION	
SECTOR OF ECONOMICS AND ADMINISTRATION	
1.	Administration and Finance Office Clerk
2.	Warehouse and Supply Systems Clerk
3.	Marketing and Advertisement Clerk
4.	Clerk of Economy and Management in Tourism
AREA OF AGRICULTURE, FOOD TECHNOLOGY AND NUTRITION	

SECTOR OF AGRICULTURE, FOOD TECHNOLOGY AND	
1.	Technician of Crop Production
2.	Technician of Animal Production
3.	Technician of Fisheries and Aquaculture
4.	Technician of Floriculture and Landscape Architecture
5.	Technician of Food Technology and Drinks
6.	Technician of Forestry and Natural Environment Management
AREA OF MARITIME PROFESSIONS	
SECTOR OF SHIP MASTERS	
1.	Master of Merchant Navy
SECTOR OF ENGINEERING	
2.	. Engineer of Merchant Navy

Source: Article 8 of Law 4186 (Government Gazette 193 / 09.17.2013)

Note: Submission of an amendment passed by the Greek Parliament, according to which a fourth specialty in the field of Electrical Engineering, Electronics and Automation was attached: Network Technician and Telecommunications, while the final Gov. Gazette reports the specialty as: Technician of Electrical Systems, Networks and Telecommunications.

Promotion and dismissal of Vocational School students.

Written promotion and graduation exams in all classes of EPAL are conducted within school to all subjects taught, except for the Project (Research Work), the Physical Education and School Vocational Guidance, Work Environment and Health - Safety.

• In general knowledge subjects, the examination topics are as follows:

a) 50% by lot from graded difficulty bank issues b) 50% by the teacher or teachers. The writings are corrected by the relevant teacher.

• In the other written examined lessons, issues are raised by the teacher or teachers.

Promotion and dismissal Conditions

• Achievement of overall grade equal to or higher than 10.

Source: Article 11 of Law 4186 (Government Gazette 193 / 17.09.2013)

Degrees and Professional Rights

Graduates of Secondary Cycle Studies are granted :

• **a High school diploma (apolytirion)** -equivalent to a General Education high school diploma), after school examinations, and

• **Degree (ptychio) of Level 3** Specialty, after school examinations from EPAL.

Graduates apprenticeship class members are granted :

• **Degree (ptychio) of Level 4** Specialty after completing the certification of their qualifications by EOPPEP.

• Students who have successfully passed the certification exams, along with the anticipated specialty degree (ptychio) **obtain the corresponding license to practi**ce, which is provided by law.

Source: Article 12 of Law 4186 (Government Gazette 193 / 17.09.2013)

Access of vocational school graduates to higher education.

• Introduction to schools, departments and introductory guidance departments of TEI in respective or related specialties of their diploma at a special percentage (to be defined by Ministry of Education).

Candidates are tested on four lessons of EPAL third grade, two general education courses (Special National Exams) with 1.5 coefficient and two specialty courses with 3.5 coefficient.

• The examinations for admission to higher education are conducted after the student's dismissal from the EPAL nationwide on issues from the syllabus in the third grade resulting from: a) 50% by lot from bank graded difficulty issues, and b) at least 50% from a central examination committee.

Participation in the Panhellenic Exams of Senior High School:

• The graduates of secondary cycle studies can also participate in national exams for admission in Universities and Technical Colleges on the same terms and conditions applicable to graduates of Senior High School.

Source: Article 13 of Law 4186 (Government Gazette 193 / 17.09.2013)

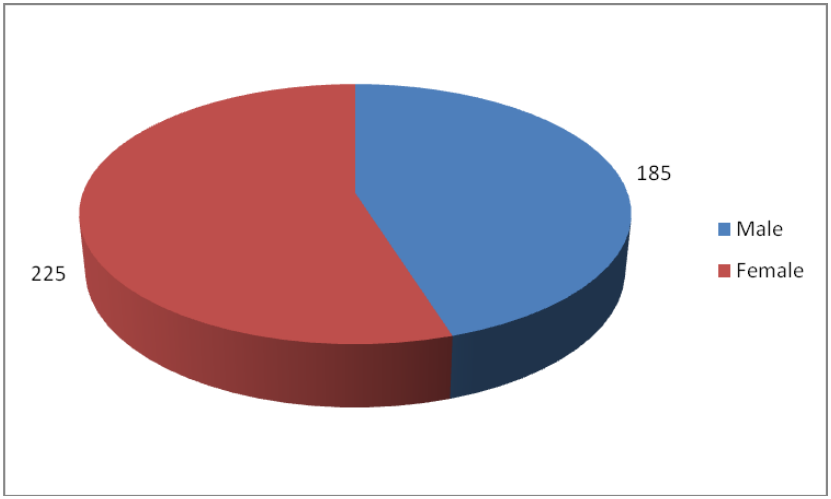
Backgrounds

Research Study - 2nd EPAL of Trikala, Greece

Questionnaire - Results

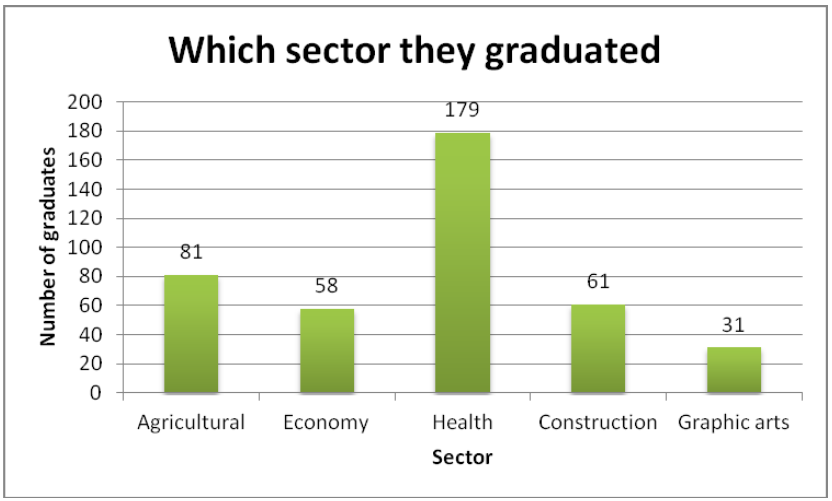
The survey involved 410 graduates (185 males and 225 females) of the 2nd EPAL of Trikala from the last five years (2010-2014).

Male	185	45,12%
Female	225	54,88%
Total	410	100,00%



The research was made by phone and the graduates were asked to answer 8 questions about their current professional status. Most of them (43,66%) had graduated the health sector which was the most popular sector in this school. The following table shows the number and the percentage of the graduates of each sector who took part in this survey.

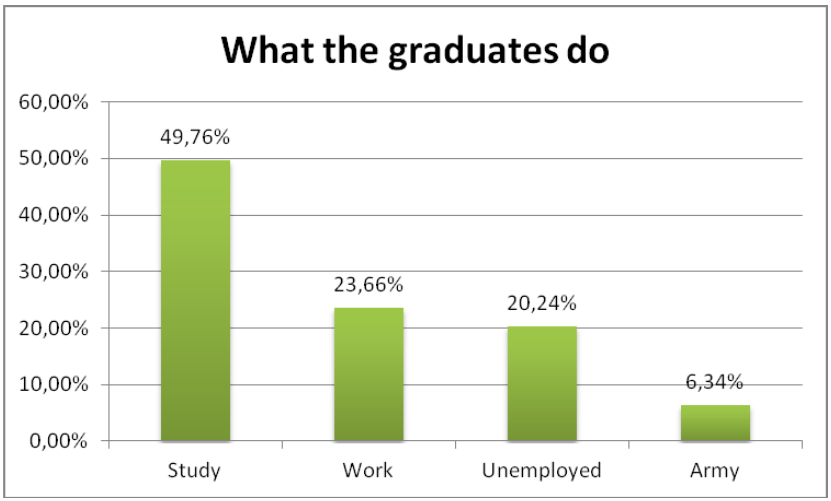
Which sector they graduated		
Agricultural	81	19,76%
Economy	58	14,15%
Health	179	43,66%
Construction	61	14,88%
Graphic arts	31	7,56%
Total	410	100,00%

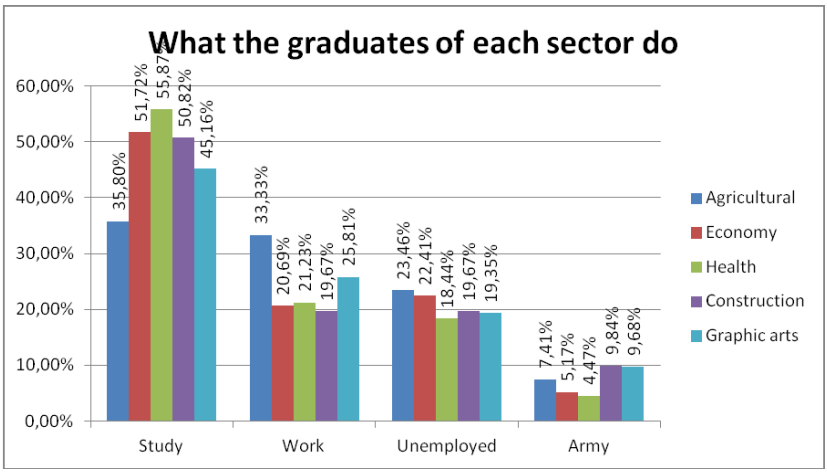


The questions, the results and the conclusions of the research are the following:

204 graduates (almost half of them) are still studying while 97 graduates have a job, 83 are unemployed and 26 graduates are soldiers (military service).

