



The Vocational Education and Training System of Cyprus:
Skills and Competences Development
and Innovative Pedagogy 2007







# The Vocational Education and Training System of Cyprus: SKILLS AND COMPETENCES DEVELOPMENT AND INNOVATIVE PEDAGOGY 2007

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#### **FOREWORD**

This report was initiated by Cedefop, the European Centre for the Development of Vocational Training, and has been prepared by the Human Resource Development Authority of Cyprus, HRDA, the nominated National Coordinator of the European network ReferNet in Cyprus.

ReferNet was set up by Cedefop as the European network of reference and expertise in vocational education and training. It aims to improve the collection and dissemination of information to policy makers, researchers and practitioners in the field of vocational education and training.

The report has been prepared as part of a series of reports on vocational education and training in European Union countries. It is a contribution to Cedefop's continuing work on VET systems in EU member states, which is changing from being mainly based on hard copy descriptions of each national system to an electronic-based system.

This report aims to provide an overview of three key interrelated topics concerning skills and competences development and innovative pedagogy. The focus is on anticipation of skill needs in the labour market and on the development of new qualifications and job profiles in VET. In addition, this report aims to describe how vocational education and training systems are responding to those developments by introducing innovative pedagogies and modernising and renewing their curricula.

The Cedefop database, eKnowVet<sup>1</sup>, offers on-line information on initial and continuing vocational training in partner countries. The standard entry format allows country-specific and multi-country searches covering 11 thematic areas in overview (thematic overviews) and 7 in detail. The database is regularly updated by the European network ReferNet.

ReferNet is made up of national consortiums, each comprising organisations, which are representative of the interests of vocational education and training within each EU Member State, plus Norway and Iceland. The HRDA, as the National Coordinator of ReferNet in Cyprus, wishes to acknowledge the invaluable contribution of the Ministry of Education and Culture in particular as well as that of the other members of the Cyprus consortium in the preparation of this report.

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<sup>&</sup>lt;sup>1</sup> http://www.trainingvillage.gr/etv/Information Resources/NationalVet/

# **TABLE OF CONTENTS**

FOREWOI	RD	iii
701.	ANTICIPATION OF SKILL NEEDS: GENERAL BACKGROUND	1
70101.	Policy development on the anticipation of skill needs	1
70102.	Legal, administrative and institutional framework	3
70103.	Methods, approaches, practices and tools used	4
70104.	Building partnerships and raising awareness	17
70105.	Financing the anticipation of skill needs (incl. statistics)	19
702.	DEVELOPING QUALIFICATIONS: GENERAL BACKGROUND	. 20
70201.	Policy development on developing qualifications	20
70202.	Legal, administrative and institutional framework	23
70203.	Methods, approaches, practices and tools used	27
70204.	Building partnerships and raising awareness	30
70205.	Financing the development of new qualifications (incl. statistics)	32
703.	INNOVATIVE PEDAGOGIES: GENERAL BACKGROUND	. 33
70301.	Policy development on innovative pedagogies	33
70302.	Legal, administrative and institutional framework	38
70303.	Practices of innovative pedagogies in VET	40
7030301.	eLearning in VET (incl. Statistics)	. 43
7030302.	Barriers to implementation	. 53
70304.	Building partnerships and raising awareness	53
70305.	Financing innovative pedagogies	55
704.	INNOVATIONS IN TEACHER TRAINING	. 56
705.	INNOVATIONS IN ASSESSMENT	. 62
70501.	Innovations in evaluation and quality monitoring	63

706.	INNOVATIONS IN GUIDANCE AND COUNCELLING	. 64
707.	THE EUROPEAN AND INTERNATIONAL DIMENSION	. 68
70701.	Europeanisation of VET curricula	69
708.	BIBLIOGRAPHICAL REFERENCE AND WEB SITES.	. 71
ANNEX 1	: ACRONYMS AND ABBREVIATIONS	. 73
ANNEX 2	: MEMBERS OF THE CYPRUS REFERNET CONSORTIUM	. 77

# 701 ANTICIPATION OF SKILL NEEDS: GENERAL BACKGROUND

Cyprus is at the forefront of countries providing forecasts for skills needs with a long experience in this field. Employment forecasts in economic sectors and occupations are provided at a detailed level of analysis, including both expansion and replacement demand.

The main formal mechanism in place for the assessment of skill needs is operated by the Human Resource Development Authority, HRDA, (Archi Anaptyxis Anthropinou Dynamikou, AnAD), which examines and analyses developments in the labour market. The employment forecasts cover the whole spectrum of the Cyprus labour market. In this forecasting approach skills refer to occupational skills. Thus forecasts are provided for occupations using the ISCO 88 (COM) classification system. Employment forecasts are provided for around 200 occupations and 43 economic sectors. All relevant studies can be found in the HRDA webpage <a href="https://www.hrdauth.org.cy./dep/index.htm">www.hrdauth.org.cy./dep/index.htm</a>.

The Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO) and the Planning Bureau, PB (Grafeio Programmatismou, GP) provide projections for the growth of the economy, which include forecasts for different sectors.

The Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) is, on the other hand, responsible for the identification of educational and special skill needs.

# 70101 Policy development on the anticipation of skill needs

The anticipation of skill needs features prominently in various national programming documents and is considered to be a priority in Cyprus. In the National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) it is stated that a better anticipation of skill needs, labour market shortages and bottlenecks contributes positively towards achieving a better matching of the demand and supply of labour and the better utilisation of the labour force. As mentioned in the National Lisbon Programme the task of preparing employment and training forecasts has been assigned to the Human Resource Development Authority, HRDA, (Archi Anaptyxis Anthropinou Dynamikou, AnAD).

One of the strategic objectives of the HRDA for the period 2007-2013 is the promotion of research and development actions in areas of vital importance for the training and development of human resources with a special emphasis on the prompt identification of employment and skill needs.

# Strengths of national policy on the anticipation of skill needs

- Cyprus has a long experience in the anticipation of skills needs.
- The long term employment forecasts methodologies used in Cyprus are similar to methodologies of leading European countries. Cyprus is at the forefront of developments concerning employment forecasts methodologies. These methodologies are presented in the Skillsnet publication "Towards European skill needs forecasting", which includes the proceedings of the Skillsnet workshop held in Cyprus in 2005. (www.trainingvillage.gr/etv/Information resources/Bookshop/publication details.asp?pub id=472)
- The HRDA participates actively in initiatives and actions that are promoted at European level in the framework of the European network Skillsnet for skill needs forecasting.
- The provision of long-term employment forecasts in economic sectors and occupations has become an established activity of the HRDA carried out every two years.
- The HRDA works closely with the Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO) and the Planning Bureau, PB (Grafeio Programmatismou, GP), which provide projections for the economy, and the Statistical Service of Cyprus (Statistiki Ypiresia Kyprou), which provides the statistical data.
- The long term employment forecasts cover a detailed level of analysis, providing forecasts for 43 selected economic sectors and around 200 selected occupations, for a time period of 10 years.
- There is active involvement of the Social Partners in the annual study identifying initial training needs.
- Both long term and short term employment forecasts are produced using appropriate methodologies in each case.

# Policy initiatives focused on specific target groups

There are occasional policy initiatives on the anticipation of skills needs that are focused on specific target groups. In the framework of these policy initiatives, research studies are conducted on specific groups.

Specifically, during the last few years the HRDA has conducted two studies on employment forecasts, as requested by the Minister of Labour and Social Insurance (Ypourgos Ergasias kai Koinonikon Asfaliseon), one providing forecasts of employment needs for foreign workers and the other providing forecasts of employment needs for nursing staff.

The HRDA study entitled "Forecasts of Employment Needs for Foreign Labour" provided employment forecasts of foreign labour in Cyprus for the period 2004-2007. This was achieved through the examination of the main characteristics of the foreign labour and the analysis of the trends of foreign labour employment in 2000-2002.

The other HRDA study entitled "Forecasts of Employment Needs for Nurses" examined and analysed the employment trends of Nursing Staff in Cyprus and provided employment forecasts for the Nursing Staff during the period 2005-2015. In particular the study provided forecasts for both expansion and replacement demand, in both the Public and Private sectors. Additionally, the study provided estimates for employment needs in the various specialisations of Nursing Staff, which are General nurses, Midwives and Health visitors.

The University of Cyprus, UCY (Panepistimio Kyprou, PK) conducted a study on the economic impact of foreign labour on the employment and the wages of Cypriot employees.

# 70102 Legal, administrative and institutional framework

The National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) specifies the major role of the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) on the anticipation of skills needs and particularly on preparing employment and training forecasts.

#### **Legal framework**

The HRDA is a semi-government organisation whose mission is to create the necessary prerequisites for the planned and systematic training and development of the human resources of Cyprus. The Human Resource Development Law of 1999 (No 125 (I)/99) replaced the Law of 1974 for the Industrial Training Authority, which was renamed to HRDA. The Authority's powers were broadened under this law and more precise responsibilities were assigned in respect of standards for vocational qualifications, vocational guidance, and cross-border activities. This law also gives the HRDA responsibility to collect, analyse and disseminate information concerning the planning, utilisation and development of human resources through appropriate research studies.

One of the strategic objectives of the HRDA for the period 2007-2013 is the promotion of research and development actions in areas of vital importance for the training and development of human resources with special emphasis on the prompt identification of employment and skills needs.

#### **Institutional framework**

For conducting the occupational and employment forecasts studies the HRDA cooperates, as needed, with the Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO) and the Planning Bureau, PB (Grafeio Programmatismou, GP) that provide projections for the growth of the economy, which include forecasts for different sectors, and the Statistical Service of Cyprus (Statistiki Ypiresia Kyprou) that provides statistical data.

For the short term projections in the annual investigations study, the HRDA cooperates with the social partners, which play an important role in the anticipation of skills needs. Specifically, the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA), employers' and employees' organisations are requested to fill in a specially designed questionnaire for the annual investigations study.

# **Summary Table**

The institutions / bodies and their responsibilities in the anticipation of skill needs are presented in Table 1.

Table 1: Institutions / bodies and their responsibilities

Actor	Responsibilities
Human Resource	National forecasts of employment and
Development Authority	training needs covering sectors and
	occupations
Ministry of Finance and	Projections for the growth of the
Planning Bureau	economy
Statistical Service	Provision of data in electronic form:
	Census of Population, Census of
	Establishments, Labour Force Survey
Ministry of Education and	Identification of educational and special
Culture	skill needs and design of curricula
Social Partners (Ministry of	Participation in the annual
Labour and Social Insurance,	investigations for the identification of
employers' and employees'	skill needs
organisations)	

# 70103 Methods, approaches, practices and tools used

The main actors involved in the anticipation of skill needs in Cyprus are the Human Resource Development Authority, HRDA, (Archi Anaptyxis Anthropinou Dynamikou, AnAD), the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP), the Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO) and the Planning Bureau, PB (Grafeio Programmatismou, GP).

The methods and approaches used by these organisations are analysed below.

# **Human Resource Development Authority**

The research activity places particular emphasis on analysing the trends in the labour market, with emphasis on human resource development issues, on providing employment forecasts, on examining the functioning of the VET systems and the training market, on analysing participation in education and training and on evaluating the impact of training activities. For the systematic employment forecasting and the identification of skill gaps, the HRDA conducts the following research studies:

# Long term employment trends and forecasting in Cyprus

The provision of long-term employment forecasts in sectors of economic activity and occupations has become an established activity of the HRDA. The Research and Planning Directorate of the HRDA provides 10-year employment forecasts on a regular basis every 2 to 3 years. The HRDA has just completed and published a new set of employment forecasts for Cyprus for the period 2008-2018 whereas the previous employment forecasts completed in 2004 covered the period 2005-2015 and the next ones will be carried out in 2009 covering the period 2010-2020.

Thus, forecasts of employment, expansion and replacement demand are provided for 43 sectors of economic activity and for around 200 occupations, which cover the whole spectrum of the Cyprus labour market. These forecasts are contained in three research studies. Furthermore, the studies in an electronic format and the analytical forecasts for each occupation are available from the HRDA's website <a href="https://www.hrdauth.org.cy/dep/index.htm">www.hrdauth.org.cy/dep/index.htm</a>.

The three studies from the latest set of employment forecasts are:

- Employment Forecasts in the Cyprus Economy 2008-2018: Provision of employment forecasts for 43 selected economic sectors and for 27 selected occupations covering the whole spectrum of the Cyprus labour market.
- Forecasts of Employment Needs in High Level Occupations in Cyprus 2008-2018: Examination of the employment needs in 104 high-level occupations, which usually require either university or post-secondary education.

 Forecasts of Employment Needs in Middle Level Occupations in Cyprus 2008-2018: Examination of the employment needs in 90 middle-level occupations, which usually require secondary education.

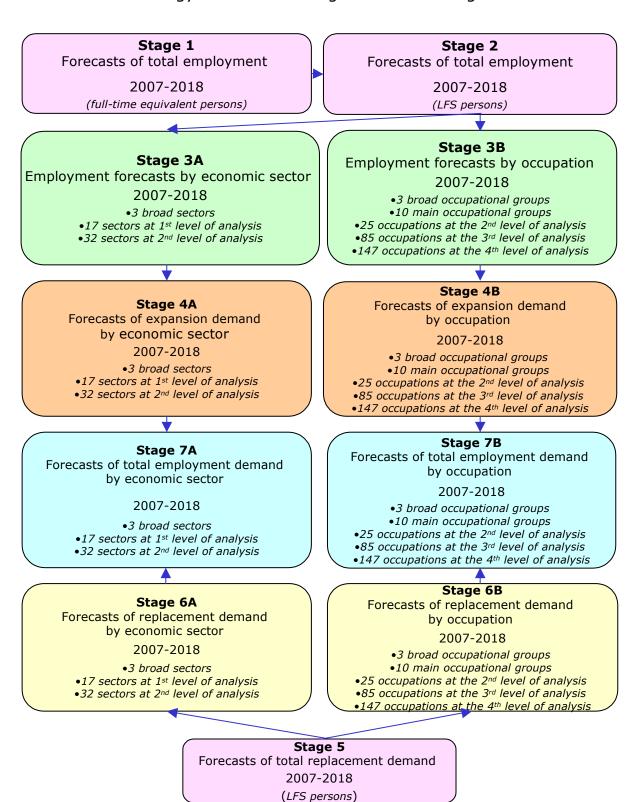
The methodology used for the long term forecasting of skill needs in Cyprus is divided into seven main stages, which at the end provide forecasts for the total demand (expansion and replacement demand) in around 200 occupations for the period 2008–2018. These seven stages are depicted in Table 1.

The Statistical Service of Cyprus (Statistiki Ypiresia Kyprou) provided the following necessary data, which were used at the various stages of the forecasting exercise:

- 1. Census of Population: The Statistical Service of Cyprus carries out these censuses every 10 years. All households and dwellings in Cyprus are visited and information is collected on the demographic and social characteristics of the population and households, on the size and amenities of dwellings and the geographic distribution of the population, households and dwellings. The data used in the forecasting exercise were the characteristics of the employed population and specifically their occupation. The last census of population was conducted in 2001.
- 2. Labour Force Survey, LFS (Erevna Ergatikou Dynamikou, EED): The Statistical Service of Cyprus conducted these surveys on an annual basis from 2000 to 2003 and from 2004 onwards on a quarterly basis. These are based on the regulations set by the European Union. They are sample-based surveys where information is collected in a sample of private households, allocated according to the number of households that reside in urban and rural areas. The data used in the forecasting exercise are the characteristics of the employed population and specifically their occupation and the economic sector of the enterprise in which they are employed. Additionally the reasons why people left the labour market and their previous employment were used.
- 3. Labour Statistics: The Statistical Service of Cyprus publishes this report on an annual basis. It contains data on employment, unemployment, vacancies, foreign workers, social insurance contributions, labour disputes, occupational accidents, wages and prices. The data for employment, wages and prices are collected through special surveys. The data used in the forecasting exercise refer to employment by economic sectors expressed as full time equivalent persons.

4. National Accounts: The Statistical Service of Cyprus provided the data on total value added at constant 2000 prices for the period 1995-2006, which were used in the forecasting exercise.

Table 1: Methodology used for the long term forecasting of skill needs



Stage 1: Forecasts of total employment 2007-2018 (full-time equivalent persons)

The forecasts of total employment (full-time equivalent persons) for the period 2007-2018 require the forecast of total value added and total productivity in the Cyprus economy for the same period. Productivity is defined as total value added divided by total employment (full-time equivalent persons).

The division of the forecasted total value added with the forecasted total productivity for the period 2007-2018 provides the annual forecasts of total employment (full-time equivalent persons).

Stage 2: Forecasts of total employment 2007-2018 (Labour Force Survey Persons)

In order to transform the forecasts of total employment (full-time equivalent persons) into forecasts of total employment (LFS persons) for the period 2007-2018, the ratio of total employment (LFS persons) to total employment (full-time equivalent persons) was forecasted.

By applying the forecasted ratios on the forecasted total employment (full-time equivalent persons) for each year of the period 2007-2018, forecasts of the total employment (LFS persons) were obtained.

