

## **LINKING OF THE EDUCATION SYSTEM WITH THE TRAINING SYSTEM**

### **STRUCTURE OF THE FORMAL TRAINING SYSTEM**

For the purpose of this review, the term “formal training” refers to all training schemes, school-based or company-based, which lead to some kind of formal national-level certification. “Non-formal training” on the other hand, refers to all other training activities, which may lead to internal market certification or no certification at all, regardless of skill or qualification acquisition.

#### **Formal training before the 1992 reform**

Before the 1992 reform, all formal training was delivered within the formal education system and was supervised centrally in accordance with the provisions of Law 1566/85. It was mainly school-based, initial training, supervised by the MoE. However, alternative, school-based initial training was available at tourism schools (supervised by the Ministry of the Presidency), Marine Schools (supervised by the Merchant Marine), Apprenticeship Schools (supervised by the Ministry of Labour) and Nursing Schools (supervised by the Ministry of Health).

#### ***School-based training***

School-based training before the 1992 reform, was offered in Technical-Vocational Lycea, Integrated Lyceum and Technical-Vocational Schools where initial training (basic training + specialisation) was provided. However, in actual fact, it was very difficult to adhere to common quality throughout the country, due to serious problems caused by inefficient, low enrolment schools in the rural areas. There were also problems created by the insufficient laboratory instruction in schools which were not supported by a School Laboratory Centre (SEK). These problems, together with the need to make specialisation training more occupation specific, were the main reasons leading to the decision to separate basic training from specialisation training in the 1995 reform. With the 1995 reform, specialisation training was placed outside the formal education system, thereby making it more flexible.

### ***Company-based training***

Before the 1992 reform, there was no formal company-based training (excluding practical training offered within companies to apprentices or to occasional students).

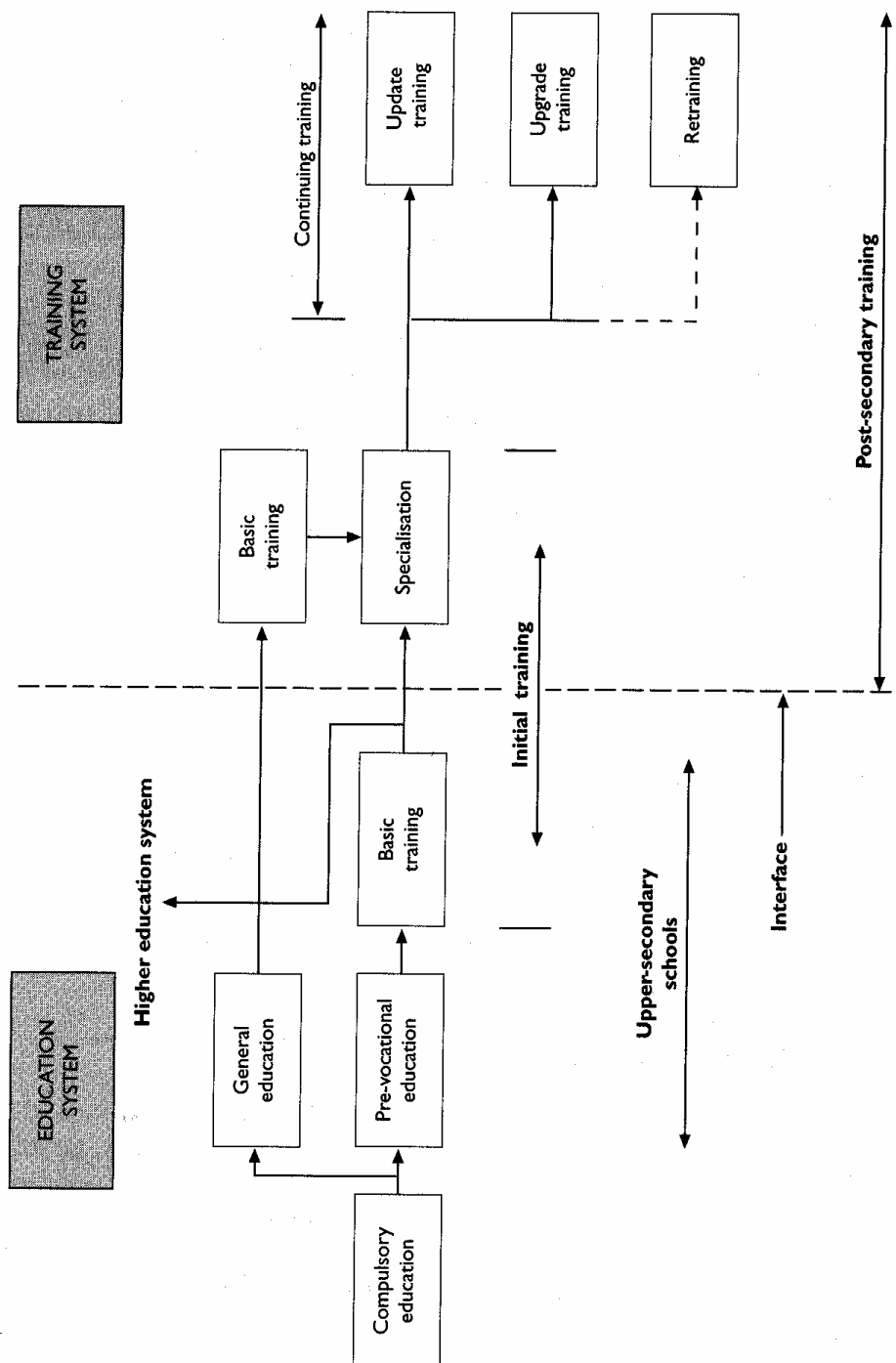
### **Non-formal training before the 1992 reform**

