Education is the only value that is not possible to be stolen, to be cancelled and none can allianeted it or perished it.

Impressum

Higher Education, Shift from Traditional to Modern

Die Schriftenreihe Telekommunikation, Information und Medien setzt sich zum Ziel neueste Erfahrungen und Erkenntnisse der Forschung und des Consultings aus diesen Bereichen einem breiten Publikum zugänglich zu machen.

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We would like to thank everybody
who contributed to edit this book.

Preface

The new medias are changing many jobs. Some of them are not longer necessary. People, working in these branches have to cope with the changes and have to change themselves. In many respects our society is more mobiler than in past years:

- quicker change of place of living (home and working place)
- mobility within the hierarchy (change from manager to specialist and vice versa)
- easier finding of the location of an emloyee by telecommunications
- working nomades without an office
- homeworker
- several kinds of job during one career.

The education system has to consider these facts, concerning the content and the method of learning.

Alena Ilavska and Gregory Zeibekakis have tried to find new ways in higher education. In this book, they show the shift from traditional to modern methods.

Johann Günther
Danube University
Vicepresident

Foreword

This attempt has its roots to the fact that important decisions on the education will be taken in the following century and particularly in the new decade.

It is true that today all over the world, the interest for the education is very strong and interwoven with the future and the growth of every country.

Historically, the beginning of education in Europe began from Greece. Today we have a new beginning, the beginning of new century, the beginning of 25 countries of European Union epoch.

It is important that the new century will be ruled from a different type of society (post industrial) characterised from two new environments. The one environment will be the economic environment (global environment), which for some people the description will be the unstoppable reality of flown ideas, capital, people and goods around the world and for others will be the hegemony of the capitalistic system.

The other environment is the only one that it could not have a double interpretation, as the previous one, this will be an environment that would be characterized by the new technologies, the information technology and computers (ICT environment).

In these two environments, education will have to commit as well, in order to be able to create graduates that will cope with the new environments and will bring with them literasy and numerasy and ethos.

Gregory Zeibekakis

Foreword

Knowledge and thought provide the key to shaping change and managing our destinies, and universities have for centuries been the foremost centres of knowledge and thought in our civilization. At a period in history when change is happening at an unprecedented rate, the role played by universities in our society is more critical than ever.

We are marking our society in very familiar terms such as “Post-Industrial Society”, “the Information Society” or “New Economy”, convey some sense of the depth and scale of current transformation. These changes offer great hope of enriching human life and liberating people from routine and repetitive tasks, but they can also bring dislocation and marginalize many people where not adequately understood or managed.

The mission for University will be to help to whole society to understand social, economic and technological forces for change, within their historical and cultural setting and to prepare people to contribute effectively to the society of the future.

It will be the necessity to move decisively to a form of educational experience which encourages students to take more control over their own learning and take their own initiatives. It is challenge for Universities to make a greater direct impact on society and play pivotal role in the development of our new society while building national and international recognition for their teaching and researching as well as skills and abilities of their students such as: critical thinking, research and analysis, interpersonal skills, personal effectiveness and awareness.
We hope that all initiatives, which are described in this book, will help to reach these goals.

Alena Ilavska

TABLE OF CONTENTS

1. EDUCATION AND SOCIETY

1.1 Introduction

Education is the cultural mean to pass all necessary knowledge, rules, abilities and values from one generation to another, thus increasing the changes of survival of culture. The process is controlled by social and economic values, which differ according to time and place. As society changes into a modern one it has become very complex as well as our scientific knowledge.

When adapting to the modern it is basically necessary to make a selection of what to learn and to pass to the next generation. The biggest problem is to judge between general and vocational education and knowledge, and what is really useful for the unknown future. How to teach the young people to deal with the unknown? Factual knowledge is rapidly scorned from the vocational skill.

The continuous learning process will be a solution. Important topics for this process will be: problem solving, dealing with uncertainty, understanding the process and structures, carrying out experiments to learn from. All humans have the ability to learn. This spontaneous or natural way of learning is characterised by its holistic approach. We learn in a global, holistic way, not by subsequent and divided subjects.

Education is at the heart to the way of societies consciously taking stock of their development and destiny. As the third millennium approaches, there is a very extensive debate in Europe on the reforms needed in the education system in order to adapt, in particular, novel methods of communicating knowledge and the new forms of knowledge required.

Political leaders are increasingly aware that adapting education to the challenges of the next century calls for better understanding and participation of future needs. In this respect, forward planning has relatively recently become one of the main techniques capable of helping politicians to direct their present action with due regard for a variety of possible futures.

In the whole world the debate for education is about reform needed.

Environmentally induced changes are occurring much faster than those determined by structures and patterns of behaviour. The resultant time lag means that structures are almost permanently out of step with their environment. Adaptation in itself is not enough - anticipation is also required.

This is particularly true in the field of education, in which reforms nearly always require several years for their impact to be widely appreciated and properly evaluated.

Adaptation in itself is not enough - anticipation is also required.

1.2 The challenges

The modern social environment is under fast political, economical and technological changes. The world is characterised by rapid change, increasing globalisation and growing complexity in terms of economic and socio-cultural relations. The speed of these changes is reflected in the context within which any reflection on the future objectives of the education and training systems must be placed. There is an unprecedented demand for and a great diversification in higher education, as well as an increased awareness of its vital importance for sociocultural and economic development, and for building the future for which the younger generations will need to be equipped with new skills, knowledge and ideals.

Everywhere higher education is faced with great challenges and difficulties related to financing, equity of conditions at access into and during the course of studies, improved staff development, skills – based training, enhancement and preservation of quality in teaching, research and services, relevance of programmes, employability of graduates, establishment of efficient co-operation. At the same time, higher education is being challenged by new opportunities relating to technologies that are improving the ways in which knowledge can be produced, managed, disseminated, accessed and controlled. Equitable access to these technologies should be ensured at all levels of education systems.

The second half of this century is a period of the expansion of higher education an over sixfold increase in student enrolments worldwide, from 13 million in 1960 to 82 million in 1995. But it is also a period which has seen the gap between industrially developed, the developing countries and particular the least developed countries. Without adequate higher education and research institutions providing a critical mass of skilled and educated people, no country can ensure genuine endogenous and sustainable development.

Everywhere higher education is faced with great challenges and difficulties.

Sharing knowledge, international co-operation and new technologies can offer new opportunities to reduce this gap.
Higher education has given ample proof of its ability to change and progress in society. Owing to the scope of change, society become increasingly knowledge-based so that higher education and research now act as essential components of cultural, socio-economic and environmentally sustainable development of individuals, communities and nations.

Higher education itself is confronted therefore with formidable challenges and must proceed to the most radical change and renewal it has ever been required to undertake, so our society, which is currently undergoing a profound crisis of values, can transcend mere economic consideration and incorporate deeper dimensions of morality and spirituality.

The decisions we make and the actions we take today can indeed influence the future negatively or positively.