Stage 3A: Employment forecasts by economic sector 2007-2018

In order to allocate the forecasts of total employment (LFS persons) to the economic sectors, the employment shares by economic sector for the period 2007-2018 were forecasted.

Four different models were used to forecast employment shares by economic sector for the period 2007-2018. For each sector the model that provided the best fit on the actual data was chosen. In some occasions where two or more models provided similar fits on the actual data, an average of the forecasts provided by these models was used. These models provided forecasts of employment shares by economic sector (3 broad sectors, 17 main sectors at the 1<sup>st</sup> level of analysis and 32 sectors at the 2<sup>nd</sup> level of analysis) for each year of the period 2007-2018.

By applying the forecasted employment shares on the total employment forecasts, the employment forecasts by economic sector (3 broad sectors, 17 main sectors at the  $1^{st}$  level of analysis and 32 sectors at the  $2^{nd}$  level of analysis) were obtained for each year of the period 2007-2018.

Stage 3B: Employment forecasts by occupation 2007-2018

This stage is divided in two different parts. The first part concerns the provision of employment forecasts in 3 broad occupational groups, in 10

main occupational groups and in 25 occupations at the  $2^{nd}$  level of analysis, while the second part concerns the provision of forecasts in 85 occupations at the  $3^{rd}$  level of analysis and in 147 occupations at the  $4^{th}$  level of analysis.

Stage 3B – Part 1: Employment forecasts in 3 broad occupational groups, in 10 main occupational groups and in 25 occupations at the  $2^{nd}$  level of analysis 2007-2018

As in the case of economic sectors, in order to allocate the forecasts of total employment (LFS persons) to the occupations, the employment shares by occupation for the period 2007-2018 were forecasted.

Four different models were used to forecast employment shares for the period 2007-2018. For each occupation the model that provided the best fit on the actual data was chosen. In some occasions where two or more models provided similar fits on the actual data, an average of the forecasts provided by these models was used. These models provided forecasts of employment shares by occupation (3 broad occupational groups, 10 main occupational groups and 25 occupations at the 2<sup>nd</sup> level of analysis) for each year of the period 2007-2018.

By applying the forecasted employment shares on the total employment forecasts, the employment forecasts by occupation (3 broad occupational groups, 10 main occupational groups and 25 occupations at the 2<sup>nd</sup> level of analysis) were obtained for each year of the period 2007-2018.

Stage 3B – Part 2: Employment forecasts in 85 occupations at the  $3^{rd}$  level of analysis and in 147 occupations at the  $4^{th}$  level of analysis 2007-2018

In order to forecast employment (LFS persons) in 85 occupations at the  $3^{rd}$  level of analysis and in 147 occupations at the  $4^{th}$  level of analysis, the structure of employment by occupation from the Census of Population 2001 was used for all the years of the period 2007-2018.

This method is considered satisfactory, as the structure of employment by occupation at the  $3^{\rm rd}$  and  $4^{\rm th}$  levels of analysis is not expected to change in any significant way. Additionally, any possible changes in the structure of employment by occupation for the period 2007-2018 were taken into account at the  $1^{\rm st}$  and  $2^{\rm nd}$  levels of analysis of occupations where forecasts of the structure of employment were made. Therefore, the Census of Population was the most recent and reliable source of information for employment in 85 occupations at the  $3^{\rm rd}$  level of analysis and in 147 occupations at the  $4^{\rm th}$  level of analysis.

The allocation of the forecasted employment in the 25 occupations at the  $2^{nd}$  level of analysis to the 85 occupations at the  $3^{rd}$  level of analysis and to the 147 occupations at the  $4^{th}$  level of analysis completes the

employment forecasts by occupation. The forecasts are provided for all the years of the period 2007-2018.

# Stage 4A: Forecasts of expansion demand by economic sector 2007-2018

Expansion demand is defined as the change in the number of employees from one year to another and is derived from the employment forecasts by economic sector provided in Stage 3A. This stage culminated in the forecasts of expansion demand in 3 broad economic sectors, 17 main economic sectors at the  $1^{\text{st}}$  level of analysis and 32 economic sectors at the  $2^{\text{nd}}$  level of analysis.

# Stage 4B: Forecasts of expansion demand by occupation 2007-2018

Expansion demand is defined as the change in the number of employees from one year to another and is derived from the employment forecasts by occupation provided in Stage 3B. This stage culminated in the forecasts of expansion demand in 3 broad occupations, 10 main occupational groups, 25 occupations at the  $2^{nd}$  level of analysis, 85 occupations at the  $3^{rd}$  level of analysis and finally 147 occupations at the  $4^{th}$  level of analysis.

# Stage 5: Forecasts of total replacement demand 2007-2018

In order to forecast total replacement demand for each year of the period 2007-2018, the total replacement rate was forecasted. Total replacement rate is derived from the division of the total number of withdrawals from the labour market with the total number of employees, using LFS data. It is noted that only permanent withdrawals are taken into account and these refer to three reasons: retirement, personal or family responsibilities and own illness or disability.

Forecasts of the replacement rate for the period 2007-2018 were estimated on the basis of the replacement rate for the period 2000-2006. The four different models that were used provided more or less the same fit on the actual data and thus an average of the forecasts provided by these models was used.

The forecasts of the replacement rate for each year of the period 2007-2018 were applied on the total employment forecasts provided from Stage 2, thus providing forecasts of total replacement demand for each year of the period 2007-2018.

# Stage 6A: Forecasts of replacement demand by economic sector 2007-2018

This stage is divided in two different parts. The first part concerns the provision of forecasts of replacement demand in 3 broad economic sectors and in 17 main economic sectors at the  $1^{st}$  level of analysis, while the

second part concerns the provision of forecasts in 32 economic sectors at the  $2^{nd}$  level of analysis.

Stage 6A – Part 1: Forecasts of replacement demand in 3 broad economic sectors and in 17 main economic sectors at the 1<sup>st</sup> level of analysis 2007-2018

In order to provide forecasts of replacement demand in 3 broad economic sectors and in 17 economic sectors at the 1<sup>st</sup> level of analysis, the replacement demand shares by economic sector were forecasted. These shares were estimated by applying the ratio "Average replacement demand shares / Average employment shares" by economic sector on the forecasted employment shares by economic sector, as these were derived in Stage 3A.

The ratio "Average replacement demand shares / Average employment shares" was estimated in sequence for the 3 broad economic sectors and the 17 economic sectors at the 1<sup>st</sup> level of analysis using LFS data for the period 2000-2006. The same ratio was used for each year of the period 2007-2018 in the 3 broad economic sectors and the 17 economic sectors at the 1<sup>st</sup> level of analysis assuming that there are no significant variations of this ratio, which is proven by available data.

By applying the ratio "Average replacement demand shares / Average employment shares" by economic sector on the forecasted employment shares by economic sector, the forecasts of the replacement demand shares for the 3 broad economic sectors and the 17 economic sectors at the 1<sup>st</sup> level of analysis were obtained for each year of the period 2007-2018.

Finally, by applying the forecasts of replacement demand shares by economic sector on the total replacement demand as this was derived in Stage 5, the forecasts of replacement demand for the 3 broad economic sectors and the 17 economic sectors at the 1<sup>st</sup> level of analysis were obtained for each year of the period 2007-2018.

Stage 6A - Part 2: Forecasts of replacement demand in 32 economic sectors at the 2<sup>nd</sup> level of analysis 2007-2018

In order to forecast replacement demand in 32 economic sectors at the  $2^{nd}$  level of analysis, the replacement demand shares by economic sector were forecasted. Having evaluated all available data, it seemed reasonable to assume that the replacement demand shares are identical to the employment shares as these were derived in Stage 3A.

By applying the replacement demand shares in 32 economic sectors at the  $2^{nd}$  level of analysis on the forecasts of replacement demand in 17 economic sectors at the  $1^{st}$  level of analysis as these were derived in

Stage 6A – Part 1, the forecasts of replacement demand by economic sector were obtained for each year of the period 2007-2018.

Stage 6B: Forecasts of replacement demand by occupation 2007-2018

This stage is divided in two different parts. The first part concerns the provision of forecasts of replacement demand in 3 broad occupational groups and in 10 main occupational groups, while the second part concerns the provision of forecasts in 25 occupations at the 2<sup>nd</sup> level of analysis, 85 occupations at the 3<sup>rd</sup> level of analysis and 147 occupations at the 4<sup>th</sup> level of analysis.

Stage 6B - Part 1: Forecasts of replacement demand in 3 broad occupational groups and in 10 main occupational groups 2007-2018

In order to provide forecasts of replacement demand in 3 broad occupational groups and in 10 main occupational groups, the replacement demand shares by occupation were forecasted. These shares were estimated by applying the ratio "Average replacement demand shares / Average employment shares" by occupation on the forecasted employment shares by occupation, as these were derived in Stage 3A.

The ratio "Average replacement demand shares / Average employment shares" was estimated in sequence for the 3 broad occupational groups and the 10 main occupational groups using LFS data for the period 2000-2006. The same ratio was used for each year of the period 2007-2018 in the 3 broad occupational groups and the 10 main occupational groups assuming that there are no significant variations of this ratio, which is proven by available data.

By applying the ratio "Average replacement demand shares / Average employment shares" by occupation on the forecasted shares of employment by occupation, the forecasts of the replacement demand shares for the 3 broad occupational groups and the 10 main occupational groups were obtained for each year of the period 2007-2018.

Finally, by applying the forecasts of replacement demand shares by occupation on the total replacement demand as this was derived in Stage 5, the forecasts of replacement demand for the 3 broad occupational groups and the 10 main occupational groups were obtained for each year of the period 2007-2018.

Stage 6B - Part 2: Forecasts of replacement demand in 25 occupations at the  $2^{nd}$  level of analysis, 85 occupations at the  $3^{rd}$  level of analysis and 147 occupations at the  $4^{th}$  level of analysis 2007-2018

In order to forecast replacement demand in 25 occupations at the 2<sup>nd</sup> level of analysis, in 85 occupations at the 3<sup>rd</sup> level of analysis and in 147 occupations at the 4<sup>th</sup> level of analysis, the replacement demand shares

by occupation were forecasted. Having evaluated all available data, it seemed reasonable to assume that the replacement demand shares are identical to the employment shares as these were derived in Stage 3B.

By applying in sequence the replacement demand shares in 25 occupations at the  $2^{nd}$  level of analysis, in 85 occupations at the  $3^{rd}$  level of analysis and in 147 occupations at the  $4^{th}$  level of analysis as these were derived in Stage 6B – Part 1, the forecasts of replacement demand by occupation were obtained for each year of the period 2007-2018.

Stage 7A: Forecasts of total employment demand by economic sector 2007-2018

In order to forecast total employment demand by economic sector, the expansion demand was added to the replacement demand due to permanent withdrawals from the labour market in each economic sector (3 broad sectors, 17 sectors at the  $1^{st}$  level of analysis and 32 sectors at the  $2^{nd}$  level of analysis) as these were derived in Stages 4A and 6A respectively.

Stage 7B: Forecasts of total employment demand by occupation 2007-2018

In order to forecast total employment demand by occupation, the expansion demand was added to the replacement demand due to permanent withdrawals from the labour market in each occupation (3 broad occupational groups, 10 main occupational groups, 25 occupations at the 2<sup>nd</sup> level of analysis, 85 occupations at the 3<sup>rd</sup> level of analysis and 147 occupations at the 4<sup>th</sup> level of analysis) as these were derived in Stages 4B and 6B respectively.

# Short term employment forecasts

On the basis of the same methodology as the long term employment forecasts, short-term employment forecasts covering a two to four year period are provided occasionally as the need arises.

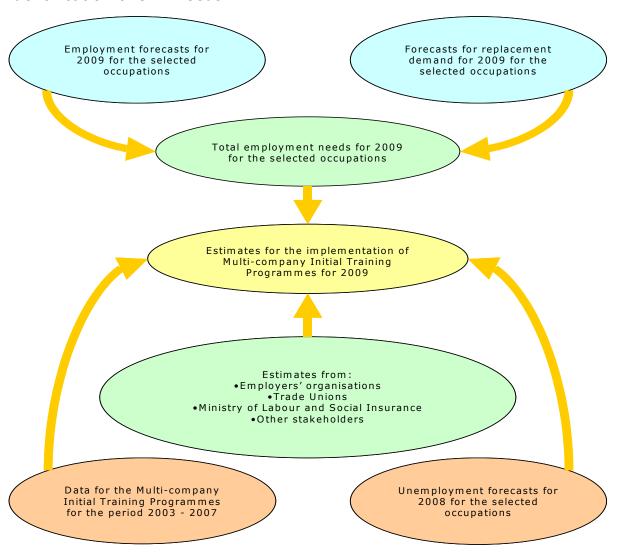
<u>Annual investigations for the identification of skill needs with the involvement of the Social Partners</u>

A study is carried out every year for the identification of initial training needs with the involvement of the Social Partners. It provides annual estimates for the number of persons required for specific occupations by district. The estimates of the needs in specialisations for the implementation of the Multi-company Initial Training Programmes in 2009, were collected by sending a specially designed questionnaire to employers' organisations, Trade Unions, District Labour Offices, DLO (Eparchiaka Grafeia Ergasias, EGE) of the Ministry of Labour and Social Insurance,

MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA) and the Cyprus Tourism Organisation, CTO (Kypriakos Organismos Tourismou, KOT). All these estimates were recorded and analysed.

On the basis of these estimates, the forecasts of employment needs for those specialisations, which were provided by the HRDA and other relevant information and data, suggestions are put forward for the implementation of Multicompany Initial Training Programmes. The methodology used for the Annual Investigations for the identification of skill needs is presented in Table 2.

Table 2: Methodology used for the Annual Investigations for the identification of skill needs



#### Employment forecasts for specific groups:

 Forecasts of Employment Needs for Nurses: The Council of Ministers (Ypourgiko Symvoulio) assigned to the HRDA the task of conducting a study providing employment forecasts of Nursing Staff during the period 2005-2015. The study

- provided forecasts for both expansion and replacement demand, in both the Public and Private sectors.
- Forecasts of Employment Needs for Foreign Labour: This study provided employment forecasts of foreign labour in Cyprus for the period 2004-2007. This was achieved through the examination of the main characteristics of foreign labour and the analysis of the trends of foreign labour employment in 2000-2002 in Cyprus.

In addition to employment forecasts, the HRDA also carries out:

- Human resource studies focusing on the characteristics of selected groups such as the employed, the unemployed, the economically inactive, women, foreign workers, education and training and lifelong learning.
- Evaluation studies on the effectiveness and impact of the HRDA's training and development activities.

## Thematic Priorities setting

The HRDA prepares on an annual basis a document that contains the thematic priorities for the multi-company continuing training programmes - standard and high-priority. This document is communicated to all training institutions / providers, which on the basis of these thematic priorities submit multi-company continuing training programmes to the HRDA every six months. The HRDA then examines, approves or rejects the submitted programmes and subsidises the implemented programmes.

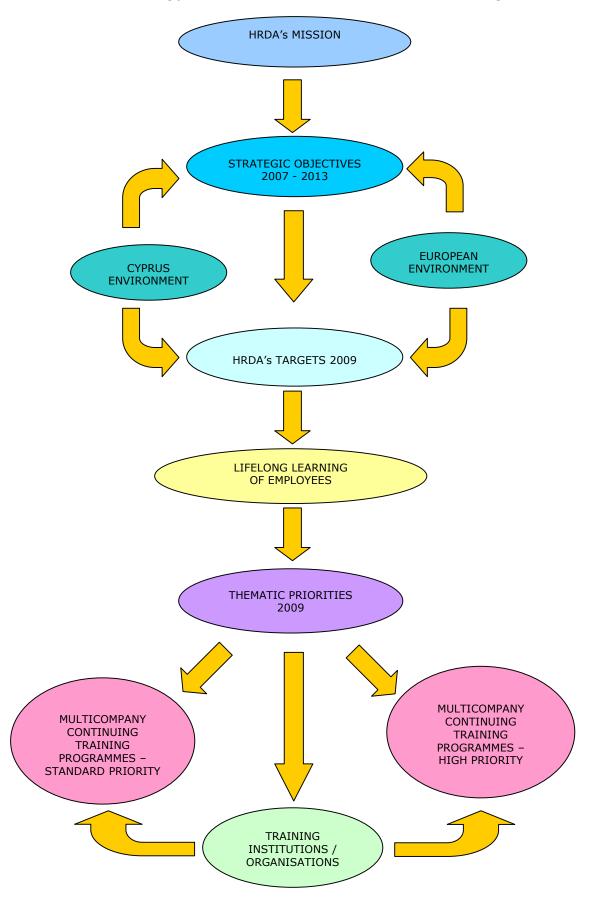
The methodology used for the Thematic Priorities setting is depicted in Table 3.

The thematic priorities that are included in the document are determined according to the HRDA strategic objectives, which define the annual HRDA targets, determine priority pillars and specify the actions that will be promoted by the HRDA in order to fulfill its mission and role.