Before the 1992 reform, all training activities planned outside the education system were non-formal, leading to certification with validation limited to internal labour markets. For example, there were alternative training schemes offered by the National Tourism Organisation (EOT) leading to diplomas recognised only by EOT enterprises and only occasionally by some private tourist companies. The Enterprise Training Centres in Athens, Salonika and Volos offered several up-to-date training courses for industry workers without any formal national recognition. Adult training programmes run by the Prefecture Committees for Adult Education in all 52 Prefectures of the country, were also non-formal, even though some training led to vocational skill acquisition.

### **Formal training after the 1992 reform**

In 1992, a new law was introduced (Law 2009/92) which established a "National Vocational Education and Training System" for the supervision of all formal vocational education and training activities leading to national training certificates. Figure 4.1 shows schematically the new structure of the education and training system. This system is supervised by the MoE through the newly established national organisation called the Organisation for Vocational Education and Training (OEEK). In clarification, it should be noted that the Ministry of Labour, besides its responsibility for the apprenticeship schools, also supervises all non-formal training activities which are partly financed by the European Social Fund. As shown in Figure 4.1, initial training is offered partly within the education system (for pre-vocational education and basic training) and partly within the training system (for specialisation). The rationale behind this division is that the education system should provide vocational education with a fundamental basic training component which prepares the students for occupational adjustment; whereas the training system should be occupation specific, *i.e.*, it should develop the student's specific competencies through specialised training in preparation for employment. In this manner, a youngster is trained for example, to become an "electronics technician" within the education system, and then enrolls in the training system to acquire specialist skills such as, for example "maintenance of ship automation systems".

◆ Figure 4.1. New structure of education and training system



Source: Ministry of Education.

### **School-based training**

School-based training after the 1992 reform, continues to exist in the form of pre-vocational education and basic vocational training offered in vocational education schools supervised by the MoE (Technical-Vocational Lycea, Integrated Lycea and Technical-Vocational Schools) and the Ministry of Merchant Marine (Marine Lycea). The Lycea offer generalised vocational training programmes whereas the schools provide more occupation specific courses.

School-based training in the form of specialist training is offered at the newly established Institutes for Vocational Training (IEK) which operate at post-secondary level and aim at meeting the training needs of general lyceum graduates primarily. The four-semester programme includes basic training and specialist training. In addition however, they are designed to accommodate the specialisation needs of Technical Lyceum- and Integrated Lyceum-Graduates with one and two semester programmes, respectively.

The IEK are the backbone of the 1992 training reform because their planning, operation and programme certification are closely linked to the local, regional and national labour market needs, through the concept of "institutionalisation".<sup>11</sup>

Figure 4.2 shows the fields of study available. Table 4.1 shows IEK statistical data. Tables 4.2. and 4.3 show the evolution of basic data for 1992-94 and 1993-94 in the public and private sectors.