What the graduates do		
Study	204	49,76%
Work	97	23,66%
Unemployed	83	20,24%
Army	26	6,34%
Total	410	100,00%

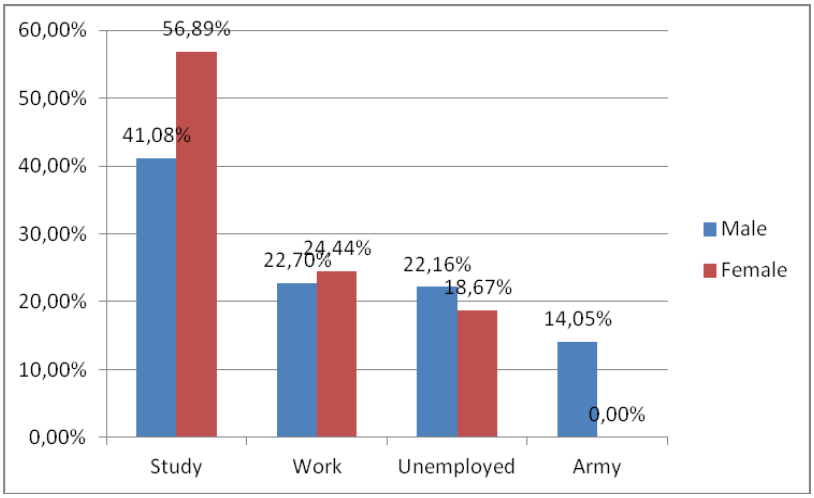




The agricultural sector appears to have the highest percentage of unemployment (23,46%), and the lowest percentage of studying (35,80%) among all sectors. On the contrary, 55,87% of the graduates of

the health sector, 51,72% of the graduates of the economy sector and 50,82% of the graduates of the construction sector are still in training. Furthermore, 33,33% of the graduates of the agricultural sector and 25,81% of the graduates of the graphic arts sector have a job. The lowest percentage of unemployment (18,44%) corresponds to the health sector.

	Male		Female	
Study	76	41,08%	128	56,89%
Work	42	22,70%	55	24,44%
Unemployed	41	22,16%	42	18,67%
Army	26	14,05%	0	0,00%
Total	185	100,00%	225	100,00%

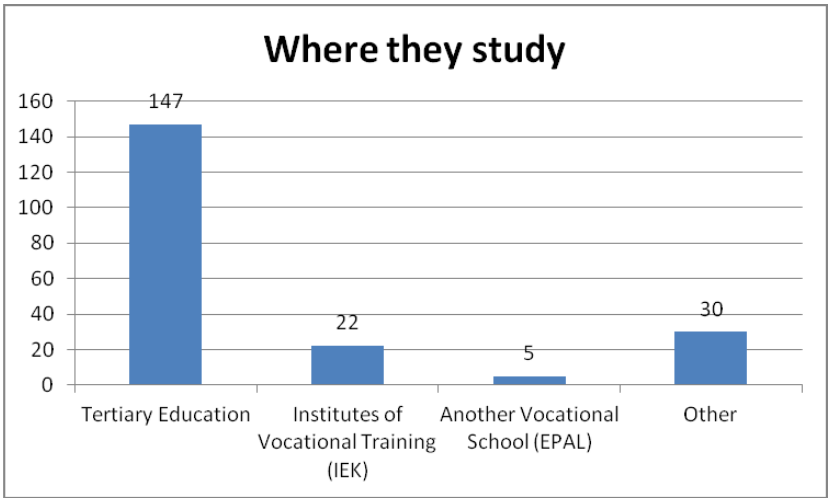


Obviously, girls prefer to study (56,89%) than boys (41,08%). In addition, the percentage of unemployment for the boys is higher (22,16%).

Graduates who are still in training

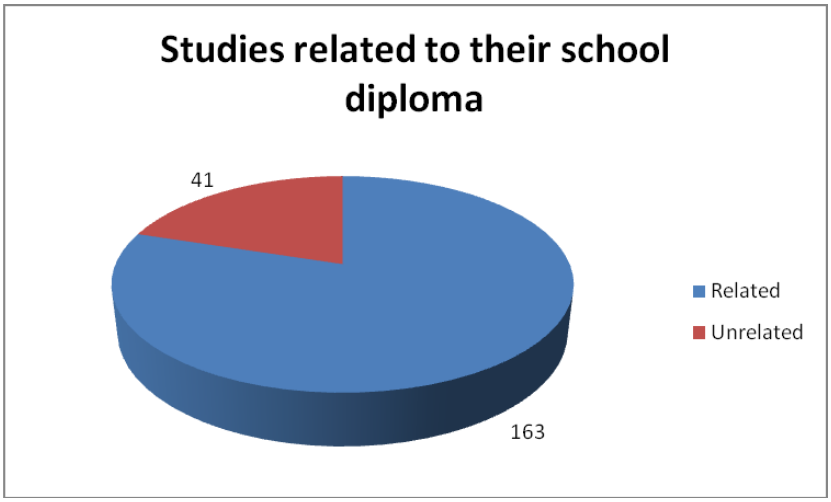
The 204 graduates, who are still in training, were asked what kind of studies they attend. 147 graduates (almost 72% of the graduates who are still studying) are in tertiary education namely Universities and mostly Technological Educational Institutes (TEI). 22 graduates (10,78%) study in Institutes of Vocational Training (IEK). 5 graduates (2,45%) attend courses in another Secondary Vocational School in order to acquire another specialty. The choice "Other" was answered by 30 graduates (14,71%) who are for example in apprenticeship or practice in a hospital, an enterprise or another organization.

Where they study		
Tertiary Education	147	72,06%
Institutes of Vocational Training (IEK)	22	10,78%
Another Vocational School (EPAL)	5	2,45%
Other	30	14,71%
Total	204	100,00%



They were also asked if their studies are related to their school diploma or not. 163 graduates (almost 80% of the graduates who are still in training) answered that their studies are related to their school diploma but 41 graduates (almost 20%) decided to choose a different sector for their studies in order to gain new skills and find more opportunities in their professional career.

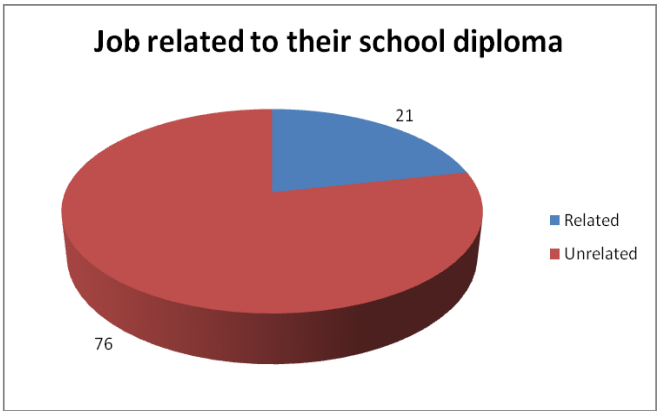
Studies related to their school diploma		
Related	163	79,90%
Unrelated	41	20,10%
Total	204	100,00%

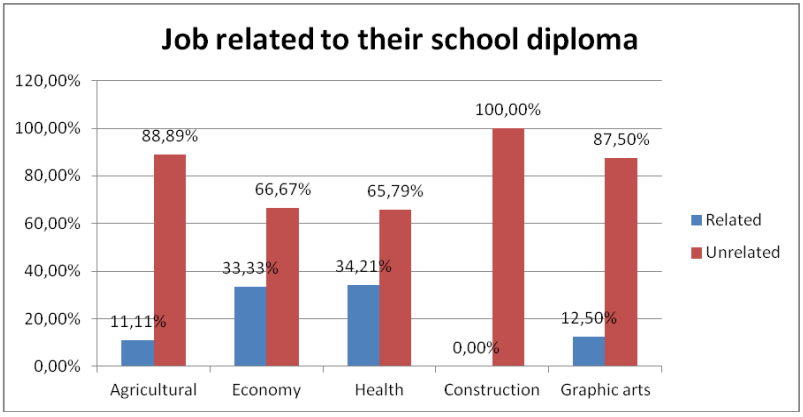


Graduates who have a job

The 97 graduates, who have a job, were asked if their job is related to their school diploma or not. 76 answered that their job is not related to their school diploma. Only 21 graduates were able to find a job which is related to their studies.