The HRDA's strategic planning responds to emerging challenges in its sphere of competence within the new socio-economic environment developed by the knowledge society and the accession of Cyprus to the European Union.

The involvement of social partners is of vital importance for the determination of the thematic priorities. The training institutions and consulting firms are considered by the HRDA as important associates and play a substantial role towards the design and implementation of suitable training programmes in response to the thematic priorities.

Table 3: Methodology used for the Thematic Priorities setting



# Ministry of Finance and Planning Bureau

The MoF and the PB provide projections for the growth of the economy, which include forecasts of value added, productivity and employment for different sectors, and submit proposals for the required policy changes.

# **Ministry of Education and Culture**

The MoEC and more specifically the Directorate of the Secondary Technical and Vocational Education, STVE (Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis, DTEE) is responsible for the introduction of new branches and specialisations, the determination of the numbers of students who will be enrolled in each branch and specialisation, the design of curricula and the identification of special skills needed.

In order to carry out these tasks, whilst considering the developmental needs of the Cyprus economy and the latest scientific and technological advances, the STVE has developed close cooperation with all major stakeholders, such as Ministries and the PB, the Social Partners (Employers' and Employees' Organisations), teachers and their associations, the University of Cyprus, UCY (Panepistimio Kyprou, PK), the Pedagogical Institute, PI (Pedagogiko Instituto) and the HRDA.

Furthermore, the desires of lower secondary education graduates to follow a branch and specialisation are also taken into consideration when determining the number of available places at each branch and specialisation.

# 70104 Building partnerships and raising awareness

The Human Resource Development Authority, HRDA, (Archi Anaptyxis Anthropinou Dynamikou, AnAD) produces long term and short term employment forecasts. The Statistical Service of Cyprus (Statistiki Ypiresia Kyprou) provides all the necessary data. The short term forecasts are produced with the cooperation of the social partners, both employers' and employees' organisations, as well as the District Labour Offices, DLO (Eparchiaka Grafeia Ergasias, EGE) of the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA).

The HRDA also participates actively in initiatives and actions that are promoted at European level in the framework of the European network Skillsnet for skill needs forecasting. In October 2005, a two-day European Workshop attended by 30 experts in skill needs forecasting was coorganised in Cyprus by Cedefop, the HRDA and the Research Centre for Education and the Labour Market at the Maastricht University (ROA). As a result of this workshop, a process was initiated for developing skill needs forecasts at EU level, which culminated in the provision of medium-term

forecasts of occupational skill needs in Europe. The HRDA is also involved in the new Skillsnet project for providing medium-term forecasts of skills supply in Europe.

#### Raising awareness

Dissemination of the research studies

The research studies upon completion are disseminated to a wide audience of prominent stakeholders in a variety of ways, utilising both traditional and electronic channels of communication. The studies are sent to government officials, employees' and employers' organisations, education and training providers, consultancy firms, organisations involved in human resource planning, counseling officers and other interested organisations and persons.

Special lectures to guidance and employment counselors

Special lectures are organised for secondary school guidance counselors in collaboration with the Ministry of Education and Culture, MoEC and for employment counselors in collaboration with the MLSI.

Lectures to parents and students and during the "Annual Careers Fair"

The HRDA presents the findings of its research studies anticipating skill needs through lectures to parents and to students in secondary schools in all districts. Lectures are also organised during the HRDA's participation in the "Annual Careers Fair".

#### Articles

The findings of the research studies providing forecasts are also disseminated to the public through the mass media. This is mainly achieved through articles in newspapers and through participation in relevant radio and television programmes.

#### Website

The HRDA maintains a website (<a href="www.hrdauth.org.cy">www.hrdauth.org.cy</a>) with information on approved training opportunities. The HRDA also displays its research studies in a downloadable form. A special section in the website contains the latest available occupational employment forecasts for all the occupations of the labour market in Cyprus. Data is presented in two alternative ways. The first way is based on the occupational categories as defined by the International Standard Classification of Occupations (ISCO 88) while the second way is based on the alphabetical order of occupations.

# **Users of information**

The main users of the research studies providing sectoral and occupational forecasts are the following:

- Policy makers, such as the Planning Bureau, PB (Grafeio Programmatismou, GP), the Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO), the MoEC and the MLSI, use these forecasts in order to develop appropriate policy responses for adapting to the forecasted situation in the labour market.
- Public and private organisations involved in human resource planning such as the Public Employment Services and the social partners (employers' organisations and trade unions) use these forecasts in their line of work.
- People involved in counselling such as secondary education vocational guidance teachers and employment counselors use these forecasts as a tool in the provision of advice and counsel.
- Finally, these forecasts are widely used by the public in general and more specifically parents and students wishing to choose an occupation or to pursue further studies.

# **70105** Financing the anticipation of skill needs

The main organisations that are involved in the forecasts are the Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO), the Planning Bureau, PB (Grafeio Programmatismou, GP) and the Human Resource Development Authority, HRDA, (Archi Anaptyxis Anthropinou Dynamikou, AnAD). They cover their own relevant costs, whereas the Statistical Service provides all the necessary data.

# **Statistical data**

There are no figures available on public and private investment for the anticipation of skill needs in Cyprus.

# 702 DEVELOPING QUALIFICATIONS: GENERAL BACKGROUND

In Cyprus until recently there has been relatively limited implementation of frameworks and mechanisms on qualifications development. The European Parliament has formally adopted a European Qualifications Framework (EQF) in February 2008. In Cyprus, a national committee has been set up for the establishment of a NQF.

Additionally, Cyprus has initiated a process of national consultation with all VET stakeholders towards the development of a European Credit Transfer System for Vocational Education and Training (ECVET).

The development of a Competence-Based System of Vocational Qualifications is a high priority objective, for which Cyprus has committed itself towards the European Commission (see 70201). The System will be established and implemented in two phases.

As far as the regulated professions are concerned, the Republic of Cyprus has introduced relevant national legislation (Nos 179(I)/2002, 121(I)/2003 and 157(I)/2004) in order to transpose the European Union Directives for the mutual recognition of professional qualifications, which are regulated by a specific law in member states. Seven other sectoral directives were adopted by the EU and transposed to the Cyprus law by the relevant competent bodies. Furthermore, Cyprus is at the final stages of fully implementing the new directive 2005/36/EC regulating the recognition of professional qualifications of both the General and Sectoral System.

The Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) is responsible for the validation of formal education, including Technical Schools (Technikes Scholes, TS) and the Apprenticeship System (Systima Mathiteias).

Two other independent bodies are important in the assessment of tertiary education institutions and the recognition of tertiary education diplomas: the Council for Educational Assessment and Accreditation, SEKAP (Symvoulio Ekpaideftikis Axiologisis kai Pistopoiisis) and the Cyprus Council for the Recognition of Higher Education Qualifications, KYSATS (Kypriako Symvoulio Anagnorisis Titlon Spoudon).

# 70201 Policy development on developing qualifications

The European Qualifications Framework (EQF) is a common European reference framework which links countries qualifications systems together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe.

Following discussions amongst government departments in October 2005, Cyprus has initiated a debate amongst numerous public and private stakeholders in the field of learning, including the social partners, for contributing towards the development of Cyprus' position on the EQF initiative. The EQF initiative was presented, analysed and discussed in early January 2006 and the participants were then asked to prepare and submit their proposals. On the basis of these proposals and further consultations and discussions, Cyprus has developed and submitted its position to the European Commission. The European Commission amended its proposal, drawing from the input of all the countries. The European Parliament and Council successfully negotiated the proposal during 2007, leading to the EQF's formal adoption in February 2008.

At the same time the same stakeholders have started discussing and debating about the development of a National Qualifications Framework (NQF) in Cyprus. A national committee has been set up for the establishment of a NQF.

The Ministry coordinating the consultation process for the implementation of an EQF as well as for the design and development of an NQF is the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP).

The European Credit Transfer System for Vocational Education and Training (ECVET) is part of the overall project for developing European cooperation in the field of vocational education and training and constitutes one of its operational tools. In this regard, ECVET complements the EQF. The MoEC has initiated a process of national consultation with all VET stakeholders and has submitted to the EU the results of the national consultation.

Within the above policy and action framework, Cyprus has committed itself towards the European Commission for the development of a Competence-Based System of Vocational Qualifications. This is a high priority objective, which is included in the National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) and the National Lifelong Learning Strategy (Ethniki Stratigiki Dia Viou Mathisis).

The Board of Governors of the Human Resource Development Authority, HRDA, (Archi Anaptyxis Anthropinou Dynamikou, AnAD) in May 2005 and subsequently the Council of Ministers (Ypourgiko Symvoulio) in November 2005 approved a detailed proposal, for the establishment and implementation of a System of Vocational Qualifications in 2 phases (1<sup>st</sup> phase: 2006 - 2008 and 2<sup>nd</sup> phase: 2007-2013).

Furthermore, the Council of Ministers decided to include the 2<sup>nd</sup> phase of the System of Vocational Qualifications, in the activities to be co-financed

by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT) during the period 2007-2013. The future development of the System of Vocational Qualifications will be decided, based on the evaluation of results after the implementation of the  $\mathbf{1}^{\text{st}}$  and  $\mathbf{2}^{\text{nd}}$  phases of the System, the overall aim being to cover the main occupations in all economic sectors.

The European Union, in order to overcome the obstacles in the free access and pursuit of professions, which are regulated by a specific law in member states, adopted a series of Directives. Cyprus has introduced relevant national legislation. The Competent Bodies for the regulated professions are appointed by law in order to recognise professional qualifications and give permission to pursue a regulated profession in Cyprus.

The MoEC is responsible for the validation of formal education, including Technical Schools (Technikes Scholes, TS) and the Apprenticeship System (Systima Mathiteias).

The Council for Educational Assessment and Accreditation, SEKAP (Symvoulio Ekpaideftikis Axiologisis kai Pistopoiisis) is an independent body that advises the Minister of Education and Culture (Ypourgos Paideias kai Politismou) on issues concerning the establishment, control and operation of tertiary institutions in Cyprus.

The Cyprus Council for the Recognition of Higher Education Qualifications, KYSATS (Kypriako Symvoulio Anagnorisis Titlon Spoudon), an independent body, is the competent authority responsible for the recognition of diplomas, which were awarded from institutions of higher education, recognised in the country they operate. A recent modification of the law of KYSATS allows the Council to recognise, at its discretion, transfer credits based on previous work experience as part of a formal degree title.

# <u>Strengths and weaknesses of the national policy on qualifications development</u>

- There is active involvement of all major stakeholders including the Social Partners, in the consultation process for the creation of an EQF, the consultations for ECVET, as well as for the development of Standards of Vocational Qualifications.
- The System of Vocational Qualifications is Competence-Based and it is expected to have a positive impact on the productivity of human resources. Its main strengths are:

- Sectoral and occupational coverage of qualifications is being promoted and opportunities for access are expected to be provided to everyone including employees, unemployed, economically inactive persons as well as students, apprentices and trainees participating in initial vocational training programmes.
- The assessment of the participants is independent of the way they acquired their knowledge and skills.
- There is limited financial burden of employers and employees participating in the System of Vocational Qualifications.
- As a consequence of the tradition of seeking consensus amongst the various stakeholders for the development of new policy initiatives at national level, which usually takes time, a National Qualifications Framework has not yet been established in Cyprus.

# Policy initiatives on specific target groups

During the 1<sup>st</sup> phase of the System of Vocational Qualifications, which covers the period 2006-2008, 5 Standards of Vocational Qualifications at level 2 have been developed in 3 economic sectors for the occupations of waiter, cook, receptionist, construction mason and sales person. Opportunities for access were provided to employees.

During the 2<sup>nd</sup> phase, which covers the period 2007 – 2013 and will be cofinanced by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT), the development of 67 new standards in priority occupations at various levels is envisaged and opportunities for access are expected to be provided to employees, unemployed and economically inactive persons. Furthermore, it will be examined how the System will incorporate the branches / specialisations of Technical and Vocational Schools and the Apprenticeship System as well as other initial vocational training programmes. The standards to be developed will cover a broader range of occupations in the sectors of Retail and Wholesale Trade, Repairs of Motor Vehicles, Hotels and Restaurants, Construction, Manufacturing, Systems and Networks of Communication and Computers, Hairdressing as well as the occupation of Trainer of Vocational Training.

# **70202** Legal, administrative and institutional framework

The legal and institutional framework for developing qualifications, which is described below, concerns the System of Vocational Qualifications, the Regulated professions, Accreditation / certification of the programmes of study, Recognition of diplomas and Validation of formal vocational education.

# **Legal framework**

# System of Vocational Qualifications

The Human Resource Development Law of 1999 (No 125 (I)/99) broadened the powers of the Human Resource Development Authority (HRDA) and gave new impetus to the issue of the System of Vocational Qualifications. More specifically, the new law clearly places the power and authority on the HRDA to "set standards of vocational qualifications for any category or categories of persons employed, provide for the assessment and issue the relevant certificates of vocational qualifications".

#### Regulated professions

The European Union, in order to overcome the obstacles in the free access and pursuit of professions, which are regulated by a specific law in member states, adopted a series of Directives. For the harmonisation with the three Directives on the General System for the Recognition of Professional Qualifications (Directives 89/48/EEC, 92/51/EEC and 99/42/EC), the Parliament of the Republic of Cyprus has introduced relevant national legislation (Nos 179(I)/2002, 121(I)/2003 and 157(I)/2004) in order to apply the General System.

Seven other sectoral directives were adopted by the EU and transposed to the Cyprus law by the relevant competent bodies. These sectoral directives refer to the professions of nurse responsible for general care (No 154(I)/2003), dental practitioner (No 82(I)/2004), veterinary surgeon (Nos 176(I)/2002, 145(I)/2003, 233(I)/2004), midwife (No 154(I)/2003), architect (Nos 221(I)/2002, 151(I)/2003), pharmacist (Nos 178(I)/2002 and 89(I)/2003) and doctor (No 102(I)/2003).

Furthermore, directive 2005/36/EC, adopted on 7 September 2005, consolidates and modernises the rules currently regulating the recognition of professional qualifications of both the General System and Sectoral. On 20 October 2007, at the end of the transposition period, this directive replaced all existing laws in the field of the recognition of professional qualifications. Cyprus has introduced the law 31 (I)/2008 for partly transposing the directive 2005/36/EC (with regard to the General Provisions and the General System) and is at the final stages of introducing seven new sectoral laws in order to fully transpose this directive.

#### Accreditation / certification of the programmes of study

Law 67(I)/96 regulates the Establishment, Control and Operation of Institutions of Tertiary Education in Cyprus.

# Recognition of diplomas

The laws of the Republic of Cyprus, which govern the "Recognition of Titles of Higher Education and Provision of Relevant Information", are Laws 68(I)/96 and 48(I)/98. The regulations concerning the recognition of diplomas of higher education and the provision of relevant information were promulgated by the Council of Ministers, approved by the House of Parliament and published in the official gazette of the Republic of Cyprus.

# **Institutional framework**

#### System of Vocational Qualifications

Cyprus has committed itself towards the European Commission for the development of a System of Vocational Qualifications. This is a high priority objective, which is stated in the National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) and the National Lifelong Learning Strategy (Ethniki Stratigiki Dia Viou Mathisis). The HRDA has the responsibility for the establishment and operation of a System of Vocational Qualifications whereas all major stakeholders are actively involved.

# Regulated professions

The competent authorities for the implementation of the General and Sectoral System are: the National Coordinator (appointed by the Council of Ministers (Ypourgiko Symvoulio)), the National Focal Point (the Labour Department of the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA)) and the Competent Body appointed by law or regulation for the recognition of the right to pursue a regulated profession in Cyprus.

# Accreditation / certification of the programmes of study

The Council for Educational Assessment and Accreditation, SEKAP (Symvoulio Ekpaideftikis Axiologisis kai Pistopoiisis) is an independent body that advises the Minister of Education and Culture (Ypourgos Paideias kai Politismou) on issues concerning the establishment, control and operation of tertiary institutions in Cyprus. It consists of seven senior academics, of international standing, appointed by the Council of Ministers after the recommendation of the Minister of Education and Culture. It is recognised internationally and is a member of the European Network of Quality Association (ENQA), the European University Association (EUA) and the International Quality Assurance Agency in Higher Education (INQAAHE).

# Recognition of diplomas

The Cyprus Council for the Recognition of Higher Education Qualifications, KYSATS (Kypriako Symvoulio Anagnorisis Titlon Spoudon), an independent body, is the competent authority responsible for the recognition of diplomas, which were awarded from institutions of higher education, recognised in the country they operate. It consists of seven members and it is appointed by the Council of Ministers after the recommendation of the Minister of Education and Culture. It serves the role of the National Academic Recognition Information Centre (NARIC) for Cyprus. The recognition of diplomas is based on the directives of UNESCO and the Council of Europe.

#### Validation of formal vocational education

The Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) is responsible for the validation of formal education, including Technical Schools (Technikes Scholes, TS) and the Apprenticeship System (Systima Mathiteias).