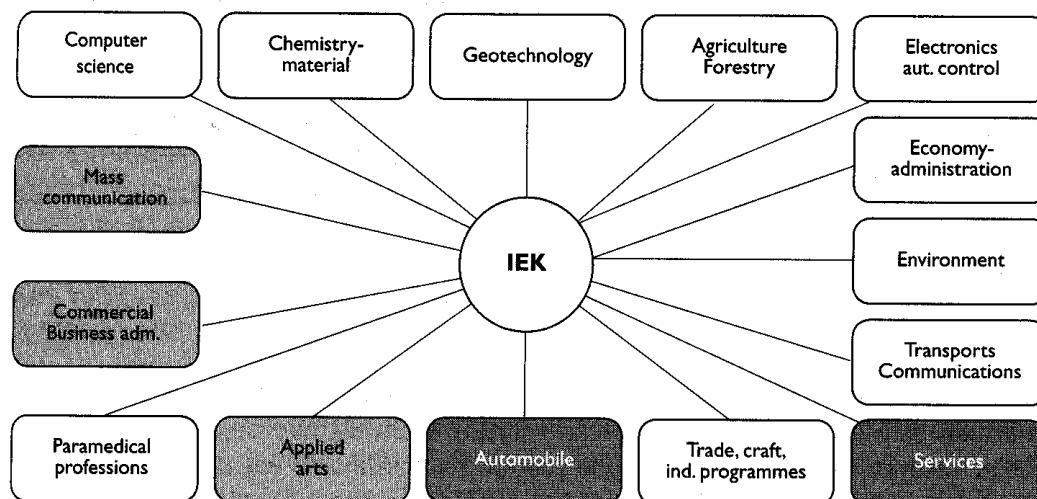
### **Company-based training**

Formal company-based training, in the form of in-service training or enterprise training, is now possible and is provided for by Law 2009/92. This means that this type of company-based training leads to national certification. Formal company-based training takes the form of up-dating, up-grading and retraining. In some cases, it can be basic training of semi-skilled workers.

### **LINKS TO THE EDUCATION SYSTEM**

As already mentioned, all programmes of vocational education and training delivered in the context of the education system are school-based, generic (non-occupation specific) and are subject to time-based certification. In addition, since they are incorporated in a generally inflexible, centralised education system, they are resistant to innovation and change and, therefore, display great inertia towards changes in market trends. Needless to say, they also lack compatibility with the local needs.

On the other hand, the new training system, which has been designed to operate *outside* the formal education system, displays flexibility in planning, delivery and certification of training programmes. These training programmes are all

◆ Figure 4.2. **IEK: Fields of study**


Source: IEK.

 Table 4.1. **IEK statistical data**

|                        | December 1994 |         |
|------------------------|---------------|---------|
|                        | Public        | Private |
| Number of IEK          | 59            | 73      |
| Enrolment              | 13 000        | 13 592  |
| Courses (specialities) | 62            | 37      |
| Number of teachers     | 4 000         | -       |

Source: Ministry of Education.

 Table 4.2. **IEK – Public sector**  
**Evolution of different types of indicators for the period 1992-94**

|              | September 1992 | February 1993 | October 1993 | March 1994 | September 1994 |
|--------------|----------------|---------------|--------------|------------|----------------|
| IEK          | 14             | 15            | 38           | 38         | 55             |
| Courses      | 42             | 47            | 52           | 52         | 64             |
| Teachers     | 1 478          | 1 978         | 3 421        | 3 621      | 4 000          |
| New entrants | 3 388          | 1 173         | 5 916        | 1 456      | 6 766          |
| Candidates   | 13 689         | 4 739         | 25 954       | 3 842      | 24 944         |

Source: Ministry of Education.

Table 4.3. **IEK – Private sector**  
**Evolution of different types of indicators for the period 1993-94**

|              | October 1993 | March 1994 | September 1994 |
|--------------|--------------|------------|----------------|
| IEK          | 44           | 52         | 73             |
| Courses      | 38           | 38         | 37             |
| New entrants | 4 455        | 845        | 9 844          |

Source: Ministry of Education.

occupation specific and subject to competence-based certification. In addition, the programmes offered are subject to cancellation should there be evidence of labour market saturation. Moreover, they are planned according to regional needs. The so-called Tripartite Advisory Committees, which are composed of representatives of the Social Partners, operate at regional level (there is one for each of the 13 Administrative Regions). These Committees have active participation in all aspects of the planning and certification of the training programmes offered by the IEK in the Region.