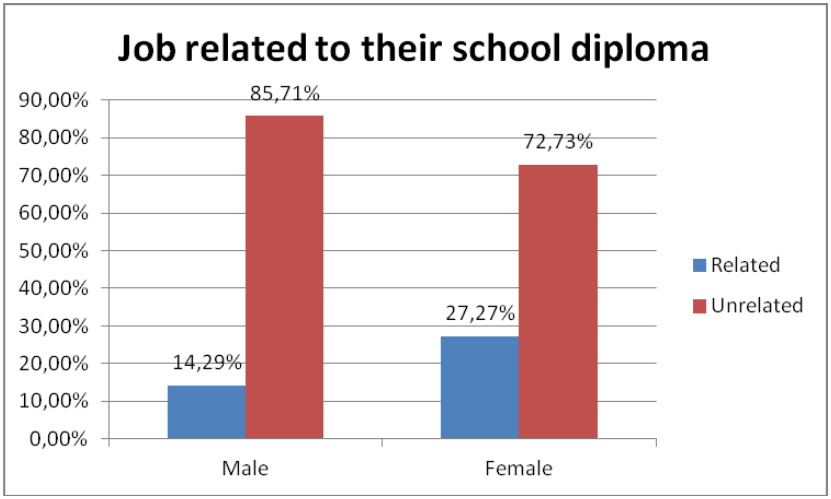
Job related to their school diploma		
Related	21	21,65%
Unrelated	76	78,35%
Total	97	100,00%





An interesting point is that none of the graduates of the construction sector has a job related to his specialty. The highest percentages are 34,21% for the health sector and 33,33% for the economy sector.

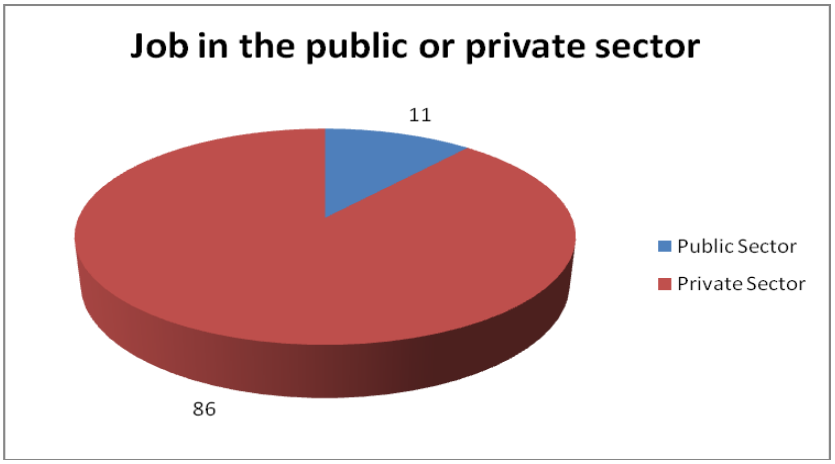
	Male		Female	
Related	6	14,29%	15	27,27%
Unrelated	36	85,71%	40	72,73%
Total	42	100,00%	55	100,00%



Furthermore, it is more difficult for the boys to find a job related to their specialty. The percentage for the male graduates is 14,29% and for the female graduates 27,27%.

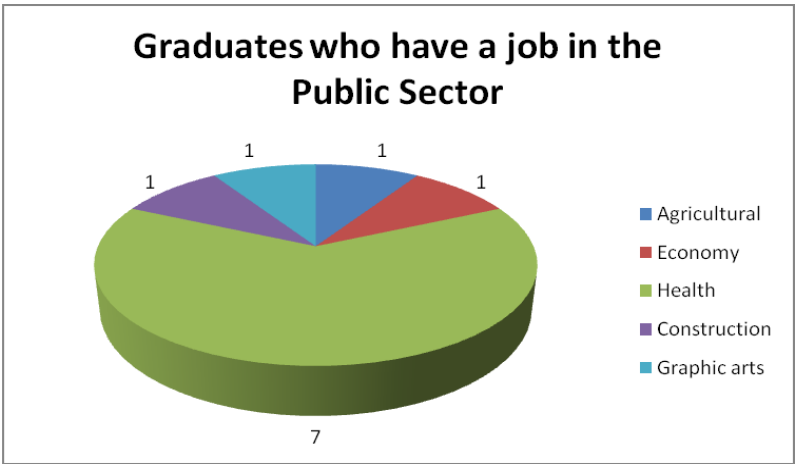
They were also asked if they work in the public or private sector. Most of them (88,66%) answered that they work in the private sector and only 11 graduates said that they are civil servants.

Job in the public or private sector		
Public Sector	11	11,34%
Private Sector	86	88,66%
Total	97	100,00%



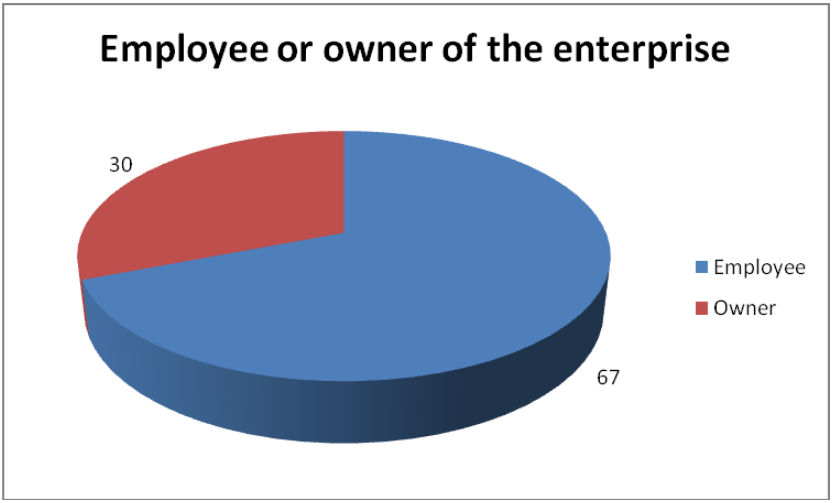
Most graduates who have a job in the Public Sector, are graduates of the Health Sector.

Graduates who have a job in the Public Sector		
Agricultural	1	9,09%
Economy	1	9,09%
Health	7	63,64%
Construction	1	9,09%
Graphic arts	1	9,09%
Total	11	100,00%



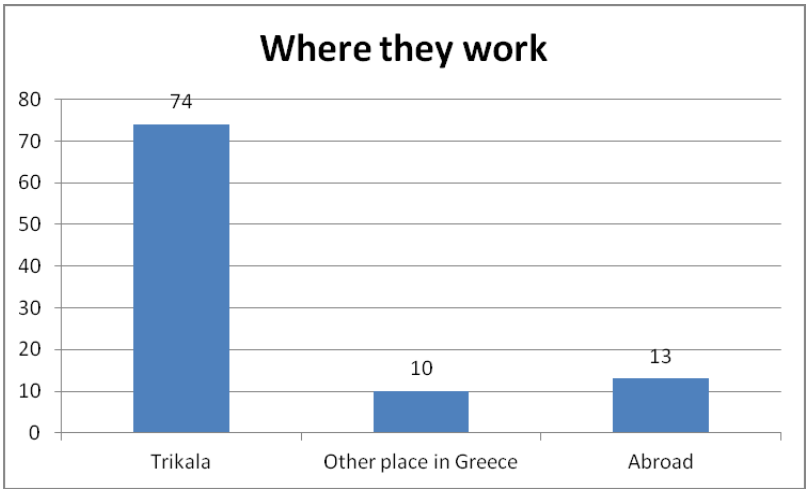
In addition, the 97 graduates, who have a job, were asked if they are employees or have their own enterprise. 67 of them answered that they are employees. 30 graduates said that they started their own enterprise or continued working in their family business.

Employee or owner of the enterprise		
Employee	67	69,07%
Owner	30	30,93%
Total	97	100,00%



Furthermore, 74 graduates have a job in Trikala while 10 graduates chose or were forced to find a job in another place in Greece. The rest 13 graduates work abroad.