Changes in working life

The nature of work is changing and skills required from employees and managers are changing too. Examples of this change are increasing knowledge intensity in products, increasing proportion of the workforce in the service sector changing work organisations structures that require new skills and the role of enterprises as training providers.

Lifelong learning in the context of employability will, in many areas, be a prerequisite to stay attractive to the labour market. This development of the knowledge society should not allow the creation of social barriers, but rather overcome them. These challenges are common to all education and training systems and they will need to anticipate and adapt to rapid changes. Common objectives, discussion on possible solutions and exchange of good practice will be important instruments to meet these challenges together.

Knowledge cannot be expected to remain static throughout life, the way it used to be.

Society demography and migration

The demographic structure is changing. The percentage of older people has never been greater. We are living longer and more actively than ever before. Young and skilled people are becoming a scarce resource, particularly in countries with tight labour markets in order to be able to achieve sustainable development in our societies this trend needs to be carefully considered.

The teaching profession itself has also to face up the demographic change. Within the Union, about half of teachers are aged 40 or more and 20% will have retired within the next ten years.

There are considerable variations, however, the percentage of teachers due to retire within 10 years in some countries is very high, reaching 75 and 80%.

The implications of this for teacher education and recruitment are very serious, particularly combined with the difficulty, which some countries experienced in attracting good recruits.

Equal opportunities and social exclusion

Education and training are structural means by which society can help its citizens to have equitable access to prosperity, democratic decision-making and individual socio- cultural development. Access to the updating of skills throughout their lives becomes a key element in the fight against social exclusion and in the promotion of equal opportunities in the broadest sense. Education and training systems should aim to contribute to the creation of an inclusive society by ensuring that structures and mechanisms are in place to remove discrimination at all levels. Within this context, a specific regard has to be paid to vulnerable groups such as people with special educational needs.

The change of demography structure is closely related to students and professors and has to be under consideration.

1.3 Technological revolution

The 21st Century Skills Success today requires a set of abilities not necessary a generation ago. Technology is critical for providing students with a wide range of 21st century knowledge and tools. These skills start with basic technology literacy, including the ability to find and analyse information on the Internet.

Technology also facilitates higher-order cognitive skills such as problem solving and the ability to draw and communicate conclusions. Finally, it encourages collaboration and the ability for self-directed and life-long learning. Many people will only acquire these skills in a timely manner if given access at school.

Debates about the educational implications of economic and technological changes have had a long history in industrial societies. [3] However, during the late 1980s and early 1990s, national education and training systems increasingly came under pressure to respond to the challenges that global economic and technological change presented to occupational structures and occupational skill profiles. [7]

One of the foremost concerns was that initial education was not adequately preparing "non-college bound" students for the transition into the emerging *neo-* and *post-fordist* labor markets. [4] Subsequently, the concern shifted slightly as national governments became equally concerned about the transition of graduate students into the labor market, the continued training and development of the existing workforce, and the reinclusion of disaffected communities within society. [20]

New economic structures and societies are
Increasingly driven by information and knowledge.

1.4 Organizational implication of technological changes

The development and extension of enterprises, both on a national and international level, brought about many changes in the hitherto organizational structure. The scope is to attempt and to throw light on the relationships between industrial manufacturing and technology and on the other side the emerging anthropocentric approach. For example due to the new technological approach or relocation of the production plant, prove that a paradigm change of the enterprises' conception is underway. The evaluation and comparison of these above-mentioned systems has to be subject of special investigation.

The organizational implications were always a characteristic of the adaptation of technology. Advances in technology and organization recreate the manufacturing and management system and exclude the non-compatible structures by means of human manpower and organization. Questioning concepts dealing with how organizations are now functioning becomes not only a scholastic term for effective management, but for the first time shows serious implications in the practical daily use of computer supported technology. Implementation of technology, requires more skilled workers and judgment, initiates new job qualifications, which are based on technological innovations, eliminating, on the other hand, the non up-dated compatible human capital.

The educational model has to adapt its role in the modern society.

1.5 Brief History of Education

The education and its history, appears simultaneously with the creation of the human being antiquity. Pedagogy has its routes on the 5th B.C century with the inflorescence of the democracy of Attica in Greece.

Contemporary with the concept the sciences start to inflorescence also classical and positive sciences were expanded (Socrates, Platon, Thalis of Milisios, Demokritos, Heron the Alexandrine).

In Greek language there are different words in order to express different processes and words for similar concept of education. Παιδεία (the special Greek word connected simultaneously with education and culture): the older expression (concept) than education. It is related to the concept of pedagogism and character modulation.
Pedagogism: close to the socialization concept.

Education: this term appears in the 17th century during the period of illumination (salvation) and has to do with the movement for pedagogism in contradistition with the Diapedagogism: means in general the influence of the older generation to the new. This term contains also the process and the result. It usually characterizes and is used for the influence that is wielded to the person, from the capitulary, the social groom, and the environment physical and humanistic.

Universities have undergone other shifts, from the medieval university based on the „studia“ that preceded the notion of the „universitas“ of the fifteenth century as a distinctive corporate body with an organisational base. The origins of universities in the twelfth and thirteenth centuries as higher-level schools were largely formed around highly mobile scholars with expertise and without any international profile of institutional base.

Education is the obligatory diapedagogism of the subject
according to programs, curricula and methods

Student bodies had significant power in these early formations, able to hire teachers and impose It was only with an expansion of the professions of law and medicine that institutional consolidation occurred demands on what was taught. Research was done, but teaching, the income generator, was the focus. Teaching continued to be the dominant mission of universities into the nineteenth century, with research only becoming a priority in the German Humboldian model.

Society and socialisation

In order to allocate the influence of the socialisation we have to give some basic terms and concepts.
The concept of socialisation concentrates at the early days of the 20th century. E. Ndyrhaem, first introduced a term connected to edification (Diapedagogism). Characterising this term as the most important media for the socialisation of the unsocial human being that transform in social human being. Diapedagogism is an unavoidable social event. Social because it has not only a physical background. And unavoidable because it is in the structure of the society.
It is very difficult to differentiate diapedagogism and socialisation from the semantic point of view (meaning). Diapedagogism is defined as the creation of the social human being and socialisation is defined as the engagement with social activities.

Different stages of socialisation

The development of socialisation follows four steps: Primarily, socialization takes place in the family environment. Furthermore socialisation occurs to the acquisition of skills and knowledge outside the family environment. Is the phase in which the person establishes his/her family and makes introduction to the professional life.
The last part is the period in which the person retires.

Education is highly connected to socialization and some times shapes characters and behaviours.