# **Summary Table**

The institutions / bodies and their responsibilities in the development of qualifications are presented in Table 1.

Table 1: Institutions / bodies and their responsibilities

Institution / body	Responsibilities
Ministry of Education and Culture	Development of NQF
	Consultation process for ECVET
	Validation of Formal Education
Human Resource Development Authority	Establishment and operation of a System of Vocational Qualifications
Competent bodies for regulated professions	Recognition of the right to pursue a regulated profession
Council for Educational Assessment and Accreditation	Accreditation / certification of the programmes of study offered by tertiary education institutions
Cyprus Council for the Recognition of Higher Education Qualifications	Recognition of diplomas awarded from institutions of higher education

# 70203 Methods, approaches, practices and tools used

The Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) is responsible for the validation of formal education, including Technical Schools (Technikes Scholes, TS) and the Apprenticeship System (Systima Mathiteias). Additionally, the MoEC coordinates the consultation process for the design and development of a National Qualifications Framework (NQF).

The methods, approaches, practices and tools used in Cyprus for developing qualifications concern the following:

- System of Vocational Qualifications.
- Regulated professions.
- Accreditation / certification of programmes of study.
- Recognition of diplomas.

# **System of Vocational Qualifications**

The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) has the responsibility for the establishment and operation of a System of Vocational Qualifications.

The System of Vocational Qualifications is based on Standards of Vocational Qualifications, which are developed by tripartite technical Sectoral Committees of Vocational Qualifications, which, in cooperation with the standard developer, finalise the content of the Standard. The HRDA Board of Governors gives the final approval for the Standard.

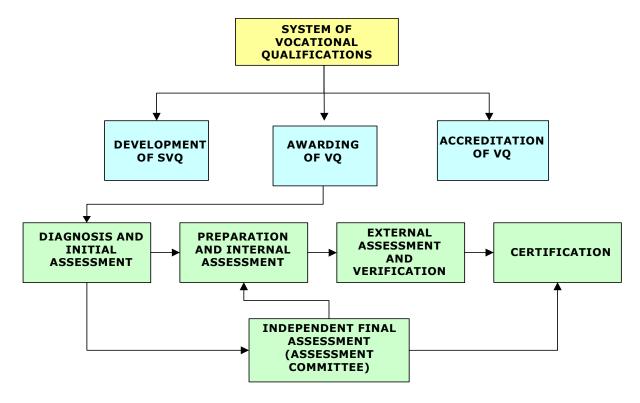
The System is designed specifically for the assessment and certification of the knowledge, skills and competences of a person in a working environment under normal working conditions at a predetermined level of occupation. Candidates can be registered and participate in the awarding procedure including the assessment and certification procedure to acquire the qualification, independently of how and when they acquired the relevant knowledge and skills.

The three main functions of the System are shown below whereas the basic functions are depicted in Table 1.

- Development of Standards of Vocational Qualifications (SVQ).
- Awarding of Vocational Qualifications (VQ), including diagnosis, preparation of the candidate, assessment and certification.

Accreditation of VQ.

Table 1: Basic functions of the System of Vocational Qualifications



During the 1<sup>st</sup> phase, in the period 2006-2008, five Standards were developed as shown in Table 2. Thereafter, from June 2006 onwards, opportunities for access were provided to employees. During the 1<sup>st</sup> phase and up to June 2008 390 persons applied to participate in the System and 132 persons were awarded the certificate.

Table 2: The five Standards of Vocational Qualifications

<b>Economic Sector</b>	Occupation	
	Waiter	
Hotels and Restaurants	Cook	
	Receptionist	
Construction	Construction Mason	
Retail Trade	Sales person (Retail Operations)	

During the 1<sup>st</sup> phase, the employees that participate in the system must have the approval of their employers who appoint an internal assessor. The candidate's application is initially assessed by the external assessor / verifier and it is decided whether the candidate will proceed to the final or to an analytical assessment. After the completion of the assessment process, the result is validated and the certificate of Vocational Qualification is awarded to the successful candidates.

During the 2<sup>nd</sup> phase, which covers the period 2007 – 2013, the development of 67 new standards in priority occupations at various levels is envisaged and opportunities for access are expected to be provided to employees, unemployed and economically inactive persons. Furthermore, it will be examined how the System will incorporate the branches / specialisations of Technical and Vocational Schools and the Apprenticeship System as well as other initial vocational training programmes. The standards to be developed will cover a broader range of occupations in the sectors of Retail and Wholesale Trade, Repairs of Motor Vehicles, Hotels and Restaurants, Construction, Manufacturing, Systems and Networks of Communication and Computers, Hairdressing as well as the occupation of Trainer of Vocational Training. The 2<sup>nd</sup> phase of the System of Vocational Qualifications is included in the projects to be co-financed by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT) during the programming period 2007-2013.

# Regulated professions

The European Union adopted a series of Directives in order to overcome the obstacles in the free access and pursuit of professions, which are regulated by a specific law in member states. The Republic of Cyprus has introduced relevant national legislation (Nos 179(I)/2002, 121(I)/2003 and 157(I)/2004) in order to transpose these Directives. This system grants the citizens of the European Union and the countries of the European Economic Area, who can pursue a regulated profession in their country of origin, or the country they come from, the freedom to pursue, in a self-employed capacity or as employed persons, the same regulated profession in the Republic of Cyprus. This freedom and this system exist for Cypriot nationals as well who wish to pursue a regulated profession in any of the countries mentioned above. The competent authorities for the implementation of the General System are: the National Coordinator (appointed by the Council of Ministers), the National Focal Point (Department of Labour (Tmima Ergasias) of the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA)) and the Competent Bodies appointed by law for the recognition of the right to pursue a regulated profession in Cyprus.

For the sectoral qualifications, which include the professions of nurse responsible for general care, dental practitioner, veterinary surgeon, midwife, architect, pharmacist and doctor, the Competent Bodies are the relevant professional bodies for each occupation.

The Competent Bodies do not develop any qualifications or job profiles. Each appointed Competent Body applies the law for the specific regulated profession. The criteria include professional qualifications, professional experience, training and compensation measures (adaptation period, aptitude test). Each person in pursuit of a regulated profession has to

apply to this body and the application is examined according to the set criteria.

# <u>Accreditation / certification of the programmes of study</u>

The Council for Educational Assessment and Accreditation, SEKAP (Symvoulio Ekpaideftikis Axiologisis kai Pistopoiisis) is an independent body that advises the Minister of Education and Culture (Ypourgos Paideias kai Politismou) on issues concerning the establishment, control and operation of tertiary institutions in Cyprus. These tertiary education offer specific courses leading to the certificate/diploma/degree including post-graduate programmes as well. It should be noted, however, that registration of a private tertiary education institution does not imply recognition of the degrees awarded by these institutions. Recognition is possible only after the successful accreditation of the programmes of study offered.

## **Recognition of diplomas**

The Cyprus Council for the Recognition of Higher Education Qualifications, (Kypriako Symvoulio Anagnorisis Titlon Spoudon), independent body, is the competent authority responsible for the recognition of diplomas, which were awarded from institutions of higher education, recognised in the country they operate. According to the laws and regulations that control the council's role, KYSATS evaluates academic qualifications granting them recognition of equivalence or equivalence and correspondence only in the case when the academic title is awarded by an accredited education establishment recognised in the country it operates or if the academic title has been conferred by an evaluated - accredited programme of study. It must be noted that an evaluated - accredited programme of study means the one, which has been evaluated and accredited, by the competent National Authority responsible for the evaluation – accreditation in the country where the programme is offered.

# 70204 Building partnerships and raising awareness

The existing partnerships and cooperation with the involvement of social partners for developing new qualifications as well as the main initiatives used for spreading awareness about new qualifications developments, are described below.

## **Building partnerships to develop new qualifications**

Cyprus initiated a debate amongst numerous public and private stakeholders in the field of learning, including the social partners, for contributing towards the development of Cyprus' position on the European Qualifications Framework (EQF), the design and development of a National Qualifications Framework (NQF) and the European Credit Transfer System for Vocational Education and Training (ECVET).

The System of Vocational Qualifications is based on Standards of Vocational Qualifications, which are developed by technical Sectoral Committees of Vocational Qualifications. These consist of representatives of the social partners (government, employers' and employees' organisations) and other professionals. The Standard is finally approved by the Board of Governors of the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD), which has a tripartite character where representatives of the Government, the Employers' organisations and the Trade Unions participate.

# Main initiatives for raising awareness and promoting the System of Vocational Qualifications

## Regional and sectoral meetings

The HRDA has organised regional and sectoral meetings and contacted interested enterprises from the three economic sectors for which the System of Vocational Qualifications has been implemented during the  $1^{\rm st}$  phase. During these meetings, the System of Vocational Qualifications was presented analytically with special reference to the benefits it creates.

Employees' and Employers' Organisations, professional associations and other stakeholders have also been contacted to discuss specific, appropriate and effective actions that could be undertaken by them for the promotion of the System of Vocational Qualifications.

A special conference was organised in May 2007 with the participation of social partners (Employees' and Employers' Organisations) and various stakeholders in order to create awareness, promote the System and exchange views on its future development.

#### Website

Additionally, there is a section in the HRDA webpage for the System of Vocational Qualifications, with an overview of the system, an analytical description of the five Standards that have been developed and information on how to participate in the system including appropriate application forms.

#### Articles

Information about the System of Vocational Qualifications is disseminated to the public through the mass media. Furthermore, an issue of the HRDA

magazine was dedicated to vocational qualifications containing a relevant analytical article on the System.

# 70205 Financing the development of new qualifications

The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) has the responsibility for the establishment and operation of a System of Vocational Qualifications. During the 1<sup>st</sup> phase of the System, the HRDA covered the cost of its implementation and operation. The approval by the Council of Ministers (Ypourgiko Symvoulio) included a provision for the utilisation of the infrastructure of public training institutions and the trainers themselves.

The 2<sup>nd</sup> phase of the Standards has been submitted as one of the projects to be co-financed by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT) during the period 2007-2013 and the HRDA will be the national contributor.

The government is responsible for financing the operations of the Council for Educational Assessment and Accreditation, SEKAP (Symvoulio Ekpaideftikis Axiologisis kai Pistopoiisis) and the Cyprus Council for the Recognition of Higher Education Qualifications, KYSATS (Kypriako Symvoulio Anagnorisis Titlon Spoudon).

## **Statistical data**

There are no figures available on the investment for the development of new qualifications in Cyprus.

#### 703 INNOVATIVE PEDAGOGIES: GENERAL BACKGROUND

The government is promoting major reforms at all levels of education, including Secondary Technical and Vocational Education, STVE (Defterovathmia Techniki kai Epangelmatiki Ekpaidefsi, DTEE) and the Apprenticeship System (Systima Mathiteias). Furthermore, the operation of the Open University of Cyprus, OUC (Anikto Panepistimio Kyprou, APKy), created a new impetus for lifelong learning, while the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) has further promoted the adoption of eLearning methods and approaches.

The Strategic Development Plan 2007-2013, SDP (Stratigiko Schedio Anaptyksis, SSA) sets the overall policy and targets for the development of the Cyprus economy, including human resource development. The National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) includes measures aiming, among others, at the continuous improvement of the quality of education at all levels.

Furthermore, the Lifelong Learning (LLL) Strategy (Ethniki Stratigiki Dia Viou Mathisis, DVM) for Cyprus, completed in 2007, includes actions and measures towards improving the education and training systems, their content and infrastructure.

The main aims of the Education Reform (Ekpaideftiki Metarithmisi) include the improvement of the quality of the education system and the modernisation of the curricula and teaching methods.

There is no formal national definition for the term «innovative pedagogies». Informally however, the term signifies the effective use of imaginative, creative and inventive approaches and methodologies in order to achieve the objectives set out by each curriculum.

During the last reform and modernisation of the curricula offered by STVE in Cyprus, the implementation of which was completed in 2004, all the stakeholders involved, i.e. the Advisory Committee for STVE, the Branches and Specialties Advisory Committees for STVE, the Employers' Organisations, the Employees' Organisations and the HRDA, agreed on the definition of the term «curriculum», which includes the training objectives, the content, the teaching material, the student's profile and suggested approaches and methods in order to achieve the training objectives.

# 70301 Policy development on innovative pedagogies

The government is promoting major reforms at all levels of education, including Secondary Technical and Vocational Education STVE (Defterovathmia Techniki kai Epangelmatiki Ekpaidefsi, DTEE) and also a

redesign of the Apprenticeship System (Systima Mathiteias). Furthermore, the Open University of Cyprus, OUC (Anikto Panepistimio Kyprou, APKy), promotes lifelong learning and has established distance-learning programmes that are mainly based on eLearning methods and approaches. Finally, the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD), has increased the number of training courses in the field of ICT that receive a subsidy and has further promoted the adoption of eLearning methods and approaches.

## **Policy priorities and initiatives**

#### **Education Reform Process**

A public dialogue is underway and a number of working groups have prepared suggestions on concrete measures to be implemented. The main priorities identified for the structured nationwide consultation to promote the educational reform are the following:

- Resetting the aims of the education systems and programmes of study from pre-primary education through to upper secondary education.
- Differentiation of the teaching in class, in order to give emphasis to cooperative, team, experiential and exploratory teaching methods.
- Incorporation of new technologies in the education and training systems.
- Creation of modern infrastructure through upgrading the building facilities and modernisation of their equipment.
- Confrontation of school failure, which is a basic prerequisite for decreasing the number of students that drop out of school.
- Improving and restructuring the system of the pre-service and the inservice education and training of educators.
- Further reinforcement of special education in order to limit the danger of exclusion of socially vulnerable students.
- Reform of the structure of the education system from pre-primary education through to tertiary education.
- Further development of higher education for exploitation of its capacity and reinforcement of its role towards achieving the Lisbon objectives.

In the context of the Education Reform, the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) is currently preparing a full restructuring of the National Curriculum, in cooperation with the University of Cyprus, UCY (Panepistimio Kyprou, PK).

## Secondary Technical and Vocational Education

During the last reform of the STVE curricula, the implementation of which was completed in 2004, the following were introduced:

- Sample teachings using innovative approaches, in order for teachers to be able to exchange good practice.
- Special seminars.
- Establishment of a Learning Management System.
- Effective use of the software and learning tools during class time, aiming at the consolidation of the material taught.
- Development of Learning Projects.

According to each curriculum, there is a set of specific knowledge, competencies and skills that the learner must acquire. Therefore, constant assessment is carried out in order to determine whether these objectives have been achieved and to what extent. Moreover, at the end of every school year, a final assessment of the degree of achieving the goals set out by each curriculum is carried out.

STVE in Cyprus is currently in the process of revising, modernising and upgrading the curricula it offers, while at the same time modernising the teaching and learning processes. A comprehensive and scientific external evaluation of the curricula offered by STVE is currently underway. The external evaluation of the STVE curricula is co-financed by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT) with the amount of €594.593 (Measure 2.2.2 Improvement and Reinforcement of Secondary Technical and Vocational Education). The curricula will be revised according to the conclusions reached by the external evaluation. The revision of the curricula is expected to be completed in 2008.

Furthermore, in order to improve both the quality and attractiveness of STVE, the MoEC continues its policy of developing the infrastructure of Technical and Vocational Schools and also of introducing Modern Technology in the STVE curricula.

### Redesign of the Apprenticeship System

In addition to the above, some improvements are being implemented regarding the existing Apprenticeship System so as to sustain it until the New Modern Apprenticeship will be in place.

The Council of Ministers (Ypourgiko Symvoulio) decided (May 2005) that the responsibility for the operation of the Apprenticeship System be undertaken by the Cyprus Productivity Centre, CPC (Kentro Paragogikotitas, KEPA), a dedicated centre of the Ministry of Labour and

Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA). The responsibility for training the apprentices remains with the MoEC.

In this context the System will be re-examined along two phases:

- Short term improvements, through:
  - a. Upgrading the Apprenticeship System, with co-financing by the ESF, by reviewing the analytical programmes, training the teaching staff, and by acquiring software and other support material, which is undertaken by the MoEC, expected to be completed in 2008 and
  - b. Improving the administration and management of the system, including the monitoring and the supervision of both the inclass and the in-company training process, which is undertaken by the CPC.
- Long term radical improvements, through the design of a New Modern Apprenticeship (NAM) with significant changes in the philosophy, the structures, systems and processes, in order to provide an alternative education and training pathway to young persons who reject / drop out of the formal education system, including the possibility of widening the coverage to accommodate possible needs of young people of wider age ranges. Also the NMA aims at attracting a greater number of girls and broadening the range of skills.

The proposal for the establishment of the NMA was approved by the Council of Ministers in November 2007. Following a transitional period of two years during which parts of the current apprenticeship scheme will coexist with parts of the new apprenticeship, it will become fully operational in 2010, and as from 2011 post secondary apprenticeship will be incorporated into the system.

The main strategic objectives of the NMA are:

- To provide a learning pathway for young persons who withdraw from the education system early, so that they are able to lean how to learn, acquire and/or upgrade their skills, and become more employable and more able to progress in their career.
- To increase the supply of labour with persons qualified to meet the needs of the economy, to ensure mobility between education, apprenticeship and employment, and to minimise the risk of social exclusion.