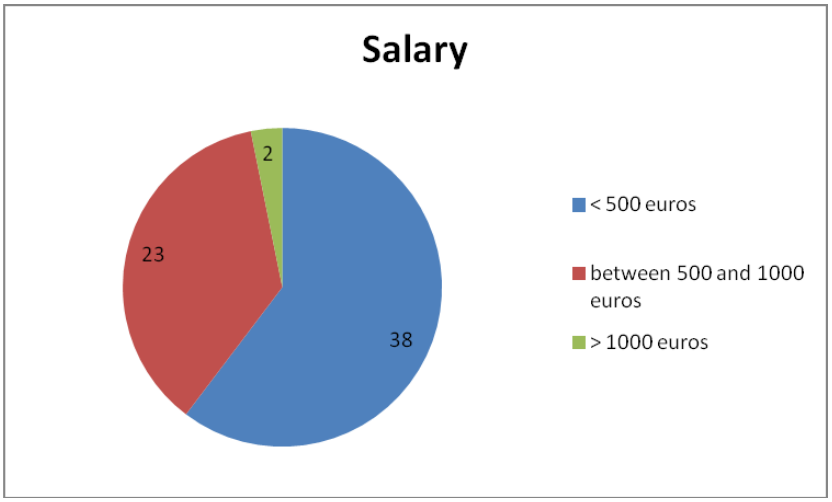
Where they work		
Trikala	74	76,29%
Other place in Greece	10	10,31%
Abroad	13	13,40%
Total	97	100,00%



The last question of the survey was about the salary. 34 graduates refused to answer to this question. Most of the graduates (almost 60%) said that they earn less than 500 euros per month. The salary of 23 graduates is between 500 and 1000 euros and only 2 graduates earn more than 1000 euros per month.

Salary		
< 500 euros	38	60,32%
between 500 and 1000 euros	23	36,51%
> 1000 euros	2	3,17%
Total	63	100,00%

34 graduates didn't answer



Existing Situation of VET Institutions

For the educational year 2014-2015 the statistics for the vocational education are:

Total No of EPAL	Day EPAL	Evening EPAL
394	**322**	**74**

No of students	Girls	Boys
Day EPAL: **72353**	**21774**	**50579**
Evening EPAL:	**4414**	**10690**
Total : **87457**		

SCHOOL YEAR 2013-2014 – A' GRADE OF VOCATIONAL SCHOOLS

No of schools	AREAS	students		No of classes	teachers	
		total	girls		total	women
115	Area of Agriculture, Food Technology and Nutrition	2702	1305	148	446	232
264	Area of Administration & Economy	5317	3310	322	966	573
20	Area of Maritime Professions	525	116	31	96	22
351	Area of Technology Applications	13613	1945	698	2010	690
	Total of a Grade	22157	6676	1199	3547	1517

SCHOOL YEAR 2014-2015 – A' GRADE OF VOCATIONAL SCHOOLS

No of schools	AREAS	students		No of classes	teachers	
		total	girls		total	women
132	Area of Agriculture, Food Technology and Nutrition	3358	1560	182	554	319

264	Area of Administration & Economy	5734	3485	333	1019	630
29	Area of Maritime Professions	772	171	42	135	28
361	Area of Technology Applications	14556	2055	735	2092	718
	Total of a Grade	24430	7271	1292	5092	1695

Employment facilities after graduation

1) The **Transition Observatory (Paratiritirio Metavasis)** in the Pedagogical Institute (Paidagogiko Institouto, PI) aims at monitoring of the external efficiency of the secondary education system. Its main objectives are the following:

• Collection of information on the transition of secondary education graduates in the labour market and dissemination of this information to stakeholders (i.e. policy makers, teachers, students, parents etc.);

• Support to educational policy making (linking curricula of upper secondary education schools with labour market requirements, linking education with initial training etc.);

• Supply the Careers Education programs with information (e.g. employment opportunities, earnings, etc.), aiming at assisting students in their decision maing process regarding educational and occupational choices;

• Census type mapping of dropout rates in secondary education (at national and regional level) and identification of dropouts' training needs;

• Identification of skills in demand in labour market (new skills monitoring).

The Transition Observatory provides the mechanisms for anticipating skills needs in formal education. It deals with the transition of school-leavers from education to work. It covers the whole range of activities of an Observatory, which approaches for the first time pupils before leaving compulsory education and monitors them periodically until their entry into working life. The Transition Observatory monitors and registers the educational/vocational choices of young people and explores their career patterns. Then it disseminates this information to stakeholders (i.e. policy makers, teachers, students, parents etc.). It also examines the accountability (external efficiency) of the educational system and supports the relevant educational policies (linking curricula of upper secondary education schools with labour market requirements, linking education with initial training etc.) Last, it improves vocational guidance and counselling.

2) **Counseling and Orientation Centers (KESYP)** were instituted by Law 2525/1997. They are located all around Greece, in the prefectures' capitals and in big cities and are recruited from

- Educators specialized in Counseling and Vocational Orientation
- Educator specialized in Documentation and Information?

They organize

- informative meetings for parents and pupils about studies and occupations
- Seminars for teachers who implement SEP in schools

And they cooperate with Local authorities, Social, educational and occupational institutions, National Center of Vocational Orientation

(EKEP), Ministry of Education, Pedagogical Institute and labour market.

Monitoring mechanism after graduation

Unfortunately there is not a Monitoring mechanism after graduation for VET students in Greece. Although all the Greek universities have Career Offices for their graduators, there is nothing like that for secondary education.

General approach to market needs

From education to working life

The link between education and the labour market is the subject of a vast body of literature. Despite differences in the findings of the various studies, they share some problems and concerns, which often boil down to whether it is possible to identify a causal link between education and labour market outcomes, or whether interpretation should be restricted to simple correlations. General consensus highlights the positive association between education and labour market returns. The fact that individuals with a higher level of education tend to get better and more highly paid jobs than those with lower levels of education raises the question of whether these better labour market outcomes truly reflect the level and type of education, or whether they reflect another variable that can be linked to both the education choice and the labour market. Also it is important of how the different VET systems are organised. VET programmes are occupation-specific in some countries but more general in others; some countries place more emphasis on workplace based training, while school-based programmes prevail in others

One group of countries has a very high proportion of people with VET-oriented education like the Czech Republic, Slovakia and Austria with 84-85%, which are all well above the average (60.3%). On the other hand, another group of countries has a considerably lowerthan-average share of the population with a VET-oriented education, namely Ireland with 22% and Portugal and Iceland with 25%. Unfortunately Greece belongs to the second category with 38%. The variation between countries could depend on several factors related to both the supply and the demand sides of the education and training systems. The educational systems of the countries concerned offer a wide range of types and levels of VET course and of professional paths opened up by the various levels and types of education. These differences all have an impact on the educational options of individuals. History also plays a role. Some countries have a long tradition of VET (i.e. Austria, Germany and Switzerland), supported by institutions and companies, which consider it a key factor in matching the demand and supply of skills more closely. People in these countries are more inclined to choose VET than people in countries that traditionally attach greater importance to general education, for example, Greece.

Promoting the acquisition of practical skills among youth: Apprenticeships represent one way to improve school-to-work transitions and the provision of appropriate skills for the Greek labour market. Indeed, it is of paramount importance to develop apprenticeship frameworks through effective social dialogue and based on skills needs, i.e. those in demand. For example, the national apprenticeship programme in Finland enables students to obtain national vocational qualifications through apprenticeship training, which consists of 70–80 per cent on-the-job training coupled with classroom teaching. The use of individual study plans and the close involvement of

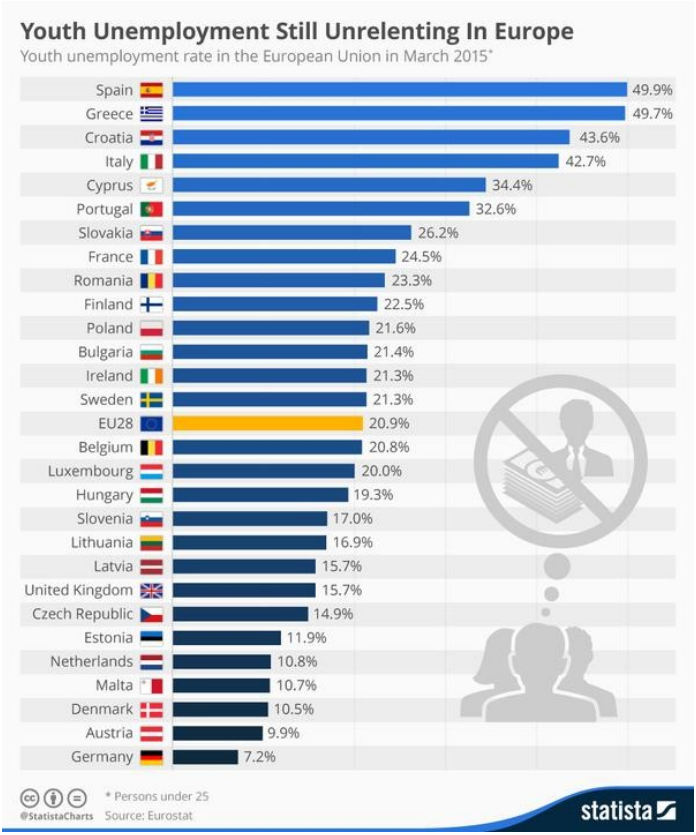
social partners result in a system with high success rates: 71 per cent of participants are employed one year after completion of the training. These experiences can provide important input in the efforts already under way to develop large-scale training and apprenticeship programmes. To further optimize the efficiency of these interventions, they could be complemented by measures to improve youth employability and their capacity to create high-impact entrepreneurial activities. For instance, the Austrian Entrepreneur's Skills Certificate aims to develop entrepreneurial skills among youth in secondary education through a series of courses covering general know-how and practical issues. In the United Kingdom, the Higher Apprenticeship Fund targets highly qualified individuals. Interestingly, qualifications needed to participate in the programme are set by the employers. Participants have been reported having better employment opportunities than non-participating individuals with the same university degree.