2. EDUCATION AND ECONOMY

2.1 Stages of economic development

Describing where our society has been, its current condition, and its most likely future is the task of social historians. Daniel Bell, professor of sociology at Harvard University, has written extensively on this topic, and the material that follows is based on his work. [3] To place the concept of a post industrial society in perspective, we must compare its features with those of pre-industrial and industrial societies. [6]

Pre industrial Society

The condition of most of the world's population today is one of subsistence, or a *pre industrial society.* Life in pre industrial society, is characterized as a struggle against nature. Working with muscle power and tradition, the labour force is engaged in agriculture, mining, and fishing. Life is conditioned by the elements, such as the weather, the quality of the soil, and the availability of water.

The rhythm of life is shaped by nature, and the pace of work varies with the seasons. Productivity is low and bears little evidence of technology. Social life revolves around the extended household, and this combination of low productivity and large population results in high rates of underemployment (workers not fully utilized).

Many people seek positions in services, but of the personal or household variety. Pre industrial societies are agrarian and structured around tradition, routine, and authority.

Pre Industrial Society life: a struggle against nature

Industrial Society

The predominant activity in an *industrial society* is the production of goods. The focus of attention is on producing more with less resourses. Energy and machines multiply the output per labour-hour and structure the nature of work. Division of labour is the operational "law" that creates routine tasks and the motion of the semiskilled worker. Work is accomplished in the artificial environment of the factory, and people tend the machines. Life becomes a game that is played against a fabricated nature - a world of cities, factories, and tenements. The rhythm of life is machine-paced and dominated by rigid working hours and time clocks.

The standard of living becomes measured by the quality of goods, but it is evident that the complexity of coordinating the production and distribution of goods results in the creation of large bureaucratic and hierarchic organizations. These organizations are designed with certain roles for their members, and their operation tends to be impersonal, with persons treated as things. The individual is the unit of social life in a society that is considered to be the total sum of all the individual decisions being made in the marketplace. Of course, the unrelenting pressure of industrial life is softened by the countervailing force of labour unions.

Post industrial Society

While an industrial society defines the standard of living by the quality of goods, the post industrial society is concerned with the quality of life, as measured by services such as health, education and recreation. The central figure is the professional person, because rather than energy or physical strength, information is the key resource. Life now is a game played by persons. Social life becomes more difficult because political claims and social rights multiply.

Society becomes aware that the independent actions of individuals can be combine to create havoc for everyone, as seen in traffic congestion and environmental pollution. The community rather than the individual becomes the social unit [1,6].

An industrial society is a world of schedules and
acute awareness of the value of time

Bell suggests that the transformation from an industrial to a postindustrial society occurs in many ways [1]. First, there is a natural development of services, such as transportation and utilities, to support industrial development. As labour-saving devices are introduced into the production process, more workers engage in no manufacturing activities, such as maintenance and repair. Second, growth of the population and mass consumption of goods increase wholesale and retail trade, along with banking, real estate, and insurance. Third, as income increases, the proportion spent on the necessities of food and home decreases, and the remainder creates a demand for durable goods and then for services.

Ernst Engel, a Prussian statistician of the nineteenth century, observed that as family income increases, the percentage spent on food and durables drops while consumption of services that reflect a desire for a more enriched life increases correspondingly. This phenomenon is similar to the Maslow hierarchy of needs, which says that once the basic requirements of food and shelter are satisfied, people seek physical goods and, finally, personal development. However, a necessary condition for the "good life" is health and education. In our attempts to eliminate disease and increase the span of life, health services become a critical feature of modern society.

Higher education becomes the condition for entry into a postindustrial society, which requires professional and technical skills of its population. Also, claims for more services and social justice lead to a growth in government. Concerns for environmental protection require government intervention and illustrate the interdependent and even global character of post industrial problems.

Post Industrial characterised by development of services,
mass consumption, and demand for durables.

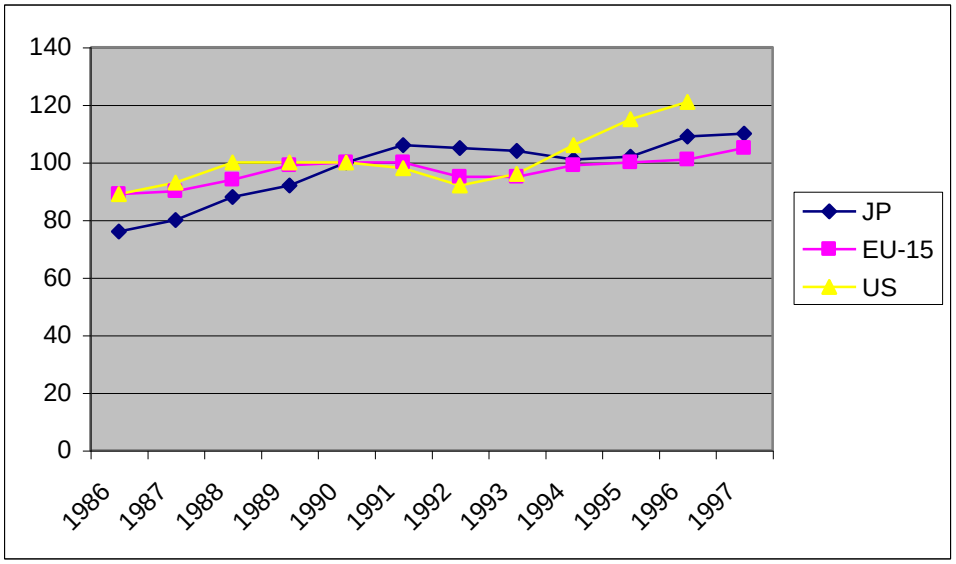


Diagram 1 - Development of the Industrial production (1990=100) Including energy and construction. (Eurostat)