The NMA will embrace young people between 14 and 25 at three levels (preparatory apprenticeship, core apprenticeship and post-secondary apprenticeship), will be supported by an internal research and

development centre, and will be linked to the national System of Vocational Qualifications established and implemented by the HRDA.

The proposal for a NMA is being promoted for inclusion in the programmes to be co-financed by the EU within the framework of the new programming period 2007-2013.

## **Open University**

On 25 April 2001, the Council of Ministers decided on the establishment of the OUC in order to promote lifelong learning and establish distance-learning programmes that will be mainly based on eLearning. The OUC commenced its operations in September 2006 and now offers the following programmes of study:

- o Post-graduate Programme in Management of Health Services.
- o Post-graduate Programme in Education.
- o Post-graduate programme in Information Systems.
- o Under-graduate programme in Hellenic Civilisation.

In the future, more undergraduate and post-graduate programmes are expected to be provided as well as short training programmes. It is expected that the OUC will have a great impact on the development of eLearning in Cyprus and in the education system in general.

### Human Resource Development Authority

The continuing training programmes that are approved and subsidised by the HRDA should be designed on the basis of the HRDA's annual thematic priority setting, which is communicated to all training institutions/providers. On the basis of these thematic priorities the training continuing institutions/providers submit multi-company programmes to the HRDA every six months. The HRDA in the last few years has increased the number of training courses in the field of ICT that receive a subsidy and has further promoted the adoption of eLearning methods and techniques.

# <u>Strengths and weaknesses of national policy on innovative pedagogies</u>

- Major reforms of the education system are being promoted in the framework of the Education Reform process, including changes in the curricula, the introduction of innovative methods and the incorporation of new technologies.
- The major stakeholders in VET have recognised the need to introduce innovative pedagogies.

- There exists a good working relationship between VET providers and the enterprises.
- The social partners and all major stakeholders are actively involved in the design of the curricula.
- A comprehensive and scientific external evaluation of the STVE curricula is underway.
- A weakness of the Cyprus policy on introducing innovative pedagogies is the lack of criteria, in the system of teachers' evaluation, which would determine the extent of the implementation of innovative pedagogies in their teaching methodology.

# **70302** Legal, administrative and institutional framework

The legal, administrative and institutional framework on innovative pedagogies and on curriculum development are analysed below.

# <u>Legal, administrative and institutional framework on innovative</u> pedagogies

There are no legal regulations that define the need and/or the course of action for introducing innovative pedagogies in VET.

The Strategic Development Plan 2007-2013, SDP (Stratigiko Schedio Anaptyksis, SSA) sets the overall policy and targets for the development of the Cyprus economy, including human resource development. The National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) includes measures aiming, among others, at the continuous improvement of the quality of education at all levels. One action concerns the introduction of modern technology in education, while another action aims at ensuring that secondary education teachers will become digitally literate and will acquire skills to implement the new ICT oriented curricula, both co-financed by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT).

The Lifelong Learning (LLL) Strategy for Cyprus (Ethniki Stratigiki Dia Viou Mathisis, DVM), completed in 2007, which was one of the main priorities of the National Lisbon Programme, includes actions and measures towards improving the education and training systems, their content and infrastructure, in order to meet the educational and training needs of a modern European-Cypriot society.

The Education Reform, the dialogue which has been initiated in 2005 for the restructuring and modernisation of the Cyprus Education System after a comprehensive study performed by a group of experts in education, constitutes a key vehicle of the LLL Strategy. The main aims of the reform include the improvement of the quality of the education system and the modernisation of the curricula and teaching methods.

The Constitution of the Republic of Cyprus, assigns to the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) the responsibility for managing the various levels of public education. The Directorate of Secondary Technical and Vocational Education, STVE (Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis, DTEE) of the MoEC initiates the development of mechanisms and actions for introducing innovative pedagogies. The Directorate undertakes to engage the most suitable individuals and/or organisations in the development of mechanisms for the introduction of innovative teaching methodologies and approaches.

Other ministries are active in the provision of education and training. All such activities are legitimised by decisions of the Council of Ministers (Ypourgiko Symvoulio) and/or Acts passed by the House of Representatives (Vouli ton Antiprosopon).

The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) approves and subsidises training programmes that are designed on the basis of the annual priorities that the HRDA sets and which are communicated to all training institutions / providers. The introduction of innovative pedagogies, ICT and eLearning methods and processes is promoted in this way.

# Legal, administrative and institutional framework on curriculum development

There is a set of laws which cover pre-primary, primary, secondary general and secondary technical and vocational institutions, namely Nos 5/71, 56/83, 123/85 and 154 (I)/99. There are no legal regulations that define the need and/or the course of action for introducing innovative pedagogies in VET and for modernising VET curricula.

The Directorate of STVE of the MoEC is responsible for curriculum development for STVE, for providing ICT in Technical Schools (Technikes Scholes, TS) and for modernising VET curricula according to labour market needs and technological advances.

The Directorate of STVE is the main body involved in the modernisation of VET curricula. The Directorate undertakes to engage the most suitable individuals and/or organisations, both in the development of curricula and in the development of mechanisms for the introduction of innovative teaching methodologies and approaches. It is worth pointing out that during, or immediately after, the completion of curriculum development or

educational reform, a need for the introduction of innovative pedagogies is noticed.

The Directorate of STVE, in order to be able to re-examine and adapt the content of its curricula according to the needs of the Cyprus economy and industry, and taking into account the latest scientific and technological advances, has developed close cooperation with the following agencies:

- The Advisory Committee for STVE.
- The Branches and Specialties Advisory Committees for STVE.
- The organised agencies of employers and manufacturers (Employers' Organisations).
- The organised agencies of employees (Employees' Organisations).
- The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD).

Additionally, according to the Apprenticeship Law of 1966, the Apprenticeship Board is responsible for supervising the operation of the Apprenticeship System. The Joint Apprenticeship Committees (which are also regulated by the Apprenticeship Law of 1966) are responsible for the monitoring of the operation of the Apprenticeship System. The Council of Ministers decided (May 2005 with the decision 62.037) that the responsibility for the operation of the Apprenticeship System be Productivity undertaken by the Cyprus Centre, Paragogikotitas, KEPA), a dedicated centre of the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA) while the responsibility for training the apprentices remains with the MoEC.

On 25 April 2001, the Council of Ministers decided on the establishment of the Open University of Cyprus, OUC (Anikto Panepistimio Kyprou, APKy), in order to promote lifelong learning and establish distance learning in Cyprus. The House of Representatives approved Law 234(1) 2002 in December 2002.

The HRDA approves and subsidises training programmes that are designed on the basis of its annual thematic priorities setting and conform to the HRDA's quality requirements.

# 70303 Practices of innovative pedagogies in VET

The challenges facing Technical and Vocational Education, TVE (Techniki kai Epaggelmatiki Ekpaidefsi) in the twenty-first century and the demands of the contemporary workplace call for the constant development and implementation of learner-centred innovative and flexible approaches.

Therefore, the current system of Secondary Technical and Vocational Education, STVE (Defterovathmia Techniki kai Epangelmatiki Ekpaidefsi, DTEE) in Cyprus is based upon an instructional approach that places students, with their learning abilities, strengths, weaknesses, talents and interests, at the centre of the educational process, thus leading them to the acquisition of solid broad knowledge and generic skills, which will equip them with the capacity to solve problems, carry out research, learn how to learn and help them adapt to a changing environment. The STVE curricula place particular emphasis on subjects and issues such as modern technology, the environment, foreign languages and entrepreneurship. They also take into account the requirements of rapidly growing service industries.

## **Innovative pedagogies**

During curriculum design and development of STVE, efforts are made to include the introduction of innovative pedagogies. Apart from this, however, the introduction and implementation of innovative pedagogies is systematic and therefore the teaching methodologies that are employed are constantly enriched. As a result, modern teaching methods are constantly being introduced, including teamwork and creative learning techniques. Students are encouraged to take the initiative concerning their learning, while teachers are systematically trained in order to implement the new learner-centred teaching methods.

In an effort to provide students with the experience they need for their smooth entry into the labour market, machines and equipment used in laboratories and workshops simulate the workplace as closely as possible. As a result, students develop command of valuable practical skills such as tool use, repair and maintenance of equipment and safety procedures. Workshop and laboratory equipment is used systematically, through activities in the workshop and laboratory and active teaching methods. In the context of the Practical Direction, more emphasis is placed on practical skills, by allocating more workshop periods than in the context of the Theoretical Direction.

The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) organises a "Training of Trainers" programme that combines both a theoretical and a practical element. The curriculum takes into account training in specialist / new / traditional skills and pedagogies such as:

- Selection and utilisation of appropriate ICTs.
- Preparation of trainers to train in a variety of VET learning environments such as role play, team dynamics and games.
- Preparation of trainers to manage mixed groups of trainees.

## **Introduction of Modern Technology**

The philosophy and content of the STVE curricula aim, among other objectives, to incorporate modern technology in education, adapt to the new Information Society, improve the quality of life and harmonise the educational policy of Cyprus with that of the European Union.

A programme for the introduction of modern technology in Technical and Vocational Schools, the implementation of which commenced in September 1999 and was completed in 2006, included the following:

- The modernisation and completion of the equipment of existing workshops and of special schoolrooms.
- The integration of computers, in order to introduce innovative teaching methods.
- The upgrading of the subject of Computers and Information Technology.

The objectives of the programme were the following:

- The improvement of the quality of the Technical and Vocational Education, TVE (Techniki kai Epaggelmatiki Ekpaidefsi) that is offered, through the integration of modern technology.
- The development of the infrastructure required for the continuing education, training and guidance of the workforce, in the context of lifelong learning.
- The preparation of students for their smooth integration into a society, which is increasingly influenced by Information Technology.
- The training of the workforce, which will contribute to the improvement of the services offered, as well as to the development in various sectors of advanced technology.

## **Introduction of a Learning Management System**

In order to introduce modern technology in education, educational software was acquired. This Learning Management System called DIAS Internet School is co-funded by the European Social Fund and national funds.

The system will be fully implemented during the period 2008-2009. During the first year there will be a pilot implementation in 7 schools (4 lyceums and 3 technical schools). By 2009, when it will be fully implemented, it will cover all primary, secondary general and technical schools in Cyprus.

The system consists of hardware and software that will cover all the needs from a central point at the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP).

The system contains many interrelated programme packages in order to achieve the necessary provision to the users. Specifically, the software is a huge database in which about 300.000 users are inserted and the system controls the services that each user receives.

The parents will receive a login password with which they will have access through the Internet to specific data that concern solely their own children, such as absences, grades in tests, semester grades, educators and so on. The students will also have access, their own personal e-mail and will be able to input relevant data. They will also have access to lessons in different forms, homework, telecommunication with teachers, data concerning their studies, electronic libraries and the Internet.

The educators will also have access to pre-prepared lessons, libraries, videos and presentations in different forms that respond to the needs of each student as well as a system for the evaluation of students. The educators will also be responsible for the creation and running of a virtual classroom.

## **Impact on learning environment**

The introduction of innovative pedagogies is a relatively recent feature of curriculum development, while the Learning Management System will be fully implemented in 2009, therefore the impact of their implementation on the learning culture in VET will be assessed in the near future.

### **7030301** eLearning in VET (incl. Statistics)

Efforts to introduce eLearning into the Cyprus Educational System have been already made. As a result, there is the infrastructure and eLearning software for supporting the teaching of various IVET and CVET subjects. However, these efforts have been random and sporadic, therefore a more organised and comprehensive effort, which is co-funded by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT) is currently underway.

# National measures and policies for eLearning

The National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) includes measures aiming, among others, at the continuous improvement of the quality of education at all levels, mainly by the introduction of modern technologies in education and by ensuring that secondary education teachers become digitally literate and will acquire

skills to implement new, Information and Communication Technologies (ICT) oriented curricula during the period 2005-2008.

This measure includes the organisation of short training courses on core IT skills, as well as long term training on the implementation of new, IT oriented, analytical programmes in both General and Technical and Vocational Secondary Education.

In addition, the measure provides for the training of trainers, with a view to promoting in-school training by a relatively limited number of trained trainers and, finally, for the accreditation of the skills acquired by all teachers, in accordance with tested international standards.

All the programmes are, or will be, organised by the Pedagogical Institute, PI (Pedagogiko Instituto, PI), under the supervision of the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP).

More specifically, the measure aims at:

- The improvement of the quality of the rendered education through the utilisation of new technologies.
- The preparation of teachers and consequently students, for a smooth entry into the knowledge society that is constantly being influenced by modern technology, computers and information technology.
- The development of infrastructure for the continuous education and training of the teaching staff, within the context of lifelong learning.
- The development of human resources, which will contribute to the efforts for strengthening the provision of services, as well as the growth of the economy based on high technology sectors.

Due to the close relationship and cooperation between initial and continuing education, resulting in the transfer of expertise, good practices, resources, curricula and infrastructure between the two areas, the introduction of eLearning in mainstream schools will be implemented in continuing education programmes as well.

Cyprus is formulating an integrated National Information Society Strategy, the main objective of which is to take advantage of the potential offered by ICT to improve the competitiveness of all sectors of economic activity. Interventions, which will be co-financed by the ESF for the period 2007-2013, concern focused actions in two priority sectors:

 Strengthening eGovernment services: Improve the performance of public services by expanding government services available to the public via the Internet and improving their security within a general framework of electronic transactions and communication between companies and individuals and the administration.

 Extending eHealth services: Improve the standard of health services provided throughout the country and improve the efficiency with which they are provided by making use of ICT.

It is evident that the development of eLearning provision in Cyprus is a national goal and the primary effort is directed towards creating in a systematic way the necessary ICT infrastructure to support the development of Cyprus's human resources in the new ICT era.

## <u>Institutions that offer eLearning courses</u>

The state and development of eLearning in the activities of the main VET actors in Cyprus are described below.

## **IVET**

# Secondary Technical and Vocational Education

Contemporary educational technology is employed, particularly the Internet, interactive multimedia materials and audiovisual aids, in order to motivate students, promote self-learning and enhance the effectiveness, quality and richness of the programmes on offer. The Directorate of Secondary Technical and Vocational Education, STVE (Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis, DTEE) of the MoEC is currently in the process of adapting or even developing teaching and learning materials that use the information and communication technologies.

Additionally, in an effort to provide students with the experience they need for their smooth entry into the labour market, machines and equipment used in laboratories and workshops simulate the workplace as closely as possible. As a result, students develop a command of valuable practical skills such as tool use, repair and maintenance of equipment and safety procedures.

As far as the use of ICT in the technological and workshop practice subjects is concerned, the situation is as follows:

- The subject of Drawing and the subjects of Drawing that are specific to each specialty are taught to a great extent with the use of computers and special drawing software.
- Computers are an integral part of the teaching process in various specialties offered in STVE that involve drawing, such as Architecture, Graphic Design, Interior Design, Furniture Design and Production, and Fashion Design.

- Computers aid the teaching of various specialty subjects, for example electronically controlled tool machines (CNC machines, CAD/CAM Systems) are used in the branches of Mechanical Engineering, as well as Woodcraft and Furniture Making.
- Special software called Autotronics, which is operated with the use of computers, has been purchased in order to facilitate the teaching process of various technological and workshop practice subjects through simulations (especially in the branch of Electrical Engineering and the specialty of Automobile Engineering).
- Special software programmes that facilitate the teaching of various technological and workshop practice subjects have been purchased. In addition, computers are used as a means of projecting slides. The extent of the use of computers in these subjects depends on the availability of a projector and the willingness and ability of teachers to use modern technology.

## **CVET**

## **Human Resource Development Authority**

The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) activities related to information technology are: the studies it conducts, the annual thematic priorities for the multi-company training programmes, the single-company continuing training programmes, training programmes abroad, the training programmes for newly employed tertiary education graduates, the Training Infrastructure Support Scheme and the scheme for the enhancement of computer literacy of the unemployed. In the case of the continuing training programmes, ICTs are used as a learning tool in numerous subjects while at the same time training is provided for specific ICT related subjects.

#### Studies

During 2001 the HRDA carried out a study entitled "Utilisation of the Latest Training Methods and Technologies at the Threshold of the 21st Century". The major objective of the study was to investigate and formulate ways of improving the quality and effectiveness of the training provided in Cyprus with the introduction and utilisation of the latest training methods and technologies. From the findings of the study it was clear that training institutions and enterprises in Cyprus were utilising ICT for training purposes in a significant percentage and that they intended to increase such usage. More specifically:

o Around 50% of enterprises (employing more than 20 persons) were utilising ICT related methods and technologies in training.