But things are different and unfortunately more difficult in Greece the last 6 years. The Greek economic crisis started in 2009 and has a great effect in the labour market. The depth and duration of the recession have resulted in a severe deterioration of labour market and social conditions. One in four jobs that existed before the crisis have been lost. As a result, the unemployment rate stood at 27.9 per cent in the first quarter of 2014 – up from 7.2 per cent in the third quarter of 2008. According to preliminary figures from national sources, however, the unemployment rate fell modestly in the second quarter of 2014, to reach 26.6 per cent. Yet, assuming that employment grows at 1.3 per cent per year – equal to the average employment growth in the decade before the recession – Greece would not return to pre-crisis employment levels until 2034. The severity of Greece's labour market

distress is also reflected in the duration of unemployment. More than 70 per cent of the unemployed have been without a job for more than one year, and almost half for more than two years, which raises important issues, notably in terms of skills deterioration and social exclusion. Of particular concern in this respect is youth unemployment which, at 56.7 per cent in the first quarter of 2014, ranks as the highest among the EU – up from 21.3 per cent in the third quarter of 2008. Moreover, 20.6 per cent of Greek youths aged between 15 and 24 were not in education, employment or training in 2013 – up from 11.7 per cent in 2008 and the third highest rate across the EU-28, where the average is around 13 per cent. Many Greeks have left the labour market. In the first quarter of 2014, the participation rate for individuals aged 15 and over was 51.9 per cent, down from 53.5 per cent in 2008 and the second lowest in the EU-28 after Italy. Participation rates are particularly low for women and youth. And the number of emigrants increased by 30 per cent between 2010 and 2012, with highly educated youth among those most likely to leave the country.

The functional enhancement to link vocational education and training with the labour market is a timeless challenge for the productive reconstruction of the country and an important need to deal with the dangerous phenomenon of the expanded youth unemployment which is receiving now, increasingly discrete-structural characteristics.

As the diagram shows below, in March 2015 the young unemployment in Greece was 49,7%.



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3. "Productive jobs for Greece", International Labour Organization 2014

4. "Vocational Education and training in Greece" Cedefop, Luxemburg 2014

5. Article 9 para. 1 of Law 4186 (Government Gazette *193/17.09.2013)*

6. Article 8 of Law 4186 (Government Gazette 193 / 09.17.2013)

7. Article 11 of Law 4186 (Government Gazette 193 / 17.09.2013)

8. *Article 12 of Law 4186 (Government Gazette 193 / 17.09.2013)*

9. Article 13 of Law 4186 (Government Gazette 193 / 17.09.2013)

10. "From Education to working life – The labour market outcomes of vocational education and training", Cedefop, Luxemburg 2012

11. "VET in Europe – Greece" , Cedefop, Greece 2009

CHAPTER FIVE

EXISTING SITUATION ANALYSIS FOR VOCATIONAL EDUCATION IN SPAIN

Backgrounds (for 5 years - Statistical Analysis)

VET is defined as training that facilitates entry into the labour market and allows individuals to take part in social, cultural and economic life. IVET prepares students for working life or further studies. The percentage of students participating in VET with regards to the total number of students involved in education leading to a School Leaving Certificate (Bachillerato) and VET increased from 36.1 per cent in 1992/1993 to 41.2 per cent in 2001/2002.

Introduction to the VET System in Spain

The VET System in Spain is regulated by four essential legal standards:

The Organic Law 5/ 2002 on Qualifications and VET.

The Organic Law 2/2006 on Education.

The Royal Decree 1538/2006 on the General Organization of VET.

The Royal Decree 395/2007 on Professional Employment training.

The Royal Decree 1147/2011 on the General Organization of VET.

In Spain a VET quality network has been created in order to support regional governments and improve the image of VET, identify, select and share indicators that will be appropriate to evaluate the quality of VET, foster the relationship between systems and educational centers and disseminate information on the events at European level in the area of quality assurance.

Three elements ensure the quality of the training offered:

Evaluation

Inspection

Teaching staff duly qualified.

The administrative framework of VET in Spain is as follows: The Ministry of Education, Culture and Sport (MECS) is responsible for initial vocational training though powers in education are transferred to the authorities of the 17 Autonomous Communities; the Ministry of Employment and Social Security is in charge of vocational training for employment though powers are also transferred to the Autonomous Communities except for the Basque Country. Concerning vocational training for employment, which integrates continuing vocational training and vocational training for the unemployed, the management is jointly made between the central government, Ministry of Employment and Social Security, (MESS) and the social partners through the Tripartite Foundation for Training in Employment (TFTE) but the ultimate responsibility falls under the Ministry of Employment and Social Security.

In the year 2002, the government of Spain proposed a new VET model, based on the National Catalogue of Occupational Standards, regarding education and employment, by creating a new training model, which allows transfer from one system to the other one, with the aim of

improving the quality of VET and the recognition of professional competences acquired through labour experience.

Spanish education system

The Spanish education system is governed by the Organic Law on Education which regulates the whole education system other than the university level, regulated by the Organic Act 6/2001, of 21 December, on Universities.

Children from 3 to 5 years old in Spain have the option of attending the pre-school stage, which is non-compulsory and free for all students. It is regarded as an integral part of the education system with infants' classes at almost every primary school.

Spanish students aged 6 to 16 undergo primary (between 6 and 11) and secondary school education (between 12 and 16), which is compulsory and, like the preceding preschool from age 3, free of charge. Successful students are awarded a Compulsory Secondary Education Diploma, which is necessary to enter the post-compulsory stage of schooling for "Bachillerato" (which gives access to University, after the corresponding entrance examination) or Vocational Studies of intermediate level.

The compulsory and free period of schooling established by the Organic Act on Education (LOE) of 2006 covers the 10-year- period from 6 to 16 years of age, and includes two educational stages: Primary Education from 6 to 12 years of age and Compulsory Secondary Education (comprehensive in nature) from 12 to 16 in two-year cycles. Compulsory education is considered a public service and, therefore, the responsibility of the central government. It is provided by publicly-funded centres and publicly-subsidised private centres. Compulsory

secondary education as established by LOE is defined as the final stage of basic education.

IVET

IVET in the Spanish education system is a part of post compulsory secondary education.

IVET or Specific Vocational Schooling is divided under LOE into two educational levels (middle level and upper level), both of which include occupational standards.

Middle-level Specific Vocational Schooling, is accessed after having successfully completed compulsory secondary education (ESO) and therefore by achieving the Compulsory Secondary Education Diploma or, exceptionally, by complying with one of the following conditions:

- By passing the compulsory training modules of an Initial Professional Qualification Programme.
- By passing a specific training course for access to Middle-level Specific Vocational Schooling. In this case candidates must be at least 17 years old.
- By having passed an entrance exam for Middle-level Specific Vocational Schooling. In this case candidates must be at least 17 years old
- By having passed an entrance university exam for people over 25.
- Any of the conditions required for access to Upper -level Specific Vocational Schooling.
- Upper -level Specific Vocational Schooling is accessed by means of a "Bachillerato" Diploma or, exceptionally, by complying with one of the following conditions:

- By accrediting having a Technician Certificate and having passed a specific training course for access to Upper-level Specific Vocational Schooling.
- By having passed an entrance exam for Upper-level Specific Vocational Schooling. In this case candidates must be at least 19 years old except for those in possession of a Technician Certificate related to the studies they want to do, that must be 18.
- By having passed an entrance university exam for people over 25.

Both levels, middle and upper, are organised in professional modules in order to forge a close link with the production sector and a high response capacity facing technological, economic and social changes. These modules are conceived as instruments for developing the professional skills required at work.