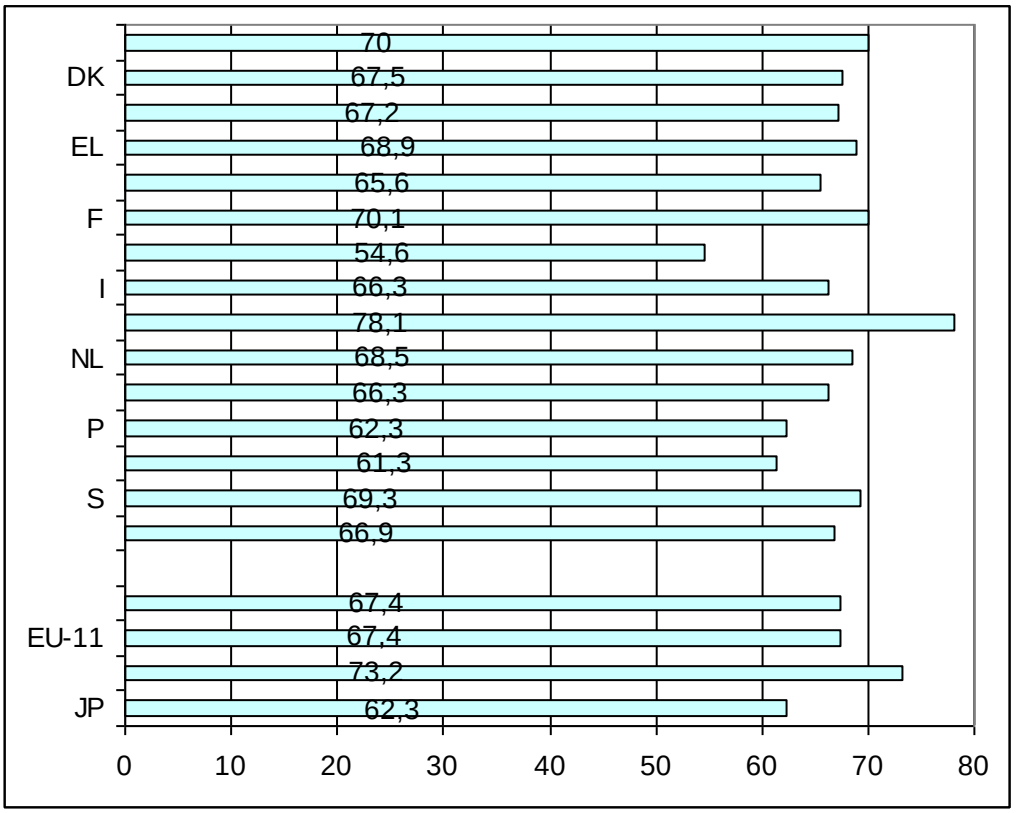


Diagram 2 – Percentage of services in gross added value (%, 1997, Eurostat)

Table 1

summarizes the features that characterize the pre industrial, industrial, and postindustrial stages of economic development.

Comparison of Societies

Features

Society	Struggle	Predominant Activity	Use of Human	Unit of Social Life	Standard of Living Measure	Structure	Technology
Pre-industrial	Against nature	Agriculture, power	Raw muscle household	Extended	Subsistence	Routine, traditional authoritative	Simple hand tools
Industrial	Against Fabricated nature	Goods Production	Machine tending	Individual	Quantity of goods	Bureaucratic, hierarchic	Machines
Postindustrial	Among Persons	Services	Artistic, creative, intellectual	Community	Quality of life in Terms of health, Education, recreation	Interdependent, global	Information

2.2 Education as a parameter of economic development

From the Lisbon meeting with the prime ministers of the European Union (23/03/2000), it was concluded within e-Europe initiative that the world of education has to contribute with different ways in order Europe to become the most competitive and dynamic knowledge based economy in the world, capable of sustainable economic growth with more and better working opportunities and greater social cohesion.

By changing needs of economy, the education system will not react to it. Traditional forms of education and continued education systems will remain the same. Education has to adapt the changes of the labour market, in standard education as well as in an increased postgraduate education because education and postgraduate education never ends. A company in the high tech field will utilize 80% of new technologies in 5 years. Employees have to be trained in these new technologies, as due to fluctuation and retirements only 20 % new employees will enter a company.

Influence of market in the modern society is extremely strong. We can agree that the market will do dissect and discriminate. This puts a particularly strong pressure on all institutions.

Universities, which form knowledge society [18] and are essentially knowledge providers, can no longer function as cottage industries in such an environment. Given the ubiquity of digital and information technology, they will become more learner-centred than faculty-centred.

Like business, they will have to evolve into multinational consortia ,form partnerships in a number of creative ways among themselves and with various kinds of enterprises that were not traditionally linked directly to higher education.

Education will be one of the main parameters for economic development in the new economic environment

Since globalisation will not disappear but will continue to predominate, the opportunities that it offers must be seized by higher education.

Another important factor is the provision of flexible forms of courses, which will be made possible when unit-level structured courses of study are introduced.

Education institutions are multi-product business firms. Their most important output is the development of "human capital." By this way and through direct consumption benefits, students gain from the benefits of higher education.

But others may benefit as well as from higher education. When such externalities exist, society is presented with the choice between underproduction of higher education services or with the government intervention in the market to promote the optimal amount of scarce resources used in the production of higher education. How can these externalities be captured without limiting individual choices – economic freedom?

The basis of economic costs is the opportunity cost principle. It is essential to understand it and also the concepts of explicit and implicit costs. It may come as quite a surprise to learn that the largest cost component of our higher education is not what we pay out from our pockets or for that matter what taxpayers pay from their pockets.

What, then, is the largest component? Our income loss while we are in university. This is the largest component. No wonder it is overlooked. We never see it, nor dies anyone else, but it is nonetheless a cost of our education. Our time and ability have alternative uses. To use them in their next best alternative would generate income.

We do not forget that income and society forfeits the output that income represents. If the rate of return one education is not to be overstated, the opportunity cost of higher education has to be calculated.

The output of the education Institute has to be
the added value of the human capital.

Under these cost concepts and the other economic principles at our command, we are ready to analyse the problems of higher education. It is essential to determine the explicit and implicit costs to a society of providing educational services.

Finally, by applying our economic tools of analysis to the problems of higher education, we should examine critically the institutional structure that we have today and the means of financing it. Do they give us the kinds of educational services we desire as a society? Are they responsive changing societal needs? Are they conducive supplying the economically correct amounts of educational services? Is “free” of “low-tuition” higher education an effective way helping the children of the poor?

An alternative higher education institutional structure might make greater use of the price system in the production of higher educational services. With the tuition rates large enough to cover all the explicit costs of providing educational services, many of the problems facing higher education might be reduced significantly if not eliminated.

Economic methods should be applied to analyse
the problems of higher education.

2.3 Investing in Education

The main important role in the education sector belongs to the government. The government has the ability to regulate and deregulate the sector of education. The introduction of venture capital and the creation of for-profit education depend also when the legal status permits, on universities forming partnerships with private corporations. In other words, it is rare for private corporations to act on their own.

The previous centralised wage-setting system resulted in a weak connection between wage and personal success, on one hand, and education, on the other hand. It should be noted also that previous system of education was mostly directed to the training of narrow-skilled specialists for particular industry. As a result workers were less mobile and highly attached to one job and occupation during the life-time horizon. Although the general level of schooling was relatively high, this narrow education did not provide skills and knowledge, which are demanded now by the market economy. The current situation in the labour markets is characterised by the large discrepancy between the structure of available educational capital and the structure of market demand for skills.

Post-communistic economies are undergoing adjustment processes. One of such common processes is supposedly represented by the increasing wage differentiation. New market-oriented wage setting practices should evolve along completely different path than it used to be under socialism. Some expectations are obvious: qualities like party membership should not be rewarded anymore; seniority and manual work-load should be looked at differently; new qualities like, for example, creativity, language skills, and education, should be rewarded.

However, some expectations cannot be formed ex-ante. For example, it is difficult to predict what happens to gender differentials, how the investment into human capital made during the old system will be rewarded in the new one, whether experience and firm-specific experience matters. Answers to these questions have to be found under research of human capital information.

Investment in human capital is particularly important for countries

.