In spite of the obvious antithesis of the two systems (education system and training system), they are complementary and have common aims and objectives. The training offered in the context of the education system, generic and inflexible as it may seem to be, is targeted towards the development of key qualifications and social skills, which lately seem to be of greater importance in the context of training strategies incorporated in the so-called New Growth Theory. In addition to these qualifications and skills, the school-based formal education system aims to guarantee, with some minimum standards, the delivery of the basic training component of initial training and leave the occupation specific specialisation training to be acquired in the flexible, market-oriented and regionally influenced, training system.

As a result of this link, the secondary education graduate-employment situation has improved considerably, if one considers the following secondary-education student-flow reality: one out of five compulsory-education school-graduates, who continue their studies in upper-secondary education schools, selects a vocational school (TEL, EPL, TES); the remaining four enrol in a general education Lycea. Of the four who attend the general education path (academic education preparing students mainly for university and non-university tertiary education entrance) only one eventually enters tertiary education. This means that three out of five secondary-education graduates enter the labour market with virtually no employable skills. These youths, who are academically well prepared, are the target of the new training system offering modern, occupation-specific training programmes.

## LINKS TO THE LABOUR MARKET

It is a fact that there have been several attempts (in most cases sporadic and certainly not comprehensive) to predict the "needs" of the labour market, in order to apply some educational planning strategy. These attempts have been assessed as generally unsuccessful (Pesmatzoglou, 1987). Such attempts include amongst others the Regional Mediterranean Project (OECD, 1965), and occasional sporadic projects implemented by KEPE (Glytsos and Fakiolas, 1985; Glytsos, 1995; and Kanellopoulos, 1994). In addition, several independent projects, financed mainly by the European Union, have been conducted within the context of regional development projects (OAED, 1989; Papatheodosiou, 1990; Centre for Spatial Studies, 1991; and URSA-NET, 1991).

The effectiveness of educational planning, based on quantitative and qualitative data derived through the application of various models monitoring the labour market, is certainly a controversial issue. It seems that the majority of the so-called neo-classic economists claim that most techniques used for manpower planning are inaccurate and ineffective in practice (Klees, 1986, p. 577). In addition, it has been shown, on the basis of a review study on experiences derived in the last 25 years, that educational planning has not had good results. On the contrary, many mistakes have been documented which have led to catastrophic results (Psacharopoulos, 1986, p. 560). Even though most educational planning techniques seem unreliable, it is well-known that the level of any planning activity is determined by *a*) the existing structures of administrative planning which takes place within the competent ministries and by *b*) the level of co-operation and co-ordination exercised among these ministries. It also requires integrated, comparable and up-to-date statistical data (see OECD, 1982). It is very difficult to claim that this is the case for Greece, a fact which makes effective educational planning very difficult (if not impossible).

In conclusion, it must be noted that there is no educational planning which would effectively link the education system with the labour market in a continuous mode (through monitoring and feedback). The results of existent planning is rather disappointing. Several sectoral studies conducted by the Greek Industrial Union on the qualification needs of the industry (SEB, 1990), and a more recent study on a new industrial strategy (Papalexopoulos, 1993) underlined the low compatibility of secondary vocational education with the needs of industry. Even more interesting are the findings of a doctoral thesis submitted to Pantion University (Athanasoula-Reppa, 1992), which concluded that there is low interrelation between the structure of the specialisations of secondary vocational education graduates and the vocational structure of employment in the country.

The above gloomy situation regarding the linking of the education system to the labour market has forced the last two governments to look at a policy which will

gradually “vocationalise”, to a small degree, general upper secondary education and generalise upper secondary vocational education, and shift occupation-specific vocational training to the training system, which through its tripartite operation and tripartite planning can achieve greater compatibility with the labour market.

## **CERTIFICATION AND VALIDATION**

### **Certification policy before the 1992 reform**

Before the 1992 reform, only training delivered within the framework of the formal education system was certifiable nationally. The type of certification was *time-based* and not *competence-based*. The training school leaving-certificate, which certified successful completion of the school requirements within the time duration determined by training regulations, constituted the official national document (*ptychion*), giving the holder professional rights for the practice of the vocation with a specified degree of autonomy. These rights are published in Presidential Decrees for Professional (vocational) Rights, which in turn, were issued according to Law 6422/1934.

In some specific vocations, such as the profession of electrical fitters, the time-based certification issued by the MoE was followed by a competence-based certification, issued by the Ministry of Industry, after a minimum two-year probationary practice period. Although this is applied with a limited degree of autonomy, such vocations are few and constitute the exception rather than the rule.