They include work based learning which is mandatory for all the students, but for those that can accredit professional experience in the field they are studying. It is carried out in the company and intends to apply the knowledge learned in educational establishments to real work situations and to know how a company really works.

The length is of 2000 hours, divided into two academic years. Students successfully completing middle and upper level specific vocational schooling are respectively awarded the Technician and Higher Technician Diplomas.

Besides, there are Initial Professional Qualification Programmes, for which the Education Departments in the Autonomous Communities are responsible.

The objective of these programmes is:

- Students achieve professional competences of the occupational standards of level 1 in the National Catalogue of Occupational Standards.
- Students can insert satisfactorily both in society and in the labour market and enhance their key competences to continue their studies in different paths.

Requirements:

- Addressed to students over 16 (before 31 December.
- No Certificate of Compulsory Secondary Education (ESO).
- Exceptionally (only by agreement of students, parents or legal tutors) they may be 15 whenever they have studied second ESO but they are not in condition to pass to the third year ESO and they have repeated once in Secondary Education.

In this case, students must commit to studying voluntary modules leading to get the Certificate of Secondary Compulsory Education.

They can study them simultaneously with:

- Specific Professional Modules referred to competence units corresponding to occupational standards of level one in the National Catalogue of Occupational Standards.
- General Training Modules enhancing key competences and favour transition from the education system to the labour market.

Or they can study them once they have passed the specific and general modules.

Both, Middle and Upper-level Specific Vocational Schooling may be delivered in secondary education institutes offering other schooling such as compulsory secondary education and Bachillerato. In general, schools delivering Specific Vocational Schooling offer the different levels of

vocational education and training, including Initial Vocational Qualification Programmes.

Besides, there are 'Integrated Vocational Training Centres', which are institutions offering all types of vocational training provision (IVET and CVET) referred to the National Catalogue of Occupational Standards. In this way both the education and employment administrations work together to respond to the needs of the production sector and stakeholders are involved in the management of these VET centres.

Adult Education

Adult Education depends on the Ministry of Education, Culture and Sport and the Autonomous Communities. Quality assurance in formal adult education is regulated in the same way as quality assurance in Initial VET.

Adult education is included in Title I, Chapter IX of the Organic Act on Education of 3 May and it aims at providing all citizens with the opportunity to acquire, update, complete or extend their knowledge and skills for personal and professional development. The Law regulates the teaching conditions which lead to official qualifications and establishes a flexible, open framework for other types of learning. It also offers the chance to validate experience acquired from other routes.

The aim of adult education is to offer people over eighteen the possibility to acquire, update, complete or enhance knowledge and skills, for their professional and personal development. To achieve this goal, the Education Administrations may collaborate with other Public Authorities with responsibilities for adult training and particularly with the Employment Authorities, as well as with local government and various social agents.

Adult education has the following objectives:

1. Acquire basic training, continuously add to and refresh knowledge, abilities and skills and facilitate access to different sectors of the educational system.
2. Improve professional qualifications or retrain for other professions.
3. Develop personal capacities in areas of self-expression, communication, interpersonal relations and knowledge building.
4. Develop capacities to participate in social, cultural, political and economic life and put into practice the right to democratic citizenship
5. Develop programmes which overcome the social exclusion of disadvantaged sectors of society.
6. Respond adequately to the challenges related to the gradual aging of the population, ensuring that senior citizens have the opportunity to increase and update their abilities.
7. Anticipate and resolve personal, family and social conflicts peacefully. Foster real equality of rights and opportunities between men and women as well as critically assess and analyse inequalities between them.

Adults can learn through regulated or non-regulated educational activities, as well as through experience –either in work or social activities. Therefore, links are established between both routes and measures adopted in order to validate the learning thus acquired.

As well as adults, young people over the age of sixteen, may, as an exception, attend adult education, if they have a work contract which does not allow them to attend normal educational institutions or if they are high performance sportsmen or sportswomen. Students who are

eighteen in the year of commencing the course may attend adult education.

The organisation and teaching methodology for adult education is based on self-study and takes into account students' experience, needs and interests. Teaching is available face-to-face or through distance learning. Besides, the Education Regional Administrations may promote collaboration agreements for the provision of adult education with universities, local government and other public or private institutions. In the latter case, preference will be given to non-profit making organisations.

Adult education is organised in an open, flexible way in order to respond to students' capacities, needs and interests.

It is the responsibility of the Education Regional Administrations to organise tests periodically so that people over the age of eighteen may obtain the Compulsory Secondary Education Diploma, if they have acquired the basic competences and reached the objectives of the stage.

CVET

Vocational training for employment (CVET) falls under the competence of the Ministry of Employment and Social Security and the Autonomous Communities. It comprises both vocational training for the unemployed and continuing training for currently employed workers. CVET leads to "partial or full completion of a Certificate of Occupational Standards". In Spain, continuous VET is regulated by the Royal Decree 395/2007 of 23 March, on vocational training for employment. In Spain, access to continuing training is through the training programmes contracted on a yearly basis by the Tripartite

Foundation for Training in Employment (TFTE). Workers have access to this training independently of their training level.

Quality Assurance

Considering Quality Assurance (QA) in Vocational Education and Training in the education system, both, the Ministry of Education, Culture and Sport and the Education Regional Departments of the Autonomous Communities are involved:

The Ministry of Education, Culture and Sport (MECS), which is responsible for the enactment of basic standards which implement the constitutional right to education by establishing general rules for the educational system; setting minimum standards for teaching centers, establishing the overall education program, setting the minimum contents of education programs, and regulating the validity of academic and occupational qualifications across Spain; guaranteeing the right and obligation to know the Spanish language without impairing the right of those Autonomous Regions, with languages of their own, that may establish their own standards guaranteeing that individuals know and use their own linguistic heritage. Additionally, the Autonomous Regions are responsible for the regulatory development of the basic national standards and the regulation of the non-basic elements or aspects of the education system.

According to the Organic Act on Education, of 3 May, the main factors that boost quality in education are:

- Teachers' training and qualifications.
- Teamwork.
- Resources: staff, installations, spaces and equipment.
- Research, experimentation and educational updating.

- Reading development and use of libraries.
- Pedagogical, organizational and management autonomy
- Management staff role.
- Educational and professional guidance.
- Education inspectorate.
- Evaluation: National Institute for the Evaluation of the Education System.

Besides, the Royal Decree 1147/2011, 29th July, on the General Organization of Vocational Education and Training in the Education System, dedicates three articles to quality in IVET:

1. Actions and measures to foster innovation and quality.
2. Establishment of both, the Reference Framework for Quality Assurance in IVET and the National Reference Point.
3. Development of a Quality Network for IVET, jointly with the Autonomous communities.

The Autonomous Communities may establish their own standards guaranteeing that individuals know and use their own linguistic heritage. Additionally, they are responsible for the regulatory development of the basic national standards and the regulation of the non-basic elements or aspects of the education system. In this way they can develop their own quality assurance systems in line with international standards such as EFQM or ISO standards.

Besides, other important organisms that have a major role in QA in VET are:

The National Institute for the Evaluation of the Education System (NIEES) which is the institution responsible for the evaluation of the education system in the Ministry of Education, Culture and Science. Its

functions, which are performed in collaboration with the Autonomous Communities, are the following:

- elaborating multiannual projects of general assessment of the educational system;
- coordinating the participation of the Spanish State in international evaluations;
- elaborating the National System of Education Indicators that will contribute to the knowledge of the educational system and to direct the decision-making of educational institutions and of all the sectors involved in education;
- collaborating in the realisation of general diagnostic assessments, which permit to obtain representative data, as well from students and centres of the Autonomous Communities as from the whole State, in the framework of general assessment of educational system

The National Qualifications Institute (NQI) which is the technical, agency depending on the Directorate General of Vocational Education and Training, in the Ministry of Education, Culture and Sport, and supports the General Council on Vocational Training in order to achieve the objectives of the National System for Occupational Standards and Vocational Education and Training (NSOSVET).

The responsibilities of the NQI include defining, creating and updating the National Catalogue of Occupational Standards (NCOS), to observe occupational standards and their evolution, to determine occupational standards, to develop the integration of occupational standards and others.

The NSOSVET consists of the following instruments and schemes:

1. The National Catalogue of Occupational Standards, which organises the occupational standards identified in the production system by recognisable skills that can be accredited and are appropriate for occupational use.
2. A procedure for the recognition, evaluation, accreditation and recording of occupational standards, established by Royal Decree 1224/ 2009, of 17 July on the recognition of professional competences acquired by labour experience.
3. Information and guidance in vocational training and labour matters
4. Evaluation and improvement of the quality of the National System for Occupational Standards and Vocational Education and Training, so as to provide the proper information on how the system works and fits individual training needs and the training needs of the production system.