The idea that acquisition and development of skills embodied in human agents of production could be treated as a form of investment originated in the works of W. Petty, A. Smith, A. Marshall. They stressed how it is important for national economy to invest in education.

At the beginning of the 20-th century the Russian economist S. Strumilin and English economists L. Dublin and A. Lotka presented the first empirical results of returns to education by using the discounted earnings procedure. However, the idea came to professional forefront in the late 1950's and early 1960's with empirical results of Schultz (1961, 1971), Denison (1962) and others showing the importance of education for productivity and economic growth. All these developments were organized into a coherent theoretical structure by Becker (1964), a landmark work which raised virtually all the major questions and which in turn stimulated an incredible number of studies in the area of human capital.

Mincer (1958) also developed an important study. He was one of the firsts who applied human capital concepts directly to the personal distribution of earnings and used the standard earnings function for estimation of rates of return to education and experience.

One of the most influential contributions within the ensuring global `education economy' debate was Robert Reich's book "The work of nations" [5].

Reich argued that industrial societies were entering an area of education-led economic growth and that national education and training systems, rather than national economies, would determine the fate of nations. From Reich's perspective, globalisation placed an enormous competitive pressure on established industrial societies. Reich suggested, therefore, that established industrialised societies were confronted with an economic and educational challenge. Economic prosperity in the twenty-first century would involve continuous innovation and the production of specialised goods and services that other nations were not capable of producing.

Priority must be given to learning

Moreover, he argued that if advanced industrial societies were to realise such economic ambitions, they would have to find ways of giving learning a priority in the economy as well as in the education system. It was Reich's contention that innovative knowledge-based forms of production required workers to have the capability to think in `system' terms in order to make connections between different areas of learning and different kinds of work; to be able to work effectively within and across different organisational contexts and to take risks and learn from mistakes.

The massive upsurge of interest in the "educational" potential of information and communication technology further fuelled the vision of "education-led" growth. It was argued that the future of education and the economy would be "technologically-driven" [26], since it was claimed that "information skills" would be critical to future economic success and educational success [27].

It was argued that the IT technologies and World Wide Web could be used, first, to extend access to education. This will be received, especially among those groups who had traditionally not participated in formal education and training [28], second, to free learning from the physical boundaries of classrooms and schedules [25], and third, to support the creation of new sites for learning within society; for example, local communities, user-groups, families [26].

This would help to break down the barriers between those institutions (i.e. schools, colleges and universities) that had previously specialised in learning and those for whom learning had not been a priority [22,25].
Information and communication technology, however, have the potential to be used either to automate or inform teaching and learning practices [29]. Schools, colleges and universities will have to decide whether to rethink the pedagogic basis of learning and support students participating in "distributed communities of practice" to produce new knowledge [27,30], or whether to simply ensure that students have access to drill and practice activities so that they acquire narrowly conceived information processing skills.

The creation of learning islands is essential and can be achieved by using the Information Technology.

Although educational institutions appear to have recognised the need to provide students with access to information and communication technology to prepare them for the emerging demands of the `knowledge area', they do not appear to have reconsidering the relationship with pedagogy. Instead, rather depressingly, many educational institutions seem to have simply automated their existing approaches to teaching and learning. [31] Yet, there is evidence that, in future, the ability to connect networks that have not been previously connected in order to extend individual and communal socio-cultural resources will be a prerequisite for effective communication. [32]

Communication between individual and conceptual
Socio - cultural resources should be extended

2.4 Organizational effectiveness

Rapid technological changes and their applications in many sectors of the economy demand and create qualifications that can be extended over the life cycles of hardware and software.
To a much greater extent, qualifications that emerge among the administration of processes are system eminent which implications do this have in high-tech industry and in the service sector? How can new knowledge both be adopted and be skilled? What is the current state of those qualifications that are shorter than the life cycles of hard and software?

The classical argument that the organizational structures of enterprises could be seen as constant can no longer be seen as acceptable, since other parts of the respective life of an enterprise incorporate more and more external parameters. Whilst talking about how technical pictures emerged, Flusser argued in 1985 that they could be transferred in a symbolic way, and in our case, into the classical acceptance how the enterprises' environment has developed.

Connecting this with the working environment we can detect three main phases, namely:
a) the embedding of huge masses of humans into the working process, in which the work can be seen as a constant and the working environment as a variable. The variables were the tools and the executive human power.
b) the second phase was developed and shaped based on the dynamics of the first process and converted the human to a variable. The human was the executive power, of course dependent on the constants of the enterprises' organization. The systematic Taylorism, as well as other management and organization theories, had standardized the inner life of the enterprise.
c) the third phase which is supported by a maximum technological equipment, takes with itself humans and tools in the position of variables. It left the continuously changing organization, the macro system, to look like a constant.

The model of constant organizational structure cannot be acceptable in modern environment of organizations.

According to that, the organizational structures of an enterprise follow a dynamic model, in which permanent compatibility allows the increasing mechanization to set root in the firm.As an example, the highly computerized office forced the various activities towards certain standardization. Wobbe (1986) emphasized this by saying that:

The social power of macro systems is very important since new organizational structures still incorporate the whole view of the market, technology, and personnel, so that strategic competition can build up further. The transformation of the enterprise strategy is successful within the human component. Consequently, the human function is responsible for success and establishes one of the important sources of enterprise strategy.

An organization is compatible by these means or successful if it is not static, or, if we go back to Tuerk (1989) organizations are only rudimentary, and stable only in the long term, it is more usual to perceive them as being permanently in motion; they never reach their surface stability, neither by balance nor static, but only by movement. New organizational images produce a constantly changing social reality because their duties, due to the changing market variables, must be redefined every time. On the other hand, these processes head for the working class with determined effect.

Much attention has been paid in the past years to the so called “effective implementation of technology” (Adler and D. Helleloid, 1986, Majchrzak, 1988), or the meaning of local knowledge systems in advanced technology organizations (Bada 1990).

On the other hand, approaches like skill-based design which leads to organizational effectiveness are becoming more and more respected when considering how to turn technologies into tools (Salzman 1989), or, organizations using symbolism as an emerging asset of the creation of realities within the firm, based upon their own professional histories, personalities, value systems (Astley, 1985) etc.

The organizational structures of enterprise follow a dynamic model.

Furthermore, the aspect of the social construction of technological systems (Pijker et al 1987) arose among technologists, and many more people now know that culture, language and ideology are definitely terms of management. Uncertainty of technological systems has the same effect on organizational concepts, because organizational structures should become more organic and less mechanistic (Kolodny 1990). Flexibility, on the other hand, replaces efficiency as one of the key objectives of both the manufacturing and service sectors.

EDP is a way of organization or of organizing technology. At the same time a political discussion emerged due to the creation of employment generated by that, during the process of mechanization and in particular by organizational changes, different groups of workers and working interests will be automatically affected.