The certification policy just described reflects a loosely defined, underdeveloped and non-institutionalised training system, which has prevailed in Greece since the commencement of formal vocational training activities in 1959. Very few Presidential Decrees for Professional Rights were ever published, mainly because the inter-ministerial committees set up to draft them could not reach agreement, since there were many conflicts due to professional interfacing (e.g., engineer, engineering technologist, higher engineering technician, lower engineering technician, etc.). This has resulted in an unstructured certification system with a high degree of arbitrariness exercised in the labour market.

### **Certification policy after the 1992 reform**

The 1992 reform divided the initial training cycle. It left the basic training component inside the education system and shifted the specialisation component into the new formal national training system (see Figure 4.1). Consequently, basic training certification remains as it was, *time-based*, which means that the certification procedure remains the responsibility of the vocational education teachers in the schools and is subject to internal assessment procedures in all public schools. Private school students, after completing their internal exams and evaluation tests,



must appear before a Ministry of Education Examining Board and be examined once again. Only if they pass this second examination can they receive their official certificate which is issued by the MoE. It must be noted here that only programmes which are licensed to operate within the framework of the formal education system, as defined by Law 1566/85, are subject to national certification. All other basic training programmes are considered non-formal and their certification is not officially recognised.

On the other hand, with the new Training Law (2009/92, Article 6), specialist training and most forms of continuing training (including retraining) is subject to official national certification which is *competence-based*. As stated earlier, each of the 13 regions of the country has established Tripartite Advisory Committees (TSE), in which the social partners are represented equally. One of the many responsibilities of the TSEs is the establishment of Examining Boards, which under the guidance of a National Central Examination Committee, undertakes the task of the practical examinations for each training speciality (the theoretical examination is administered nationally with exams supervised by the responsibility of the National Central Examination Committee). Each candidate must undertake an individual, practical examination, conducted by a tripartite, three-member examination team, within a workshop, a laboratory or a studio laboratory. Where necessary, the practical examination can take place in a regular work environment. Upon successful fulfilment of the requirements of both the theoretical and practical examinations, as well as attendance and study requirements at the Institute for Vocational Training, the candidate receives a certificate award which has both national and European recognition (through Directive 92/51/EEC).

### **Validation of training**

According to the new Training Law, validation of training is accomplished through Presidential Decrees regarding Professional Rights. However, the opinion of the Administrative Board of the Organisation for Vocational Education and Training (OEEK) is taken into consideration. (OEEK was established with the provisions of Law 2009/92.) Moreover, it forms the Supervisory Body of the National System for Vocational Education and Training and has a Board with tripartite representation.

Special ad-hoc committees, with representatives from the appropriate Ministry supervising the practice of the profession under consideration, are set up to draft the contents of each Presidential Decree in collaboration with a permanent Professional Rights Committee established by OEEK, before it is submitted for consideration to the Board of OEEK and to the Minister of Education for his signature.

It should be noted that the above procedure for validation of training certificates applies only to regulated professions.

## **PUBLIC AGENCIES OF VOCATIONAL AND TECHNICAL EDUCATION AND TRAINING**

### **OEEK – IEK**

The MoE, in recognition of the great importance of vocational education and training for *a)* the overall development of the country and *b)* the provision of young people with the essential skills and competencies, proceeded to the establishment of a National System of Vocational Education and Training (ESEEK).

The National Vocational Education and Training System, established by the Law 2009/1992 aims at:

- planning, developing and delivering Vocational Education and Training;
- certifying all formal vocational training activities;
- co-ordinating the vocational training system with the Education System;
- implementing all types of national or local programmes of Vocational Education and Training.

The official body responsible in realising the aims and objectives of ESEEK is the Organisation for Vocational Education and Training (OEEK).

The OEEK is an autonomous, legal entity of public law, supervised by the MoE. The State and the social partners are represented in the Management Board.

The remit of OEEK is to supervise the development of a coherent national system of vocational education and training in conjunction with the social partners and to introduce a coherent national system of vocational qualifications. The main aim of the OEEK is to improve vocational opportunities at post-secondary level and to meet the needs of the labour market.

The Institutes for Vocational Training (IEK) are not part of the formal education system (*i.e.* they are not supervised by the MoE). They are of post-secondary training level and supervised by OEEK.