Regarding Quality Assurance (QA) in Vocational Training depending on the Ministry of Employment and Social Security, the following institutions are involved:

The State Public Employment Service (SPES) which is an autonomous body of the General State Administration, currently assigned to the Ministry of Employment and Social Security, entrusted the planning, development and follow-up of the programmes and measures of the Employment Policy in the framework of the legislation.

Aims:

Its main activity developed focuses on:

- Creation, development and follow-up of the Employment Policies.

- Reinforcement, within the National System of Employment, of the coordination between the stakeholders involved in the labour market.

Functions:

- Planning and fostering proposals of Employment Policies focused on people and companies' needs: professional guidance through individual and personalized pathways, training for employment, training for employment development and others
- Managing and controlling unemployment benefits, guaranteeing unemployed people's right to protection.
- Accomplishing research, studies and analysis, at national level, on the situation of the labour market and the measures to improve it.
- Guaranteeing information about the labour market in order to achieve citizens' insertion and continuation in it and the improvement of the companies' human capital, with the collaboration of the Autonomous Public Services for Employment and other social agents of the labour field.

The occupational observatory which is a technical unit within the State Public Employment Service, that analyses the situation and trends of the labour market, as well as the occupations, the relevant groups for the employment and the changes taking place in it. Besides it foresees the challenges and requirements that the labour market demands facilitating in this way decisions making.

Some of the functions:

- Research on the elements responding to the needs demanded as a basis for the employment and training policies.

- Study on the activities and occupations on which employment is being created or generated.
- Information on the profiles of the occupations and workers' training needs.
- Studies/ reports on the labour market, relevant groups for the employment, relevant occupations and activities and at the same time its trend and prospective in the generation of employment in the short and medium term.
- Search of new employment sources, movements and changes taking place in the labour market, modifying occupation content.
- Information and technical advice to entities and agents/ managers in charge of training and employment policies.
- Information to users related to the labour market and to citizens in general.
- Cooperation with the observatories of the Autonomous Public Employment Services and with other institutional ones at national and international level.

The State Public Employment Service in cooperation with the regional governments elaborate and execute an annual evaluation plan regarding the quality, effectiveness, efficiency and impact of the system of vocational training for employment and the identification of the aspects susceptible to be improved.

The Tripartite Foundation for Training in Employment (TFTE) is a collaborating entity providing technical support to the SEPE (article 34 of Royal Decree 395/ 2007, of 23 March which regulates the subsystem of Vocational Training for Employment). It belongs to the State Public Sector with tripartite character and its board is constituted by the Public Administration (represented through the Ministry of Employment and

Social Security and the Autonomous Communities) and the most representative business and trade unions associations.

The most relevant activities are:

- Collaborating and providing technical support to the State Public Employment Service in the activities related to planning, management, evaluation, follow-up and control of training initiatives, as well as in the elaboration of the annual report on these activities.
- Collaborating in the drawing up of proposals related to the resolution and justification of subsidies, being the SEPE the body in charge of awarding and paying.
- Boosting and disseminating the subsystem of vocational training for employment among businesses and workers.
- Providing technical support, as long as requested, to the Public Administrations and business and trade union organizations according to regulation.
- Providing assistance and advice to SMEs enabling access to vocational training for employment and to professional guidance to workers.
- Cooperating with the State Public Employment Service in guaranteeing quality improvement in vocational training for employment, in drawing up statistics for state purposes and in creating and updating the state registry of centres referred to in the royal decree.
- Participating in national and international forum related to vocational training for employment.

http://eqavet.eu/gns/what-we-do/implementing-the-framework/spain.aspx

TABLE 21: NUMBER OF STUDENTS IN SECONDARY EDUCATION AND PERCENTAGE IN PUBLIC CENTRES 2007/2008/2008/2009/2009/2010

	2007/2008		2008/2009		2009/2010	
	No. of students	% students in public centres	No. of students	% students in public centres	No. of students	% students in public centres
COMPULSORY SECONDARY EDUCATION	1,829,874	66.14%	1,813,572	65.89%	1,793,205	65.9%
STUDENTS IN BACHILLERATO	622,133	73.79%	629,247	73.83%	649,343	74.7%
STUDENTS IN VOCATIONAL TRAINING	509,465	75.55%	541,807	76.49%	608,796	77.1%

Source: Statistics on non-university education. Ministry of Education

Diagram of the Spanish Vocational Training System

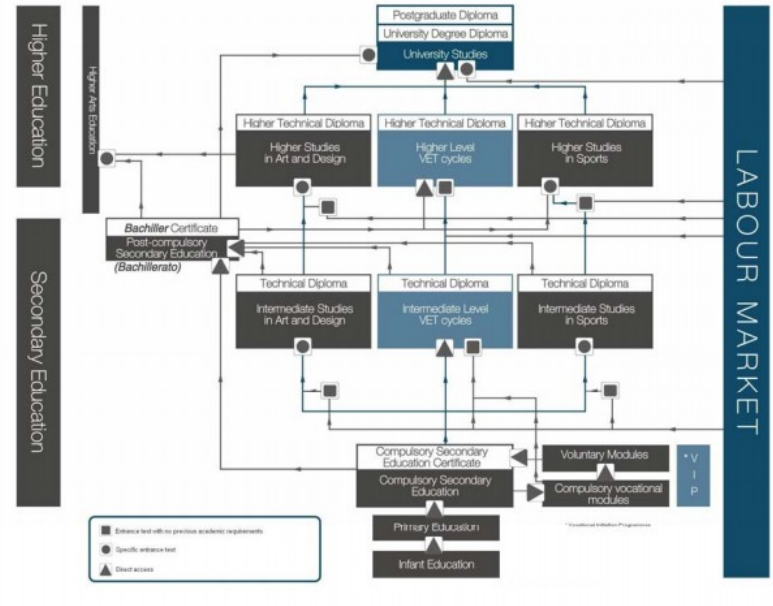


TABLE 25: STUDENTS ENROLLED IN UPPER SECONDARY EDUCATION BY PROGRAMME ORIENTATION (VALUES AND SHARE OF THE TOTAL), 2009							
	TOTAL ISCED3	ISCED3GEN (NUM)	ISECD3GEN (%)	ISCED3PV (NUM)	ISCED3PV (%)	ISCED3VOC (NUM)	ISCED3VOC (%)
EU-27	20,633,767	10,946,188	53.0	:	:	9,687,579	47.0
SPAIN	1,102,355	629,247	57.1	:	:	473,108	42.9

Source: EUROSTAT (UOE); Extracted on: 19-05-2011; last update: 13-05-2011

TABLE 26: STUDENTS IN VOCATIONAL UPPER SECONDARY EDUCATION BY TYPE OF PROGRAMME,2008 [%]		
ES		
SCHOOL BASED	96	271,990
COMBINED	4	5,935 (Distance learning)
TOTAL VET	100	

Source: Cedefop´s calculation based on Eurostat, UOE data collection on educacion systems, date of extraction 27.7.2010

Existing Situation of VET Institutions

2013- 697.408 students +34.516 more than in 2012

2013-2014 (students) VET (elementary) 334.055
VET (II grade) 314.380

	2013-2014 (1)
Centers VET	
CF FP Medium Grade - Rég. Ordinario	2.682
CF FP High Grade - Rég. Ordinario	2.228
CF FP Medium Grade distance	150
CF FP High Grade distance	201

	VET CENTERS SPAIN			
	C.F. FP medium Grade	C.F. FP High grade	C.F. FP Medium grade distance	C.F. FP High grade distance
TOTAL	2.654	2.195	114	161

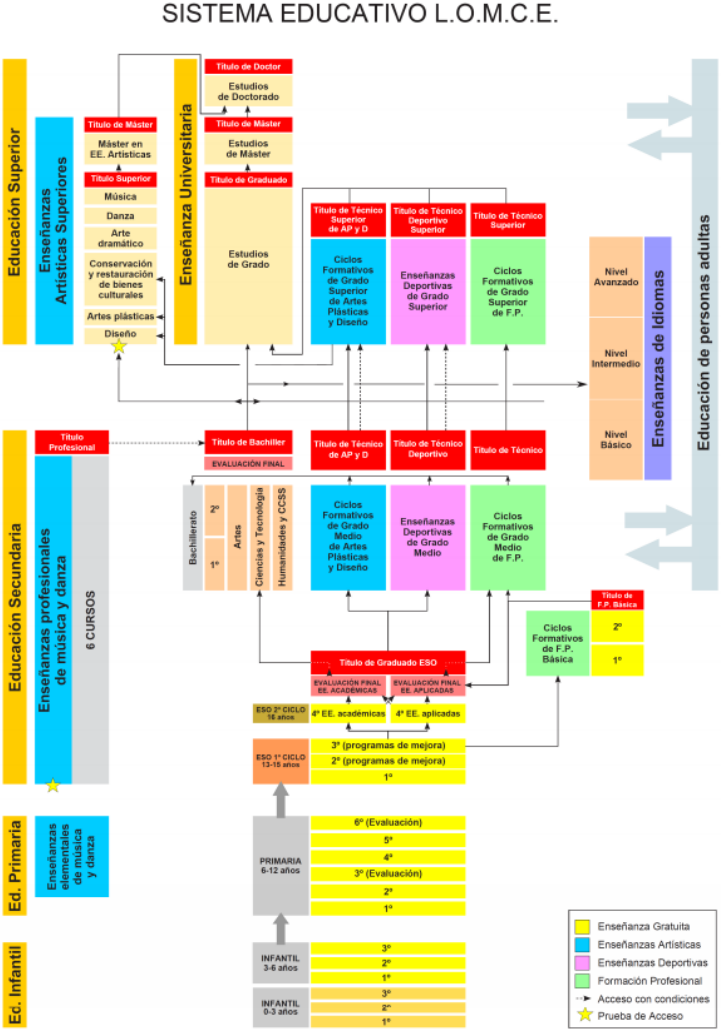
	Medium grade	High grade
Both genders		
Total	37,3	34,0