- o More than 55% of these enterprises (employing more than 20 persons) were going to increase the usage of ICT related methods and technologies in training.
- o From the training institutions 67% had computers and 38% were using interactive multimedia.
- o 77% of training institutions were planning to invest in equipment in the next 3 years.
- o Suggestions were put forward for increasing the utilisation of the latest training methods and technologies.
- Thematic priorities for the multi-company training programmes

The HRDA prepares on an annual basis a document that contains the thematic priorities for multi-company programmes. This document is communicated to all training providers. The HRDA examines various programmes submitted by public and private training providers, which follow the thematic priorities, and subsidises the provision of continuing training. Amongst the thematic priorities information technology is prominently featured. Public training institutions cater mostly for technology and craft programmes while private institutions cater mostly for business, management, IT and service-oriented programmes.

• Single-company continuing training programme

The aim of these programmes is to meet the specific needs of the enterprise. ICT features prominently as one of the basic training needs of enterprises.

Training programmes abroad

The HRDA provides subsidies to employers for the costs of participation of their employees to approved training programmes abroad, both single-company and multi-company programmes. These programmes aim to meet the training needs of enterprises in fields related to the introduction and utilisation of new technology and technical know-how as well as business management innovations.

• Training programmes for newly employed tertiary education graduates

The HRDA promotes these programmes and their aim is to meet the need for strengthening the management capacity of enterprises through the employment and training of unemployed university and other tertiary education graduates. These programmes include both theoretical and practical training and the acquisition of IT- related skills is included in the curricula.

#### Overall CVT Results

As already mentioned a significant part of the continuing training programmes is on ICT related subjects. HRDA data for 2007 show that around 12% of the participants in continuing training programmes, approved and subsidised by the HRDA, received training on ICT related subjects. Additionally ICT is extensively used as a learning tool in the non-ICT related continuing training programmes.

## • Training Infrastructure Support Scheme

This scheme of the HRDA aims to strengthen the training infrastructure of enterprises and training institutions in order to provide training more effectively by the use of modern technologies and thus meet human resources training needs in sectors, occupations and areas of priority. Enterprises and training institutions can receive financial assistance from HRDA to create new or to improve the existing training infrastructure, which may include equipment and audio-visual aids, development of training specifications and training of trainers. Enterprises and training institutions wishing to benefit from the scheme submit a proposal to HRDA for approval before its implementation. Financial support under this scheme is provided in the form of net subsidies and has a ceiling of 30% for training providers and 45% for enterprises. Applications under the "de minimis" aid clause may receive up to a maximum sum of €100.000, provided that enterprises have not received any other state aid from any other source in the current three-year period. The design for the enrichment of the existing scheme started in June 2006. The enriched scheme is expected to become accessible and be utilised by the training providers and enterprises from January 2009 onwards. So far the scheme has been revised and approved as from 1/7/07 in order to correspond to the revised de-minimis regulation (1998/2006/EC).

## • Scheme for the enhancement of computer literacy of the unemployed

A scheme for the enhancement of computer literacy of the unemployed, which is also co-financed by the ESF, was developed and implemented over the period November 2006-December 2007. In 2007, 460 persons participated in the scheme. The scheme aimed to enhance the computer literacy and thus improve the employability of the unemployed with priority attached to young unemployed, women unemployed as well as groups of unemployed threatened by social exclusion e.g. older aged unemployed.

#### Ministry of Education and Culture

The MoEC is responsible for the Adult Education Centres, the Evening Technical School and the Afternoon and Evening classes of Technical Schools.

#### Adult Education Centres

There are 250 Adult Education Centres, both in the urban and rural areas in Cyprus, run by the Directorate of Primary Education (Diefthinsi Dimotikis Ekpaidefsis) of the MoEC, which offer a wide range of short or medium length courses that cover several interest areas. Amongst the subjects provided are introductory subjects on information technology.

# Afternoon and Evening Classes of Technical Schools

Technical and Vocational Education Programmes as well as preparatory classes for various examinations, are offered by the Directorate of Secondary Technical and Vocational Education during the afternoon and evening on the premises of Technical Schools in all major towns. Depending on the subjects, ICT is incorporated into the curricula and is used as a learning tool.

## Open University

On 25 April 2001, the Council of Ministers (Ypourgiko Symvoulio) decided on the establishment of the Open University of Cyprus, OUC (Anikto Panepistimio Kyprou, APKy), in order to promote lifelong learning and establish distance learning programmes that will be mainly based on eLearning. The Open University of Cyprus commenced its operations in September 2006 and now offers the following programmes of study:

- o Post-graduate Programme in Management of Health Services.
- o Post-graduate Programme in Education.
- o Post-graduate programme in Information Systems.
- o Under-graduate programme in Hellenic Civilisation.

In the future, more undergraduate and post-graduate programmes are expected to be provided as well as short training programmes. It is expected that the OUC will have a great impact on the development of eLearning in Cyprus and in the education system in general.

### <u>Public and private training institutions</u>

The training market is highly developed in Cyprus, which has been encouraged and strengthened primarily through the approval and consequent subsidisation provided by the HRDA. Public and private training institutions offer a variety of training programmes including large numbers of programmes on information technology. As there is substantial competition amongst these institutions, curricula and training tools have been adapted using the latest available ICTs.

One of the public training providers, the Cyprus Productivity Centre, CPC (Kentro Paragogikotitas, KEPA), a dedicated centre of the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA), is seeking a turnkey solution for the supply and implementation of a Learning Management System (LMS). The system will provide additional support to the centre's traditional training programs. CPC also plans to design and operate eLearning training programs in Greek, which will be tailor made so as to meet the specific needs of the business community in Cyprus.

## **Statistical data**

In Table 1, it is shown that the percentage of enterprises using eLearning applications for training and education of employees is higher in Cyprus compared to EU. Specifically in 2007, 74% of the large enterprises (250 and more employees) used eLearning applications compared to 45% in EU27, while the corresponding figures for SMEs (10-249 employees) were 42% in Cyprus and 23% in EU27. It has to be mentioned that through the Training Infrastructure Support Scheme of the HRDA, enterprises receive financial assistance to create new or to improve the existing training infrastructure in order to provide training more effectively by the use of modern technologies.

As shown in Table 2, the percentage of individuals having used the Internet within the last 3 months has increased in 2006 from 2004 (11,5% compared to 9,6% for formalised educational activities, 5,2% compared to 2,7% for other educational courses related to employment opportunities and 8,0% compared to 5,0% for post educational activities) and this is significantly higher in the younger age groups. One explanation for this increase in the percentages is the improved telecommunications infrastructure in Cyprus and the introduction of computers with access to the Internet in all schools. The percentages of individuals having used the Internet for formalised educational activities are higher in Cyprus than EU (11,5% compared to 8,3% in EU27), while they are lower for other educational courses related to employment opportunities (5,2% compared to 8,2% in EU27) and about the same for post educational courses (8,0% compared to 8,2% in EU27).

The percentage of individuals having accessed the Internet in the last 3 months, presented in Table 3, is lower in Cyprus than in EU27 (4% compared to 8% in EU27 in the place of education and 20% compared to 25% in EU27 in the place of work). The percentage of individuals having accessed the Internet in the last 3 months in the place of work has shown a small increase during the last two years. The implementation of measures under the National Information Society Strategy, such as eGovernment is expected to improve these figures.

Table 1: Percentage of enterprises using eLearning applications for training and education of employees, by size of enterprise (2005-2007)\*

	2005		20	006	2007		
Country	SMEs Large enterprises		SMEs	Large enterprises	SMEs	Large enterprises	
	(10-249	(250 and more	(10-249	(250 and more	(10-249	(250 and more	
	employees)	employees)	employees)	employees)	employees)	employees)	
EU27	20	42	20	43	23	45	
Cyprus	41	77	39	66	42	74	

Table 2: Percentage of individuals having used the Internet in relation to training and education within the last 3 months, by purpose and age group (2004-2006)\*

		2004			2005			2006		
Country	Age	For	For other	For post	For	For other	For post	For	For other	For post
	group	formalised	educational	educational	formalised	educational	educational	formalised	educational	educational
		educational	courses	courses	educational	courses	courses	educational	courses	courses
		activities	related to		activities	related to		activities	related to	
		(school,	employment		(school,	employment		(school,	employment	
		university	opportunities		university	opportunities		university	opportunities	
		etc)			etc)			etc)		
	16-24	34,3	11,7	:	29,5	10,2	9,2	27,7	11,1	12,3
EU27	25-54	7,9	11,1	:	7,3	8,6	6,2	6,9	10,5	9,6
EUZ/	55-64	2,0	3,5	:	1,6	2,5	2,8	1,7	3,8	4,6
	Total	10,1	8,7	:	8,8	6,8	5,4	8,3	8,2	8,2
Cyprus	16-24	28,3	4,0	9,2	28,9	2,4	7,6	29,4	8,9	16,8
	25-54	7,3	3,1	5,3	6,6	2,2	4,5	10,3	6,0	8,2
	55-64	1,6	0,5	1,2	0,8	0,2	0,8	3,5	1,1	2,3
	Total	9,6	2,7	5,0	9,0	1,8	4,1	11,5	5,2	8,0

: Not available

Table 3: Percentage of individuals having accessed the Internet in the last 3 months, by place of access and by age group (2005-2007)\*

		2005		20	06	2007		
Country	Age group	Place of education	Place of work (other than home)	Place of education	Place of work (other than home)	Place of education	Place of work (other than home)	
	16-24	39	12	39	13	39	15	
FU27	25-54	4	30	3	32	3	35	
EU27	55-64	1	13	1	13	1	15	
	Total	8	21	8	22	8	25	
Cyprus	16-24	26	6	29	9	25	8	
	25-54	0	20	1	24	0	30	
	55-64	0	5	0	7	0	8	
	Total	5	14	5	17	4	20	

Table 4: Percentage of individuals having obtained IT skills, by way/place of education/training (2006-2007)

		2006		2007			
Country	In formalised	In training	In training	In formalised	In training	In training	
	educational	courses and adult	courses and adult	educational	courses and adult	courses and adult	
	institution	education centres	education centres	institution	education centres	education centres	
	(school, college,	(on own	(on demand of	(school, college,	(on own	(on demand of	
	university etc)	initiative)	employer)	university etc)	initiative)	employer)	
EU27	21	11	16	22	11	17	
Cyprus	25	12	13	25	12	12	

Source for all tables: Eurostat, Information society statistics

<sup>\*</sup> For years 2004 and 2005 data for European Union refer to EU25

From Table 4 it is shown that the percentage of individuals having obtained IT skills is higher in Cyprus than the EU27 average in formalised educational institutions in 2007 (25% compared to 22% in the EU) and in training courses and adult education centres on own initiative (12% compared to 11% in EU27), while it is lower in training courses and adult education centres on demand of employer (12% in Cyprus compared to 17% in EU27).

## **7030302** Barriers to implementation

The major obstacles to introducing innovative pedagogies are due to the lack of adequately trained learning facilitators. Nevertheless, efforts are made for their systematic training, in order to be in a position to implement them.

## 70304 Building partnerships and raising awareness

In Cyprus, partnerships that operate as mechanisms to define/introduce innovative pedagogies and modernise curricula, take the form of working groups, bodies and committees in which all stakeholders were represented.

## **Education Reform**

In the context of the Education Reform (Ekpaideftiki Metarithmisi) a public dialogue has been initiated in 2005 and several working groups have been formulated in which all stakeholders were represented. Some of these groups are:

- Education Council (Symvoulio Ekpaidefsis), which deals with issues of School Education, constituted by Decision of the Council of Ministers (Ypourgiko Symvoulio).
- Higher Education Council (Symvoulio Anotatis Ekpaidefsis), which deals with issues of Tertiary Education, constituted by Decision of the Council of Ministers.
- Higher Education Advisory Committee (Symvouleftiki Epitropi Tritovathmias Ekpaidefsis), an advisory body, constituted by law in order to counsel the Minister of Education and Culture (Ypourgos Paideias kai Politismou) on any matter concerning Tertiary Education.

## **Secondary Technical and Vocational Education**

The Directorate of Secondary Technical and Vocational Education, STVE (Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis, DTEE), in order to be able to re-examine and adapt the content of its

curricula according to the needs of the Cyprus economy and industry, and the latest scientific and technological advances, has developed close cooperation with the following agencies:

- The Advisory Committee for STVE.
- The Branches and Specialties Advisory Committees for STVE.
- The organised agencies of employers and manufacturers (Employers' Organisations).
- The organised agencies of employees (Employees' Organisations).
- The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD).

Cooperation between the Directorate of STVE and the agencies mentioned above has been developed in the following areas:

- The introduction of revised curricula.
- The introduction of new branches and specialties.
- The levels and content of the curricula.
- The employment prospects and career opportunities of the Technical School graduates.
- The practical training of final-year students of the Practical Direction.

#### Apprenticeship System

The design of the new Apprenticeship is the outcome of long and detailed deliberations with the social partners through social dialogue. Furthermore, the Apprenticeship Board that examines issues concerning the System has tripartite character with representation of the government, technical schools, employers and employee organisations, the Cyprus Productivity Centre, CPC (Kentro Paragogikotitas, KEPA) and the HRDA.

### **Human Resource Development Authority**

The HRDA prepares on an annual basis a document that contains the thematic priorities for the multi-company continuing training programmes (standard- and high-priority). This document is communicated to all training institutions / providers, which on the basis of these thematic priorities submit multi-company continuing training programmes to the HRDA every six months. The HRDA then examines, approves or rejects the submitted programmes and subsidises the implemented programmes. The involvement of social partners is of vital importance for the determination of the thematic priorities.

## 70305 Financing innovative pedagogies

The Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) is responsible for the administration, organisation and all decisions concerning the financial resources of public schools.

When the Directorate of Secondary Technical and Vocational Education, STVE (Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis, DTEE) of the MoEC, decides to launch a procedure for curriculum development and/or to introduce and implement any innovative teaching methodology, it makes a proposal, including a financial study, for approval to the Council of Ministers (Ypourgiko Symvoulio). Private funding of innovative pedagogies and curriculum developments is practically non-existent in Cyprus and Technical and Vocational Education Technical and Vocational Education, TVE (Techniki kai Epaggelmatiki Ekpaidefsi) is almost always funded by the Government.

A new form of funding however is the co-financing of vocational education and training measures by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT). The Government and the ESF co-finance the following actions:

- A study focusing on the organisation of STVE, co-financed by the ESF with the amount of €594.593 (Measure 2.2.2 Improvement and Reinforcement of STVE), was completed in 2007. The Ministry of Education and Culture will subsequently revise and develop the curricula offered by STVE based on the study findings. A pilot project for the implementation of the new curricula is estimated to finish in 2008.
- The purchase of a Learning Management System at the amount €1.623.171, which aims to provide the teaching material electronically to all the Schools of Secondary Education. At this stage, the programme will be implemented on a pilot basis at three Secondary Technical and Vocational Schools and four Secondary General Education Schools (Lyceums). The project is expected to be completed in 2009.
- Special Teacher Training Programmes on the use of ICT in education and e-learning, which will continue to be offered until September 2008 with total expenditure €9,4m.
- A study focusing on the organisation of the Apprenticeship Scheme, co-financed by the ESF with the amount of €1.674.429 (Measure 2.2.3 Reform of the Apprenticeship System), was completed in 2007.

### **Statistical data**

There are no figures available on public and private investment in ICT provision in VET in Cyprus.

#### 704 INNOVATIONS IN TEACHER TRAINING

Innovations in teacher training provision, innovative pedagogies used for the training of VET teachers and trainers, new skills and competences required for teachers and trainers and the changing role of teachers and trainers are analysed below.

## **Innovations in teacher training provision**

Innovations in teacher training concern the pre-service and in-service training of the following categories of teachers and trainers:

- Teachers in public upper Secondary Technical and Vocational Education, STVE (Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis, DTEE).
- Teachers in public institutions of tertiary education.
- Trainers.

There are no differences amongst CVET and IVET teachers and trainers in Cyprus. Usually the same type of teachers and trainers are involved in both IVET and CVET activities, having the same pre-service and in-service training requirements.

# Teachers in Public Upper Secondary Technical and Vocational Education

The most recent and significant development in the training of teachers in public upper STVE has been the introduction of the Pre-service Training Programme, PTP (Programma Proypiresiakis Katartisis), which is an obligatory requirement for all new appointments to the Educational Service.

Teachers of public secondary education were until recently recruited without the prerequisite of pedagogical training. However, recognising the role of teachers in the effort to upgrade the educational system of Cyprus and improve the quality of teaching and training, the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) decided to bring into action a dormant act, enacted in 1987 but never implemented, regarding the initial training of teachers entering the public secondary education system. This act stipulates that all new appointees to public secondary education (General as well as Technical and Vocational Secondary Education) are required by law to have proof of successful completion of a teacher training programme, the PTP. The Educational Act 180/87, as amended by the House of Representatives (Vouli ton Antiprosopon) of the Republic of Cyprus in June 1999, and the related Public Education Service Regulations of 2000 and 2001 (in agreement with article 28C) govern PTP. Based on the above regulations, the Pedagogical Institute, PI (Pedagogiko Institutto, PI) had the responsibility for

organising and implementing the PTP, in co-operation with the University of Cyprus, UCY (Panepistimio Kyprou, PK) and other overseas universities. Starting from the academic year 2007-2008 the PTP was undertaken by the UCY in collaboration with the MoEC, in an effort to further upgrade this training.