As the courier of the new technological system, the hardware sector, after viewing the evolution in the software sector and loosing its monopoly, decided to catch up using flexible and user friendly systems in order to be more accessible to the user. Small and medium sized industries were more flexible and quicker to react than the larger manufacturers (Silicon Valley Fever).

Friendly and accessible system will contribute to organisational effectiveness.

3. EDUCATION, MARKETING AND MANAGEMENT

3.1 Equitable Market

Can we create a market that becomes more a question or can we create an equitable market, which maximises distribution of education and knowledge and work efficiently under modern management approach?

From this approach it is impossible to exclude the organization that covers service sectors like the university, institution and general organization that offer education and training. The term to this approach is marketing. It is not very simple to present the content and the function at this term.

Philip Kotler, one of the pioneers in marketing, defines marketing as a series of human activity with the aim to facilitate and integrate transactions. Some times it functions in connection with the imperialism of America and the commercialization of multinational companies with relevant products. Marketing is not only sales and advertising, is more than this.

Marketing is not a procedure to define sales methods of the product that someone has produced but the precise positioning and the total knowledge of the consumer needs and the creation of the right product or service solution that satisfying his needs and desires and it will offer profits to the company. Marketing is an integrated managerial system of a "company" connected to all management activities that take in account the business aspects and has to focus on the satisfaction of the client which can be obtained through products offers and service offers that are produced under research based on the client needs, desires and expectation.

Within this scope looking at the educational services through the marketing aspectst we have to adapt the old static environment of University and Institution to the marketing process in which design - application and control - and more specific strategic planning, analysis of the Marketing opportunities, segmentation- marketing plan (development – application and control).

Marketing in education has two directions
one to client user, the other one to labour market.

Another basic parameter that affects marketing is that the consumer does not buy a product or services on its own but also satisfaction and professional carrier. Consumer also is buying a voucher which can be exchanged with the professional career.

Recently there has been a growing importance in customer satisfaction. “Companies” are developing strategies to keep their customers loyal by the quality of their products and services. Cronin(1992) defined satisfaction as a post choice evaluative judgment of a specific transaction. Cadotte (1987) suggested that customers evaluate the product or service by using two comparisons: Most preferred/last purchased, or by the average performance perceived by the customer for a similar product category.

Consumers when buying education services buy also satisfaction and professional career.

3.2 Education for the new Century

Management of education should address changes to the nature of what needs to be learned, who needs to learn it, who will provide it, and how it will be provided and paid for. Revolutionary changes are in progress in terms of the number and quality of students and faculty available, the status of campus facilities, the range of courses offer, the impact of computers, and the correct interface between teaching and research.

Statements are appearing on the impending crisis in engineering education, and the treat poses to economic competitiveness in global markets, and the inevitable decline in real living standards that would result.

Technical-intensive is really the only way to the future. No nation can be successful unless it is successful in technology, no matter how well it performs in other areas and technical standards. Education has essentially replaced the gold standard in providing a nation's economic credibility; the struggle for technical ascendancy is now as fierce as a cold war battle, the struggle of a nation to be mastering, its own fate and independent from foreign self-interests.

From a purely management standpoint, any nation, industry of institution in a state of decline must reassess the quality of its own leadership irrespective of any other factors. Leadership in education must come from the top.

Leadership in Education must come from the top because the process is a top down process and not bottom up.

3.3 Thinking from the management point of view

Generally it is essential to apply modern approaches to the Institutes and Universities. We have to think that University is not only a social organization but also a model that has to follow general management theories concerning business.

In the modern society we have to cover human needs for products and services through different economical units. Economical unit can be defined as the economic entity that combine different nature of production means through economic terms in order to supply products or services for human beings needs. In accordance to this, in order to have the economic entity we need:

1. Combination of product coefficient (kind, labor, capital, information).
2. This combination to be governs for economical terms (maximum output with the least inputs).
3. The final product must be the supply of goods or services to cover human needs.

A university or an organization or a company will be characterized like economical units without the influence whether it belongs to a private or a public sector. As considered from the above, modern universities have to be ruled by parameters that are connected to management as :

1. Production coefficient (kind, labor, capital, information).
2. Productivity, efficiency, effectiveness
3. Characteristics of the environment in general (economic, legal, technological, social) in specific.

Closely related to this, University has to follow and to be governed by the parameters -components of the social organization point of view like:

a. basic parameter human resource, target, infrastructure systems used, formation, confines time duration
b. Institution, functionality.

University is an economical unit.

3.4 System approach

The system approach will also represent a method of study and approach on the phenomenon and organization. Studies that have been developed in the 50s mainly from the biologist Bertalanffy economist Boulding Biomedicine Rapoport and physicist Gerard have their origin in the general system theory.

Every system will define a sum of elements or parts that are connected between them and a number of principless through interactive relations. Every system considers from subsystem and develops relation in the same environment in perpendicular way and also in relation to other system in horizontal way. For better understudying we will represent the meaning of educational system in the Diagram.

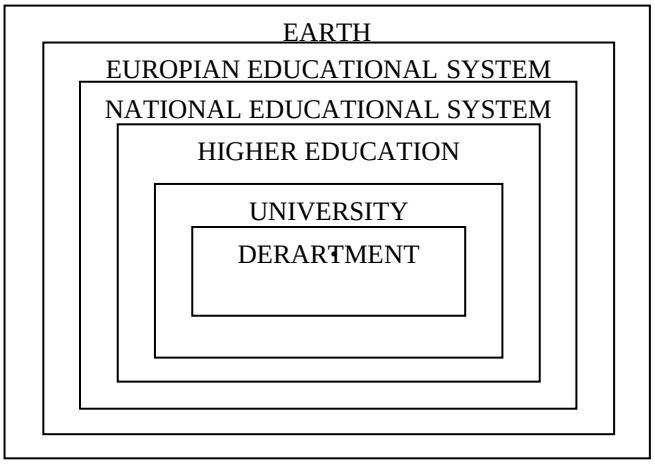


Diagram 3

That the alignment inside the subsystems is the first and basic step for modernization but sometimes this is not easy especially in rigid organization like Universities. To get systems improvement, we must make use of what is already known about education, promoting education and about institutional change.

To get systems improvement usage of what is already known is essential.

4. GLOBAL EDUCATION

4.1 Globalization in Education

Universities are by their nature global institutions and favoured with actions that remove barriers for mobility of people and ideas. With this approach it sure that the term for universities is well known and define.

In recent years, unfortunately, the term “globalization” has been used in so many ways that it has lost the precise meaning it once might have had and as a result, discussions regarding globalization can become confusing.

For some people globalization is a reality that they cannot do anything about it and some other people imply globalization as the transformation of cultures, nations and even the change of attitudes and ideas about society and religion, which are transformed by cultural diffusion brought by globalization.
Yet today globalisation implies a world driven by economic forces and in which public sector activities, including Higher Education are perceived in market terms.