	Medium	High
men		
Total	41,1	34,5

	Medium	High
women		
Total	33,3	33,4

Educational Ministery Source

Employment Facilities After Graduation



Monitoring Mechanism After Graduation

Evaluation and quality of VET Both the education and labour administrations have evaluation systems and institutions for the evaluation and control of VET Programmes. Currently, the SNCFP assessment is underway and a committee has been established to define the evaluation methodology and criteria led by the Ministry of Education. The Evaluation Institute of the Ministry of Education (CNIIE) has established procedures and statistical indicators, in collaboration with the Autonomous Regions that will enable annual assessments which serve as a basis for policy decision-making and for improving the quality of the Spanish education system, including vocational training, in line with different recommendations and EU directives. With the cooperation of the Autonomous Communities Employment Services and the Tripartite Foundation for Training for employment (FTFE), SEPE, as coordinator of the National Employment System, annually evaluates training initiatives. Part of the annual assessment of the entire training for employment subsystem(24F 27), evaluation is based on a system of indicators and focuses on quality, impact, effectiveness and efficiency. Some of the evaluation indicators are referenced to the European Quality Assurance in Vocational Education and Training (EQAVET) Reference Framework guidelines. The evaluation report is produced by external contractors. In addition, within the establishment of a new framework for the evaluation of active labour market policies in 2013(25F 28) different indicators have been established to evaluate initiatives and measures developed by SEPE and the Autonomous Communities.

General Approach to Market Needs

• Spain is well engaged in the VET system. Nationally, this takes place through the National Commission on VET, which aims to build consensus among the national and autonomous community governments, and employers and unions, on VET policy. Locally, employers are engaged in the system particularly through the provision of workplace training.

• Reform has been pursued systematically in recent years, while a substantial degree of consensus has been maintained through consultation with different levels of government and the social partners. This is a real strength, and there remains a need to sustain and develop this consensus between national government, autonomous communities in the regions of Spain, employers and unions on VET policy.

• Recent reforms have been designed to improve permeability in the VET system and access to post secondary education. Graduates of upper secondary VET (with VET diplomas) were previously required to restart upper secondary academic programmes in order to spend another two years studying before obtaining the Spanish Baccalaureate – this has now been reduced to one year.

• The VET system as a whole, and the pathways through it, are generally clear and comprehensible to participants. A recent reform, which has yet to be fully implemented, has aligned the VET diplomas (accredited by the Ministry of Education) with the individual competences (certified by the Ministry of Labour), so that typically completion of any diploma will include the acquisition of certain certified competences. This is a welcome and positive development

Graduates from the intermediate and higher level programmes are awarded a technical or higher technical diploma in the relevant speciality, which is national and recognised in the labour market. This is supported by the Ministry of Education. In addition, they will, once new reforms are fully implemented, obtain one or more "certificates of professionalism" issued by the Ministry of Labour – linked to competence standards. Certificates can be issued at level 1, 2 or 3 corresponding to three levels of competence.

The youth unemployment rate of 15 to 24 year-olds, at 41.6% in 2010 was the highest of all OECD countries. According to a survey undertaken prior to the economic crisis, transition from school to work was easiest for graduates of vocational secondary education. Young people with an intermediate level vocational qualification needed the least time to find their first job (4.8 months). Tertiary graduates and those with general upper secondary education needed about the same time (6.2 and 6.3 months respectively), which is surprisingly very close to the time needed for secondary school drop-outs (6.7 months) . Training contracts (contratos en prácticas for graduates of tertiary programmes, and contratos para formación available for 16-21 year-olds who are not eligible for contratos en prácticas and for some specific target groups) had low take-up, in 2005 only 4% of total youth in employment were hired on training contracts . Reforms of employment protection legislation since the 1980s have facilitated the use of temporary contracts. Although this may have reduced youth unemployment, it does also risk trapping young people in jobs with limited chances of career advancement .

In an interview with the Spanish daily, published on 20 April, Cedefop Director James Calleja said that vocational education and training (VET) in Spain needs to be closer to labour market needs.

He added that, according to Eurostat figures, the country has the highest early school-leaving rate in the European Union, but that the outlook is encouraging.

Mr Calleja argued that Spain needs to work on connecting better vocational and higher education, on increasing permeability. And he noted that people should stop thinking education finishes at 25; it is a lifelong process.

Relevant recommendations to improve the VET engagement with the labour needs in Spain:

• Returning to the issue of how best to tackle drop-outs, it argued that the options offered at the final stage of compulsory schooling be diversified and include vocational subjects. Conditions for grade advancement and access to upper secondary education should focus on the core competences required for any type of upper secondary education and allow for the inclusion of vocational subjects.

• VET programmes should be evaluated according to the transition of graduates to qualified jobs, and the results of this evaluation should be published.

• Barriers to the access of professional practitioners to VET teaching should be reduced, given that employers appreciate their role.

• Weaknesses in basic academic competences should be tackled to improve VET graduates' employability throughout their careers.

• Measures should be taken to ensure that schools can adapt the curriculum in vocational programmes to local labour market needs.

• Improving access from upper secondary VET to tertiary education would make vocational pathways more attractive.

Auxiliary operations of assembly and maintenance of microcomputer systems

The employee develops its activity in private companies or public entities as employee or self-employed worker, that have computer equipment to be managed.

Productive Sectors:

Service sectors, mainly in the following types of companies:

- Companies or organizations of any size from any productive sector that uses computer systems to be managed.
- Companies active in marketing, installation, maintenance and repair of equipment and microcomputer services.
- Companies that provide microcomputer support.
- At the public administration, as part of the IT support organization.

Senior Technician on Development of Web application

The employee develops its activity in private or public companies as employee or self-employed worker. The person develops its activity on the development of web applications area (intranet, extranet and internet)

Productive Sectors:

Technology companies: The technology sector is the most attractive area of work for this technician. The most demanding position is to work as web programmer, multimedia programmer and web app developer.

Senior Technician on Administration and Finances

The employee develops its activity in private companies or public entities of any sector, particularly, in the service sector. The employee

develops administrative work, during management process and advices the areas of labor, commercial, accounting and fiscal of the companies and entities. Also develops administrative paperwork with public administration and manage the archive and communications of the company. The person could work as employee or self-employed worker.

Productive Sectors:

Service sectors, although the service can be deliver to all productive sectors because the activity consist to deliver information inside and outside the company.

Types of companies:

- Software development companies.
- Commercialization of analysis and design services.
- Design and construction of web applications for network, internet/intranet infrastructures
- Companies that use information systems for management.

Technician on Administrative Management

The employee develops its activity in private companies or public entities (small or medium-scale) of any sector, including service sector and public administration. The employee develops its responsibility in administration and personnel management areas.

Productive Sectors:

In the Financial Sector: private and public owned banks, saving banks, credit and financial institutions and corporation, insurance companies; in the public administration: central, local and autonomic.

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NecVET

New approaches to strengthened cooperation facilities for VET institutions and labour market

EXISTING SITUATION ANALYSIS FOR VET SYSTEMS IN NECVET COUNTRIES (ESA)

O2

ERASMUS+ KA2 PROJECT
2014-2016

New approaches to strengthened cooperation facilities for VET institutions and labour market

(NecVET)

This project is suported by Turkish National Agency in the framework Erasmus + Strategic Partnership in VET between the years 2014-2016

New approaches to strengthened cooperation facilities for VET institutions and labour market

NecVET

EXISTING SITUATION ANALYSIS FOR VET SYSTEMS IN NECVET COUNTRIES (ESA)

O2

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Strategic Partnership for Vocational Education and Training

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