Candidate teachers are required to attend a series of pedagogical lessons, participate in the prescribed and specified teaching practice and succeed in the systematic evaluation which incorporates a final written examination, coursework in the form of papers and projects and the appraisal of the trainees' performance during their practical training at school.

The general performance of the trainees is assessed through both written examinations and project assignments. The programme lasts for eight months. Upon successful completion of the programme, participants are issued with a certificate of attendance. This certificate is issued as proof of competence for appointment as teacher in STVE, and must therefore be submitted to the Education Service Committee, ESC (Epitropi Ekpaideftikis Ypiresias, EEY).

## The objectives of the PTP are:

- To contribute to the continuous improvement of the quality of education offered by public schools, including the improvement of the quality of educators entering the educational system.
- To provide the opportunity to prospective teachers to acquire psycho-pedagogical knowledge, develop teaching skills and adopt positive attitudes to schooling, learners and learning.
- To provide the opportunity to prospective teachers to become accustomed to the school environment.
- To provide prospective teachers and trainers with the opportunity to enhance their personal development and professional self respect.

### <u>Teachers in Public Institutions of Tertiary Education</u>

As far as teachers in public institutions of tertiary education is concerned, a new method called "Transition Facility" (Pyrinas Mathisis) has been applied in 2003 in organising in-service continuing training for IVET teachers. This method is used in the Higher Hotel Institute of Cyprus, HHIC (Anotero Xenodocheiako Instituto Kyprou, AXIK), the Cyprus Forestry College (Dasiko Kolegio Kyprou, DK) and the School of Nursing. The "Transition Facility" consists of a small group of people appointed by the institution to identify the training needs of the employees through a specially designed questionnaire. Based on the outcome of the questionnaire the team makes suggestions on the training programmes

the employees need to attend in order to upgrade their skills and knowledge. Once the proposal of suggestions is finalised it is sent to the Ministry of Finance, MoF (Ypourgeio Oikonomikon, YO) for approval. This procedure is done on an annual basis.

The majority of in-service training programmes attended by the teachers in the public institutions are related to the institutions' areas of interest as well as to the teachers' training needs. The teachers in the Higher Technical Institute, HTI (Anotero Technologiko Instituto, ATI) and in the HHIC tend to participate in the training programme "Training of Trainers". All public institutions participate in multinational exchange programmes for IVFT teachers.

#### Trainers

In cases in which public and private training institutions and enterprises wish to submit training programmes to be approved and subsidised by the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD), through HRDA's training schemes, the trainers need to conform to the HRDA pre-set criteria.

The HRDA, in order to approve the initial training programmes submitted to it, requires the trainers without prior teaching experience to attend an approved course "Training of Trainers". The training programme "Training of Trainers" addresses specifically innovations on the following issues:

- Design of training programmes.
- Implementation of training programmes.
- Introduction in Information and Communication Technologies (ICT).
- Identification and analysis of training needs.
- Evaluation.

It is expected that once a trainer attends the training programme "Training of Trainers" organised by HRDA, the trainer will be able to design and implement training programmes with the use of effective and innovative methods. Additionally, a trainer will be able to train other people by using more effectively ICT methods.

# Innovative pedagogies in teachers training

Innovative pedagogies used for the training of VET teachers concern the following in-service training programmes:

## <u>Industrial placement of VET teachers</u>

An innovative programme allows teachers of STVE to become attached to industry for one day per week, with their salary being paid by the state. The aim of this programme is to offer VET teachers the opportunity to update their knowledge and keep abreast of technological advances. They also act as links between STVE and industry.

# Special developmental activity

Change agent teams at each Technical School, organised extensive inservice training workshops focused on student-centred teaching approaches to support the implementation of the new curricula, introduced in September 2001, in their own schools. This initiative is considered as an example of good practice. It is, perhaps one of a few occasions where teacher training relates directly to changes in the curriculum and responds to the immediate and urgent needs of teachers.

## New skills and competences required for teachers and trainers

#### Teachers

A new ambitious programme aiming to help teachers improve their knowledge and skills in Information Technology in order to become competent to use IT in teaching and learning is currently underway.

The European Social Fund, ESF (Evropaiko Koinoniko Tamio, EKT) supports the programme for teachers in Secondary General and Technical and Vocational Education and the government funds that for teachers of Primary Education. The programme is to cover the entire population of teachers in Primary and Secondary Education.

The objective of this initiative is to ensure that Secondary General and STVE teachers will become digitally literate, as it includes the organisation of short training courses on core IT skills, as well as long term training courses on the implementation of new, IT oriented, analytical programmes in Secondary Education.

More specifically, the programme aims at:

- The improvement of the quality of the rendered education through the utilisation of new technologies.
- The preparation of teachers and consequently students, for a smooth entry into the knowledge society that is constantly being influenced by modern technology, computers and information technology.

- The development of infrastructure for the continuous education and training of the teaching staff, within the context of lifelong learning.
- The development of human resources, which will contribute to the efforts for strengthening the provision of services, as well as the growth of the economy based on high technology sectors.

In addition, this initiative provides for the training of the trainers of the programme, with a view to promoting in-school training by a relatively limited number of trained trainers and, finally, for the accreditation of the skills acquired by all teachers, in accordance with tested international standards.

All the training courses included in the programme are organised by the Pedagogical Institute (PI), under the supervision of the MoEC.

Participation in the programme is voluntary. The various training courses are offered either during school hours or in the afternoons. Teachers opting to attend a training course after school hours will receive a subsidy of about  $\le 600$  to be spent for the purchase of a computer. In addition, the qualifications acquired in ICT will count towards promotion.

The training courses offered range in duration, from between 50 hours for the basic level to 280 hours for the more advanced level and all participants have to pass a final test of competence.

### <u>Trainers</u>

One of the strategic objectives of the HRDA is to promote the review and gradual introduction of a system for the assessment and certification of training providers including trainers. Following a tender procedure, In September 2005 the Board of Governors of the HRDA approved the development and introduction of the system for the assessment and certification of training providers including trainers with tender invitations. The project was assigned to the consortium of the National Accreditation Centre of Continuing Vocational Training (EKEPIS) and ICAP Business Information and Consulting Firm that are located in Athens. The implementation of the project started in October 2006. The project is expected to be completed in 5 stages over a period of thirty-six months. In August 2007 a draft paper of the system was extensively discussed with key stakeholders in VET and interested bodies, in an effort to have the highest possible level of consensus. In July 2008 the Board of Governors of the HRDA decided to accept the proposed system and proceed with the next stage of the project, which is the preparation of a specification for the computerisation of the system.

The HRDA has the responsibility for the establishment and operation of a System of Vocational Qualifications. The System is being established and

implemented in two phases (1st phase: 2006 - 2008 and 2nd phase: 2007-2013). Once the standards are set, the content and the quality of vocational training programmes will have to be enriched in order to comply with the standards. Those trainers that will be involved with the implementation of the System of Vocational Qualifications will be required to attend specially designed training programmes, particularly those to be engaged as internal/external examiners and verifiers.

## **Changing role of teachers and trainers in VET**

The traditional role of teachers and trainers in VET will be enhanced significantly as a consequence of the introduction of innovative pedagogies. The acquisition of new skills, mainly IT related, the introduction of new tools, such as interactive boards and ICTs and the development of new learning approaches and methodologies will enhance their ability to deliver learning in an effective way. The teaching environment and methods will become more flexible and thus teachers and trainers will be better able to respond to the rapidly changing needs of society and economy.

Furthermore, the profession of teachers and trainers will become more satisfying and fulfilling as their personal development advances through implementing these innovative pedagogies. This also leads to an upgrade of their image in the eyes of students, parents and society in general.

In the new learning environment the teacher becomes a coordinator and facilitator of knowledge rather than a transmitter of knowledge whereas the new approach of teaching is student-centred rather than teacher-centred.

#### 705 INNOVATIONS IN ASSESSMENT

The results of the final Pancyprian Exams are used as an index of the effectiveness of implementing innovative pedagogies and the reformed curricula. However, due to the fact that these exams take place immediately after the completion of the student' studies, they fail to indicate the students' development potential later in the workplace. It is expected that, through the study for the organisation of Secondary Technical and Vocational Education, STVE (Defterovathmia Techniki kai Epangelmatiki Ekpaidefsi, DTEE), which is co-financed by the Government and the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT), the effectiveness and quality of the individual rate of return and the social rate of return of Technical School (Technikes Scholes, TS) graduates, over the past 15 years, will become evident.

The final Pancyprian exams are learning outcomes based assessment, the approaches of which are upgraded and improved year by year. The Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP) in co-operation with the British Council, has organised seminars for the training of the inspectors and teachers that are involved in the procedures of the Pancyprian Exams.

As far as VET qualifications standards and profiles are concerned, these have practically remained at the same level since 1982. Technical School graduates obtain a Leaving Certificate (Apolytirio) of the second cycle of Secondary Education and, therefore, enjoy the same rights and privileges as graduates of Schools of General Education (Lyceums), both in respect of employment and of pursuing further studies in Cyprus or abroad. Moreover, Technical School graduates have additional rights that entitle them to be employed in posts that are related to technical professions in the government, semi-governmental organisations or private companies.

The curricula, and in extension the learning outcomes, are modified in order to meet the needs of the industry. The System of STVE, through the programme for the industrial placement of VET teachers, but also due to the fact that a great number of VET teachers had been employed in industry prior to their appointment, is in a position to balance the material taught at Technical Schools with the industrial reality. In addition, in order to be able to re-examine and adapt the content of its curricula according to the needs of the Cyprus economy and industry, the Directorate of STVE has developed close cooperation with the following agencies:

- The Advisory Committee for STVE.
- The Branches and Specialties Advisory Committees for STVE.
- The organised agencies of employers and manufacturers (Employers' Organisations).

- The organised agencies of employees (Employees' Organisations).
- The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD).

The System of Vocational Qualifications, as developed by the HRDA, is designed specifically for the assessment and certification of the knowledge, skills and competences of a person in a working environment under normal working conditions at a predetermined level of occupation. Candidates can be registered and participate in the assessment and certification procedure to acquire the qualification, independently of how and when they acquired the relevant knowledge and skills.

## 70501 Innovations in evaluation and quality monitoring

The quality of the processes of anticipating skill needs, which are implemented by the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD), is monitored by way of comparing the actual data with the forecasts and identifying the causes and reasons for any significant deviations. Additionally, the methodologies used in the forecasts are continuously evaluated taking into consideration recent developments and innovations at EU level. The active participation of the HRDA in initiatives and actions promoted by the European network Skillsnet for skill needs forecasting, contributes towards the evaluation and the quality-monitoring of the methodologies, mechanisms and processes implemented in Cyprus.

The participation of the Social Partners in the development of the Standards of Vocational Qualifications contributes towards ensuring the quality of these Standards. The evaluation of the 1<sup>st</sup> phase of the system will be used for making the suitable adjustments to the mechanisms and processes. The 2<sup>nd</sup> phase of the system will be evaluated according to EU criteria, as it will be co-financed by the European Social Fund, ESF (Evropaiko Koinoniko Tameio, EKT).

The effectiveness of the innovative pedagogies that are implemented in Secondary Technical and Vocational Education, STVE (Defterovathmia Techniki kai Epangelmatiki Ekpaidefsi, DTEE) is evaluated through the following:

- Sample teachings, which are assessed by VET inspectors.
- The formal teachers' evaluation system.
- The learning outcomes of final exams.

In the cases where it is observed that the degree of effectiveness is limited, corrective measures are taken.

#### 706 INNOVATIONS IN GUIDANCE AND COUNCELLING

The main actors for guidance and counselling in Cyprus are the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP), the Ministry of Labour and Social Insurance, MLSI (Ypourgeio Ergasias kai Koinonikon Asfaliseon, YEKA) and the Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD).

## **Ministry of Education and Culture**

All the Counsellors employed at the Counselling and Career Education Service, CCES (Ypiresia Symvouleftikis kai Epaggelmatikis Agogis, YSEA) of the MoEC, apart from their first Degree, have a postgraduate Degree with specialisation either in Counselling or in Career Education / Guidance. Therefore, they already receive formal training at a postgraduate level in guidance and couselling as part of their studies.

Additionally, when they enter the field of Guidance and Counselling as official employees of the MoEC they receive one—year pre-service training, at the University of Cyprus, UCY (Panepistimio Kyprou, PK). During this pre-service training, as well as during the in-service training they receive afterwards from the CCES, (when they officially enter the Service), emphasis is given on methods helping them to acquire new skills in effective teaching methodological approaches, in the use of new technologies in teaching (e.g. eLearning, interactive board, etc.), and in effective counselling/guidance approaches, given the demands of the new technological era.

Specifically, during the in-service training offered to counsellors from the CCES on a yearly basis, the new knowledge is transferred to them through both theoretical work and group work (eg. workshops). Special emphasis is given on developing the students and other youngsters skills on learning how to retrieve information, how to screen-out the useful information in order to serve the purposes of their search, how to synthesise new knowledge, and how to utilise it appropriately, using their critical thinking skills.

The CCES gives special emphasis on the issue of lifelong guidance and is planning to offer more training to the counsellors on skills needed for the best promotion of this goal. Specifically, the CCES has already proposed the operation of regional Centres of Counselling and Guidance, which will operate at convenient to the general public hours. The Centres will provide counselling / guidance to all citizens, irrespective of age, gender, religion, race, ethnicity and disability. The qualified counsellors, who will serve in these Centres, will have in-service training with special consideration on helping their clients to develop appropriate career managing skills over

their lifetime. Additionally, special emphasis is going to be given to the provision of effective counselling to specific groups of people depending on their needs, as well as on the formal evaluation of the services provided, on the provision of appropriate in-service training to the staff of the Service, and on scientific research on areas of special interests to CCES.

The CCES currently promotes the goal of the establishment of a National Forum on Lifelong Guidance, which is considered as a basic immediate goal for the upgrading of all guidance and counselling services in Cyprus.

At the 3rd year of Lower Secondary Education counsellors offer to students the course of Career Education in which they learn of new learning opportunities, new qualifications, and job profiles. Additionally, the counsellors organise visits to Technical and Vocational Schools (Upper Secondary Education) where they receive more information on these subjects. The students also receive individual counselling and special seminars are given to the parents of the students by the CCES. The Service has prepared a special educational film on different job profiles (vocational jobs included) and qualifications needed to enter them. The film is available to students and is shown to interested students and other young people at the Cyprus International Educational Fair every year.

In addition to the above, the counsellors organise lectures given by various professionals to students, informing them about their job profiles, the qualifications needed to enter these professions, etc.

The counsellors also organise visits for the students to actual work places, where they also receive relevant information.

Furthermore, the Counselling and Career Education Service cooperates with other Services/Departments (governmental and non-governmental) for the organisation of informative seminars addressed to the schools counsellors regarding CVET learning opportunities, qualifications and job profiles.

The counsellors, in their turn, spread out this information (sometimes given in written form, eg. articles, books, research, etc.) to the students and other young persons.

Recent innovative methods used by the CCES for the development of guidance and couselling mechanisms/practices involve the use of a psychometric interest test (Career Gate Test k.17). This test is used by the counsellors as an additional scientific instrument for the purposes of educational/vocational counselling. The test suggests 33 different professions to the students according to their interests and personality types. In addition, the test includes a part on the qualifications needed for different jobs, as well as on work opportunities in the local work market.

#### **Ministry of Labour and Social Insurance**

The Vocational Guidance Service of the Public Employment Services, PES (Dimosies Ypiresies Apascholisis, DYA) of the MLSI provides information to adults and secondary-school graduates on employment prospects and opportunities or on skills-training possibilities. These services also cater for school dropouts, who may be interested in joining the apprenticeship system.

Furthermore, the PES provide assistance to employers, job-seekers and those in employment who wish to change jobs, through registration and placement services, provision of information on training opportunities and job vacancies.

A nationwide candidate placement system is installed to which all PES counsellors have access. The candidate placement system performs a wide range of functions, including: registration and updating of clients history; registration of employers and vacancies; and monitoring clients interviews with employers. A facility for matching candidates against training programmes is currently being developed and a self-service Internet-based facility for clients is planned to become available to the public.

The enhancement and modernisation of the PES is one of the priorities of the National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas). The implementation of this measure over the period 2005-2008 is co-financed by the European Social Fund, ESF (Evropaiko Koinoniko Tamio, EKT). It is expected that the enhancement and modernisation of the PES will pave the way for a preventive deal towards unemployment and better utilisation of the labour force as well as increasing access to training through an individualised approach. This provision of individualised supportive and monitoring services consists of counselling, identification of skills, training, adaptation and integration to the working environment. This individualised guidance will be especially targeted towards the unemployed, the economically inactive women and young secondary education graduates within the framework of the four schemes co-financed by the HRDA and the ESF.

The National Resource Centre for Guidance Cyprus (NRCG-CY) of the Department of Labour of the MLSI, in accordance with the Euroguidance initiative, provides information about private and public education and training opportunities that exist in Cyprus.