Universities are faced with a major challenge to shift from traditional to modern through a relationship between them and globalization. During the last ten years, universities have become progressively more "international" in focus, scope and strategy. The number of international students studying all over the world has risen to great levels, student exchanges have become more important activities for institutions, and international activities of an entrepreneurial nature have assumed a significance far beyond that which could have been predicted a decade ago.

Globalization challenges the rigid and monolithic face of university in contrast to the opportunities for development that can be possibly result from issues like competition, quality, and connection with marked needs.

These issues will hold universities to increase their presence not only in local but also in national and international environments retain them a priority for the improvement of the regional and national needs.

Universities are by their nature global organisations.

One of the most important effects of globalisation is the competition across the nations. In order institutes to become more competitive and internationalised, the integration of a global dimension into their operations and strategy is essential. With the global competition comes the potential danger of a highly stratified market dominated by the "brand name" Institutions that prosper as they increase their reach worldwide

With this global competition some countries, which have history in education such as UK and USA, will be in advanced position compared to other countries. Similarly, institutes such as the Harvard University or the alliance between France's European Institute for Business Administration and the University of Pennsylvania's Wharton School of Business, have the advantage based on their prestigious name compared to other same level Institutes. Therefore, there is the fear that countries like US and UK will undermine others countries national higher education systems and transform Higher Education to a more internationalised education. Some people view internationalisation as a response to globalisation. [47]

Globalisation brought competition but also contributes to stratification of the market, which means sometimes danger.

4.2 New subject or teaching principle

Global education should enable students, by means of appropriate knowledge and abilities, to act with responsibility in the complex interconnections of global society. Global education is not a new subject, but a comprehensive guiding principle for teaching at all levels.

Global education is learning for the future. Being fit for global society does not only mean having a knowledge of English and computers to be able to enter the labour market.
Global education will encourage people and empower them to be active in forming world society, creating conditions world-wide for solidarity in thinking and acting. It aims at the development of that cognitive, social and practical competence which we need in order to lead a fulfilled and responsible life, even under the com-plex conditions of a world which is becoming ever more interwoven.

Global education has its roots in various approaches, especially in education concerning development and peace, the environment, and intercultural matters. According to its manifold educational orientation, there are various approaches in theory and practice. All of them are focused on a viable development in the future according to Agenda 21 which was also signed by Switzerland in 1992 in Rio. Global education shares this aim with other educational areas such as the environment, health and intercultural education. The specific interests of global education in this respect are values for human development on the basis of social justice.

Global education is oriented towards an integral and participative process of learning. A variety of methods and change of perspective should help towards a better comprehension of complexity, to the acceptance of uncertainties and insoluble contradictions and help in learning how to deal with them.

Global education is oriented towards
participative process of learning.

The students immediate realise of daily life should, whenever possible, be at the mid-point. From their local experience (e.g. wearing a T-shirt), a global dimension can be deduced.

There are three levels of learning in this process:

- Learning to understand the global correlations of our daily life (knowledge), e.g. how do the children live who work in garment factories?

- Learning to develop personal behaviour and attitudes concerning individual topics (values), e.g. I condemn child labour under shameful conditions.

- Learning to apply lessons learnt (capabilities) .e.g. I change my behaviour as a consumer and buy fair-trade products.

It is clear that global education is not a subject, but a dimension that runs through curriculum, an extra filter to help students to make sense of all the information and opinion of the world. It combines methodology – active and experimental discussion based activities, a caring, co-operative and open outlook on the classroom experience, and core concerns finding out about all the cultures.

Higher education has to play major role for the future society.

4.3 What does Globalization mean for Higher Education?

UN-Secretary General Kofi Annan, has made strong appeals for seeking ways to make "globalisation benefit all", and UNESCO has designated the year 2002 as its year for *Globalisation with a Human Face*.

It is clear that all education, but in particular also higher education has to play a major role. Higher education in particular, as a player of a major role in training teachers and developing and regularly updating school curricula. Also, because of its role in training doctors and stuff of health care organization and provision, and its role in providing the experts and support for the legal system, the administration, business and industry.

Beyond this, higher education has a crucial role to play in sustaining and further developing the intellectual and cultural base of society, helping to preserve cultural identity and give inspiration and justified pride to citizens in the achievements over time of their own society. However: how is higher education itself impacted by globalisation?

How can higher education optimise its performance in serving society in our age of globalisation? What does globalisation really mean for higher education?

It is clear that globalisation has increasingly became a complex concept. Modern information and communication technology is the key to the present state of rapid and profound change.

In the past, the exchange of the ideas required our actual physical displacement, and this could only be achieved at a single place and a single time.

At the present, we interact with many diffent people in many different places around the world at the same time and this gives new dimension to the education.

Better understanding of globalisation also could be through its elements. One such a dimension is the geographical and is related to exploration and discovery, other dimensions are economic, the cultural, the social and of course political. Is visible that each dimension of the globalisation can be placed front and centre stage in combination with one or more of the other dimensions.

Globalisation could have a human face.

We have to take into consideration that for this type of world we are educating new generation.

We took responsibility to prepare the next generation not only for a different world, bordeless world, or at least a world in which many borders have lost much of their meaning. All these facts will present universities with a numbers of challenges and oportunities as we already mentioned.

Universities have to see themselves not only as an part of a national system, protected by the state had seand the rules on the programmes which are provided and the reseach which has to be done.

Universities must rely on their own performance in order to secure sufficient funding for high quality of teaching and reseach and they have to understand then very fast they will find themselves in extremely unprotected and highly competitive world. And this will start to be a rule also for state-run university system under which individual university have to compete for students, reasearch and adequate founding. So they have to redefine their modes of governance, their internal structures, their financing and external relations, as well as their modes of operation.

Without any doubts the performance of the higher education sector is too important for the future of the state and for the society because society not only needs well – educated people but also needs to generate an adequate intellectual elite to reflect on and give guidance to the future of humankind.

Globalisation has increasingly became a complex concept.

5. EDUCATION IN AMERICA

5.1 Structure of Education

America in comparison to Europe, has the advantage of already solved problems regarding to the organization of education across States.
America and also other countries (Australia, Canada, New Zealand) had play-leading role in designing schemes and involving users in new terms and arrangements. Terms like tuition fees, loans, vouchers, had led institutions to find ways for the new perception of the education environment.

The following figure shows the structure of education in the United States. The figure presents the three levels of education (elementary, secondary, and postsecondary) and gives the approximate age range of persons at each level. Pupils ordinarily spend from 6 to 8 years in the elementary grades, which may be preceded by 1 or 2 years in nursery school and kindergarten. A 4- to 6-years program in secondary school follows the elementary school program. Pupils normally complete the entire program through grade 12 by age 18.