The post-secondary training system diverges from the traditional academic system. Diplomas are awarded and recognised by the State, but these do not fall within the formal education system. Holders of these awards have no access to higher education (*i.e.* Institutions of Higher Education – AEI, Technological Education Institutions – TEI).

The different sections of IEK may be attended by adults who have finished the Gymnasium, the Technical and Vocational Schools, the apprenticeship programmes of OAED (Manpower Employment Organisation) and Lycea of all types, as well as by adults who have completed any education level and want to upgrade their skills and qualifications. Courses offered by the Institutes for Vocational Training are designed and structured according to the needs and educational background of the students.

Students successfully completing their studies can seek immediate employment.

At present, there are 59 Public and 73 Private Institutes for Vocational Training operating all over Greece. The 61 specialisations offered cover the following areas: Computer Science, Chemistry and Materials, Geotechnology, Electronics and Automatic Control, Economic Administration, Environment, Automotive Technology, Applied Arts and Paramedical Professions.

### **OAED (Manpower Employment Organisation)**

OAED is the main instrument for the implementation of government policy regarding employment. It is an autonomous, public, legal entity supervised by the Ministry of Labour. The State and the social partners are represented in its Management Board.

OAED's services comprise of a Central Administration and Regional Services. Its budget revenue comes from a) employees' and employers' contributions; b) European Community's Structural Funds; and c) the State.

More specifically, OAED's aims are carried out through the following sectors of activity: vocational guidance, technical vocational training, accelerated vocational training, further training and retraining, the apprenticeship system, post-lyceum vocational training, social protection, geographic and professional mobility of labour force, employment promotion.

### ***The apprenticeship system***

Technical education for young people is provided by OAED through the apprenticeship system. The apprenticeship system, which lies outside the formal education system, constitutes an internationally established practice. It combines training in the Apprenticeship Schools of OAED with practical training in public or private enterprises.

There are about 12 700 apprentices in the Training Units of OAED and about 3 200 who complete the programme every year.

Apprenticeship training, which lasts three years, is open to 15-18 year-olds who have completed the Gymnasium.

The first year of training, with a strong emphasis on workshop training, takes place at an apprenticeship centre. During the following two years, a progressively greater proportion of the student's time is spent in a company, until by the final term, full-time work-based training is undertaken.

There are between 20 and 30 specialisations according to labour market needs and it is the responsibility of OAED to secure training places with companies. The

diploma awarded through the apprenticeship system corresponds to that of Technical-Vocational Schools (TES).

### ***Post-secondary vocational training (IEK)***

OAED – in its continuous search to meet the country's training needs – has decided to extend its activities within the field of post-secondary vocational training and establish Institutes of Vocational Training (IEK). At present, there are 59 IEK operating all over Greece.

### ***Experimental Institute of Vocational Training and Employment (PIEKA)***

In 1993, OAED established the Experimental Institute of Vocational Training and Employment (PIEKA), a public law legal entity. Its mission is:

- to follow up the statistical development of employment/unemployment in every prefecture of the country on the basis of primary research data provided by:
  - National statistics service
  - OAED
  - Eurostat
  - OECD
  - Other agencies
- to develop further innovative vocational training programmes;
- to carry out research on matters relevant to the statistical analysis of employment and unemployment.

### ***GGLE (General Secretariat for Adult-Education)***

The GGLE and its regional agencies (Regional Committees for Adult Education, NELE, throughout Greece), is the sole governmental service responsible for projects regarding Adult Education.

Such projects, through which the aims of GGLE are realised, include:

- further education;
- literacy;
- illiteracy prevention;
- vocational training;
- vocational training and rehabilitation of disabled persons;
- social support activities;
- health counselling-prevention;

- cultural and leisure activities;
- seminars on intercultural communication;
- workshops for the preservation of traditional arts and skills;
- social integration of unprivileged groups.

One of the basic activities of GGLE is the planning and development of projects directed toward underprivileged groups such as:

- gypsies and Gypsy children (adult Gypsy and Gypsy-children education, community awareness);
- offenders – ex-offenders (vocational training, literacy, support services);
- disabled (vocational training and social rehabilitation);
- repatriated Greeks from Western and Eastern Europe, former Soviet Republics (Pontian Greeks), and Albania (Greek language, vocational training);
- elderly (New Educational Opportunities, Social Support).

The GGLE's activities are supported by EU funding through corresponding programmes.