### **Human Resource Development Authority**

The HRDA maintains a web page with information and advice on approved training opportunities. The HRDA also displays its research studies in a

downloadable form. A special section in the web page contains occupational employment forecasts in all the occupations of the labour market in Cyprus. Another section contains the latest available trends of human resources indicators for the labour market and education and training in Cyprus.

The HRDA presents such studies and information on its schemes and the different options available by lectures to parents and students, as well as during the "Annual International Education Fair" and the "Annual Careers Fair". Special lectures are also organised to guidance and employment counsellors.

#### 707 THE EUROPEAN AND INTERNATIONAL DIMENSION

Anticipation of skill needs, as envisaged in the EU employment guidelines for 2005-2008, has been prominently featured in various national documents. Specifically, the continuous assessment of labour market needs is a policy priority of the National Lisbon Programme (Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas) aiming to increase flexibility in the labour market. The examination of trends and the provision of forecasts of skill needs is a research area included in the priority pillar for research and development for the support of lifelong learning, contained in the National Lifelong Learning Strategy (Ethniki Stratigiki Dia Viou Mathisis).

The Human Resource Development Authority, HRDA (Archi Anaptyxis Anthropinou Dynamikou, AnAD) is responsible for the anticipation of skill needs through the examination and analysis of developments in the labour market. The HRDA participates actively in initiatives and actions that are promoted at European level in the framework of the European network Skillsnet for skill needs forecasting. In October 2005, a two-day European Workshop attended by 30 experts in skill needs forecasting was coorganised in Cyprus by Cedefop, the HRDA and the Research Centre for Education and the Labour Market at the Maastricht University (ROA).

The European Qualifications Framework (EQF) and the European Credit Transfer System for Vocational Education and Training (ECVET) are two initiatives that are contributing towards shaping the policies in Cyprus on skills and competences development.

#### **European Qualifications Framework**

The EQF is a common European reference framework, which links countries' qualifications systems together, acting as a translation device to make qualifications more readable and understandable across different countries and systems in Europe.

The European Commission has prepared a Commission staff working paper made available for consultation of Member States and stakeholders in July 2005. The Ministry coordinating the consultation process for the creation of an EQF as well as for the design and development of a National Qualifications Framework (NQF) is the Ministry of Education and Culture, MoEC (Ypourgeio Paideias kai Politismou, YPP).

Following discussions amongst government departments in October 2005, Cyprus has initiated a debate amongst numerous public and private stakeholders in the field of learning, including the social partners, for contributing towards the development of Cyprus's position on the EQF initiative. The EQF initiative was presented, analysed and discussed in early January 2006 and the participants were then asked to prepare and submit their proposals. At the same time the same stakeholders have

started discussing and debating about the development of a National Qualifications Framework (NQF). A national committee has been set up for the development and implementation of a NQF.

### <u>European Credit Transfer System for Vocational Education and</u> Training

The ECVET is designed to facilitate the transfer, accumulation and recognition of people's learning outcomes. ECVET is part of the overall project for developing European cooperation in the field of vocational education and training and constitutes one of its operational tools. In this regard, ECVET complements the EQF.

The European Commission has prepared a document to serve as a basis for consultation, which involves, in particular the policy-makers, the social partners, the stakeholders and experts in qualifications systems and vocational education and training in Europe. As decided by the European Commission, the MoEC in Cyprus initiated a process of national consultation with all VET stakeholders and submitted to the EU the outcome of the national consultation.

#### 70701 Europeanisation of VET curricula

Over the last years, Vocational Education and Training, (Epaggelmatiki Ekpaidefsi kai Katartisi) has attracted the interest and attention of all the people who are involved in planning the policy of various national education systems. The European Union has shown particular interest in VET. The Lisbon strategy, for example, has set as its goal the upgrading of VET in all Member States and the attraction of more students. Over the last decades, VET has gone through several stages and has been called upon to assume various roles, depending on the socioeconomic situation of each period of time and region, and also on the tendencies prevailing in industry.

Cyprus, being a full member of the EU since 1st May 2004, is faced with the challenge of adapting its education system to the new state of affairs, which is characterised by an abrupt transition from the industrial to the post-industrial era.

#### **Secondary Technical and Vocational Education**

The Directorate of Secondary Technical and Vocational Education (Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis) is constantly in the process of revising, modernising and upgrading the curricula it offers, taking into account the guidelines set out by the European Union. At the same time, Secondary Technical and Vocational Education, STVE (Defterovathmia Techniki kai Epangelmatiki Ekpaidefsi,

DTEE) is modernising the teaching and learning processes. The role of the teacher is gradually changing since there is a shift of focus from the teacher to the student. Students, with their learning abilities, strengths, weaknesses, talents and interests, are placed at the centre of the educational perspective.

The STVE aims to enable students to acquire solid and adaptable knowledge, as well as to develop learning skills and the competencies that will help them adjust to dynamic and unpredictable situations. In addition, it aims to help students acquire competence in searching for, assessing, selecting and using essential information.

Students are also given the opportunity to acquire methodological skills, and learn how to analyse and solve problems. Moreover, they are provided with a productive environment that encourages them to develop such characteristics as the ability to co-operate with other people, their creativity and self-confidence, and the skills to help them deal successfully with the diverse roles they are expected to play in life.

Through the analytical programme of the subject of European Culture offered by the STVE, students are given the opportunity to become acquainted with the legal rights, privileges and responsibilities of European citizens. In addition, students become acquainted with the culture and civilisation of the Member States, as well as with the peoples and regions that comprise the European Union. Finally, students learn to appreciate the value of their country's tradition at a national level, while at the same time they are encouraged to develop respect towards the culture and civilisation of other nations of the European Union.

As far as initiatives taken towards tolerance and social inclusion, it is worth mentioning that, regardless of their nationality, race, gender, religion or physical disability, all students who have completed the third year of Gymnasium successfully and have obtained a Leaving Certificate, are eligible to study in mainstream Secondary Technical and Vocational Education Schools. In addition, students who come from other countries or from private English schools can attend STVE programmes, provided that they succeed in the special entrance exams. On their completing the programmes successfully, students are awarded a Leaving Certificate (Apolytirio), which is equivalent to that obtained from Upper Secondary General Education Schools (Lyceums).

In addition to the above, foreign students who have difficulty in following the STVE programmes due to language problems, may attend classes offered at STVE Schools as mere observers if they wish and be entitled to enrol in the next class as regular students, provided that they succeed in the special entrance exams.

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Cyprus Employers and Industrialists Federation, <a href="https://www.oeb.org.cy">www.oeb.org.cy</a>

Cyprus Productivity Centre, <a href="www.mlsi.gov.cy/kepa">www.mlsi.gov.cy/kepa</a>

Cyprus Workers Confederation, <a href="https://www.sek.org.cy">www.sek.org.cy</a>

ETF www.etf.eu.int

Eurydice - CEDEFOP, www.eurydice.org

Forestry College of Cyprus – Ministry of Agriculture, Natural Resources and Environment <a href="https://www.moa.gov.cy/fc">www.moa.gov.cy/fc</a>

Higher Hotel Institute – Ministry of Labour and Social Insurance, www.mlsi.gov.cy/mlsi/hhic

Higher Technical Institute, <a href="https://www.hti.ac.cy">www.hti.ac.cy</a>

Human Resource Development Authority, <a href="https://www.hrdauth.org.cy">www.hrdauth.org.cy</a>

Ministry of Agriculture, Natural Resources and Environment, <a href="https://www.moa.gov.cy">www.moa.gov.cy</a>

Ministry of Education and Culture of Cyprus, <a href="https://www.moec.gov.cy">www.moec.gov.cy</a>

Ministry of Labour and Social Insurance, <a href="https://www.mlsi.gov.cy">www.mlsi.gov.cy</a>

National Resource Centre for Guidance Cyprus, <a href="www.mlsi.gov.cy/dl/nrcg">www.mlsi.gov.cy/dl/nrcg</a>

Nursing School, <u>www.moh.gov.cy</u>

Pancyprian Federation of Labour, www.peo.org.cy

Planning Bureau, <u>www.planning.gov.cy</u>

Police Academy – Ministry of Justice and Public Order, <a href="www.police.gov.cy">www.police.gov.cy</a> Skillsnet – Cedefop,

www.trainingvillage.gr/etv/Projects Networks/skillsnet/

Statistical Service of Cyprus, <a href="https://www.mof.gov.cy/mof/cystat">www.mof.gov.cy/mof/cystat</a>

**ANNEX 1: ACRONYMS AND ABBREVIATIONS** 

NAME	ACRONYMS	EN TRANSLATION	EN ACRONYM	COUNTRY
АРКу	Anikto Panepistimio Kyprou	Open University of Cyprus	OUC	Cyprus
ATI	Anotero Technologiko Institouto	Higher Technical Institute	HTI	Cyprus
AXIK	Anotero Xenodocheiako Institouto Kyprou	Higher Hotel Institute of Cyprus	HHIC	Cyprus
	Apolytirio	School Leaving Certificate		Cyprus
AnAD	Archi Anaptyxis Anthropinou Dynamikou	Human Resource Development Authority	HRDA	Cyprus
DK	Dasiko Kollegio	Forestry College		Cyprus
DTEE	Defterovathmia Techniki kai Epaggelmatiki Ekpaidefsi	Secondary Technical and Vocational Education	STVE	Cyprus
	Diefthinsi Dimotikis Ekpaidefsis	Primary Education		Cyprus
	Diefthinsi Defterovathmias Technikis kai Epaggelmatikis Ekpaidefsis	Directorate of Secondary Technical and Vocational Education	DMTEE	Cyprus
DYA	Dimosies Ypiresies Apascholisis	Public Employment Services	PES	Cyprus
	Ekpaideftiki Metarithmisi	Educational Reform		Cyprus
	Epaggelmatiki Ekpaidefsi kai Katartisi	Vocational Education and Training	VET	Cyprus
EGE	Eparchiaka Grafeia Ergasias	District Labour Offices	DLO	Cyprus
EEY	Epitropi Ekpaideftikis Ypiresias	Education Service Committee	ESC	Cyprus

NAME	ACRONYMS	EN	EN	COUNTRY
		TRANSLATION	ACRONYM	
EED	Erevna Ergatikou Dynamikou	Labour Force Survey	LFS	Cyprus
DVM	Ethniki Stratigiki Dia Viou Mathisis	Lifelong Learning Strategy	LLL Strategy	Cyprus
	Ethniko Schedio Drasis gia ti Stratigiki tis Lissavonas	National Lisbon Programme		Cyprus
EKT	Evropaiko Koinoniko Tameio	European Social Fund	ESF	
GP	Grafeio Programmatismou	Planning Bureau	PB	Cyprus
KEPA	Kentro Paragogikotitas	Cyprus Productivity Centre	CPC	Cyprus
KYSATS	Kypriako Symvoulio Anagnorisis Titlon Spoudon	Cyprus Council for the Recognition of Higher Education Qualifications		Cyprus
КОТ	Kypriakos Organismos Tourismou	Cyprus Tourism Organisation	СТО	Cyprus
	Nosileftiki Scholi	School of Nursing		Cyprus
PI	Paidagogiko Institouto	Pedagogical Institute	PI	Cyprus
PK	Panepistimio Kyprou	University of Cyprus	UCY	Cyprus
	Programma Proypiresiakis Katartisis	Pre-service Training Programme	PTP	Cyprus
	Pyrinas Mathisis	Transition Facility		Cyprus
	Statistiki Ypiresia Kyprou	Statistical Service of Cyprus		Cyprus
SSA	Stratigiko Schedio Anaptyksis	Strategic Development Plan	SDP	Cyprus

NAME	ACRONYMS	EN	EN	COUNTRY
	71011011111	TRANSLATION	ACRONYM	
	Symvouleftiki	Higher		Cyprus
	Epitropi	Education		
	Tritovathmias	Advisory		
	Ekpaidefsis	Committee		
	Symvoulio	Higher		Cyprus
	Anotatis	Education		
	Ekpaidefsis	Council		
	Symvoulio	Education		Cyprus
	Ekpaidefsis	Council		
SEKAP	Symvoulio	Council for		Cyprus
	Ekpaideftikis	Educational		
	Axiologisis kai	Evaluation-		
	Pistopoiisis	Accreditation		
SM	Systima	Apprenticeship		Cyprus
	Mathiteias	System		/ .
TS	Technikes Scholes	Technical		Cyprus
		Schools		/ .
TEE	Techniki kai	Technical and	TVE	Cyprus
	Epaggelmatiki	Vocational		/ .
	Ekpaidefsi	Education		
	Tmina Ergasias	Department of		
		Labour		
	Vouli ton	House of		Cyprus
	Antiprosopon	Representatives		, .
YSEA	Ypiresia	Counselling and	CCES	Cyprus
	Symvouleftikis kai	Career		, .
	Epaggelmatikis	Education		
	Agogis	Service		
YEKA	Ypourgeio	Ministry of	MLSI	Cyprus
	Ergasias kai	Labour and		, .
	Koinonikon	Social		
	Asfaliseon	Insurance		
YO	Ypourgeio	Ministry of	MoF	Cyprus
	Oikonomikon	Finance		/ .
YPP	Ypourgeio	Ministry of	MoEC	Cyprus
	Paideias kai	Education and		/ .
	Politismou	Culture		
	Ypourgiko	Council of		Cyprus
	Symvoulio	Ministers		<b>,</b> '
	Ypourgos Ergasias	Minister of		Cyprus
	kai Koinonikon	Labour and		''
	Asfaliseon	Social		
		Insurance		
		1115ul alice		

NAME	ACRONYMS	EN	EN	COUNTRY
		TRANSLATION	<b>ACRONYM</b>	
	Ypourgos Paideias	Minister of		Cyprus
	kai Politismou	Education and		
		Culture		
		European Credit	ECVET	
		Transfer		
		System		
		European	ENQA	
		Network of		
		Quality		
		Association		
		European	EQF	
		Qualifications		
		Framework		
		European	EUA	
		University		
		Association		
		Information and	ICT	
		Communication		
		Technologies		
		Information	IT	
		Technology		
		International	INQAAHE	
		Quality		
		Assurance		
		Agency in		
		Higher		
		Education		
		International	ISCO	
		Standard		
		Classification of		
		Occupations		
		Learning	LMS	
		Management		
		System		
		National	NQF	
		Qualifications		
		Framework		
		Training of	TTnet	
		Trainers		
		Network		

#### ANNEX 2: MEMBERS OF THE CYPRUS REFERNET CONSORTIUM

#### 1. NATIONAL COORDINATOR

1.1. Human Resource Development Authority of Cyprus (<a href="www.hrdauth.org.cy">www.hrdauth.org.cy</a>)

#### 2. <u>MINISTRIES/GOVERNMENT DEPARTMENTS</u>

- 2.1. Planning Bureau (<a href="www.planning.gov.cy">www.planning.gov.cy</a>)
- 2.2. Ministry of Labour and Social Insurance/Department of Labour (<a href="www.mlsi.gov.cy/dl">www.mlsi.gov.cy/dl</a>)
- 2.3. Ministry of Education and Culture (<a href="www.moec.gov.cy">www.moec.gov.cy</a>)
- 2.4. Statistical Service of Cyprus (www.mof.gov.cy/cystat)
- 2.5. Cyprus Academy of Public Administration (CAPA) (<u>www.mof.gov.cy</u>)
- 2.6. Pedagogical Institute (<a href="www.pi.ac.cy">www.pi.ac.cy</a>)
- 2.7. Cyprus Productivity Centre (<a href="www.mlsi.gov.cy/kepa">www.mlsi.gov.cy/kepa</a>)

## 3. <u>SOCIAL PARTNERS: EMPLOYER AND TRADE UNION</u> ORGANISATIONS

- 3.1. Cyprus Employers and Industrialists Federation (<a href="www.oeb-eif.org">www.oeb-eif.org</a>)
- 3.2. Cyprus Chamber of Commerce and Industry (www.ccci.org.cy)
- 3.3. Cyprus Workers' Confederation (<u>www.sek.org.cy</u>)
- 3.4. Pancyprian Federation of Labour (<a href="www.peo.org.cy">www.peo.org.cy</a>)
- 3.5. Democratic Labour Federation of Cyprus (www.deok.org.cy)
- 3.6. Cyprus Union of Bank Employees (www.etyk.org)

### 4. OTHER ORGANISATIONS/NON-PROFIT MAKING ORGANISATIONS

- 4.1. University of Cyprus (<a href="https://www.ucy.ac.cy">www.ucy.ac.cy</a>)
- 4.2. Research Promotion Foundation (<u>www.research.org.cy</u>)

# 5. NATIONAL AGENCIES/UNITS FOR MANAGING EUROPEAN PROGRAMMES/INITIATIVES

- 5.1. Foundation for the Management of European Lifelong Learning Programmes (<a href="www.llp.org.cy">www.llp.org.cy</a>)
- 5.2. National Eurydice Unit (<a href="www.eurydice.org">www.eurydice.org</a>)