High school graduates who decide to continue their education may enter a technical or vocational institution, a 2-years College, or a 4-years college or University. A 2-years college normally offers the first 2 year duration of a standard 4-year college curriculum and a selection of terminal vocational programs. Academic courses completed at a 2-years college are usually transferable for credit at a 4-years college or University. A technical or vocational institution offers postsecondary technical training leading to a specific career. An associate degree requires at least 2 years of college-level work, and a bachelor's degree normally can be earned in 4 years. At least 1 year beyond the bachelor is necessary for a master's degree, while a doctor's degree usually requires a minimum of 3 or 4 years beyond the bachelor's.
Professional schools differ widely in admission requirements and in program length.

America has the advantage of a homogeneous educational system in comparison with Europe.

Medical students, for example, generally complete a 4-years program of premedical studies at a college or University before they can enter the 4-years program at a medical school. Law programs normally require 3 years of coursework beyond the bachelor's degree level.

The implementation of a single system across every State gives the possibility of setting and adapting better the educational subject in America related to the situation Europe and to face them from a different point of view.

5.2 The two faces of Education

While in the USA an intense process related to the Higher Education has been experienced, it is also important to notice that America gives great importance on education issues regarding mathematics and science simultaneously. It is also important to add that the USA do not make the mistake in the degree of growth market oriented policies for the Higher Education to forget General Education. This is visible from the statistics and not only by themselves but also from the way that those statistics are made. In order to testimonial this we will present two statistical tables. One has to do with the average mathematics performance of other countries compared with the United States in 1995 and the other with the average science performance of other countries compared again with United States the same year.

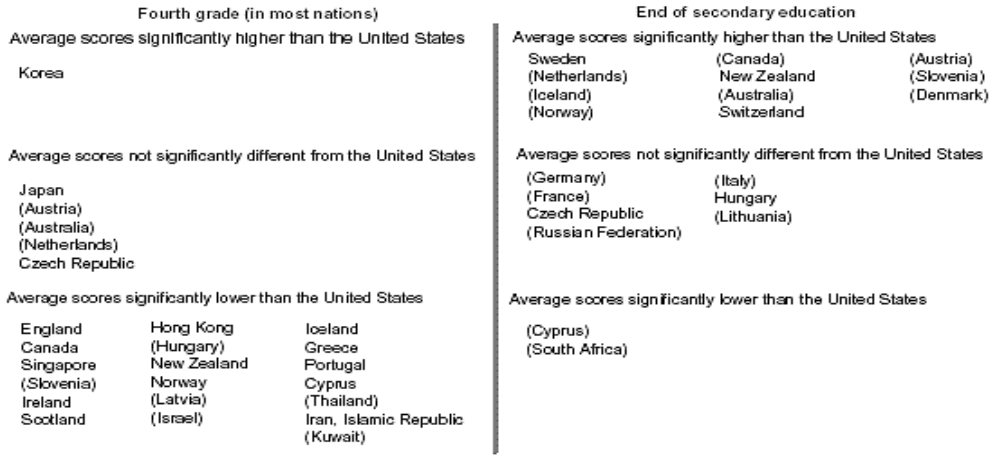
Many of the statistics in this chapter are derived from the statistical activities of the NCES. In addition, substantial contributions have been drawn from the work of other groups, both government and nongovernmental, as shown in the source notes of the relevant tables.
In the following two tables two important things can be observed:

1. United States is not only interesting in secondary education but also in elementary and primary as well as, this can be observe also from the statistics.
2. There is a specific classification, according to the following three answers:
   Like us, better than us, worst than us.

*America gi*ves *great importance on educational issues.*

Average mathematics performance of other countries compared with the United States: 1995

Average science performance of other countries compared with the United States: 1995



NOTE: Nations not meeting international guidelines are shown in parentheses.
SOURCE: U.S. Department of Education, National Centre for Education Statistics, *Pursuing Excellence: A Study of U.S. Fourth-Grade Mathematics and Science Achievement in International Context*, 1997 and *Pursuing Excellence: A Study of U.S. Twelfth-Grade Mathematics and Science Achievement in International Context,* 1998 .

5.3 Educate future leaders

The interest of America about education and for its introducing as a product of offered services was and it will be always in the first line trying to see the benefits of an international policy in the point to constitute priority of the White House. In this framework, the White House on the 19th of April 2000 publishes a statement, the memorandum for the Heads of Executive Departments and Agencies with subject International Educational Policy.

This memorandum signed from the President Bill Clinton, provides an important direction to the internationalisation of educational policy and as the President Clinton stated " We have to maintain our role as world leader to prepare our citizens for a global environment to attract and educate future leaders from abroad. In order to increase the 500.000 foreign students studying at postsecondary level and contribute some $9 billion annually to our economy but also they are developing appreciation for ours".

Continuing the President points out the priority of this policy. It is important the statement presented "Report of the international education study team" which is prepared as part of the implementation of the President International Education Policy (02/01) with title "survey of US posts - International Education obstacles and opportunities".

The purpose of the project is to obtain and analyze comprehensive information on measures in various countries affecting the ability of students to gain access to education and training services provided by foreign suppliers.

Members of the project are the office of the U.S. Trade Representative, in conjunction with the U.S. Departments of Education, State and Commerce.
The Methodology ruled the project is to:

- Survey information currently available to USG agencies on the educational systems of other countries and their manner of regulating foreign providers of education

Interest of America of the education is, its understanding as a product of offered services.

- Identify country practices that tend to discourage entities from engaging in international education and training or that discriminate against non-national providers of education
- Develop a database of U.S. public and private entities, currently engaged in education and training activities abroad for profit and assess their experiences.
- Estimate or evaluate the commercial significance or potential commercial significance of these enterprises worldwide and in key countries.
- Examine the educational programs of other countries engaged in international education
- Recommend possible solutions that might be achievable through trade agreements and through international cooperation for problems identified in the study.

Information would be sought on limitations on foreign ownership of education facilities; discrimination against education provided by foreign-owned schools; lack of recognition of degrees earned in foreign institutions; denying students permission to study abroad and similar restrictions.

Consistent with the intent of the President's Directive to remove unnecessary obstacles to international education, this study would assist in determining the magnitude of the problems encountered.

Recommendations would be designed to assist the Office of the U.S. Trade Representative, and other U.S. Government agencies, in their efforts to negotiate trade agreements with other countries to reduce obstacles to U.S. entities engaged in providing education and training services to foreign students in the United States and abroad.

It is very significant that the survey of U.S. was prepared by embassies in 140 countries with main goal to obtain information on obstacles and opportunities for US entities seeking to supply education and training services on a commercial basis in foreign markets.

Intent of the President Directive is removing unnecessary obstacles to international education.

The interest of U.S. in this internationalisation of education is visible also from the article of Michael Scan " Other's Open Doors" – How others attract international students. This article examines what other countries make in order to increase the number of international students This can also be achieved for the following (See also www.opendoors.iienetwork.org for complete online survey and *Open Doors 2002* data).

"These numbers are encouraging," said Patricia Harrison, Assistant Secretary of State for Educational and Cultural Affairs. "International education has become of paramount importance to economic, political, and social conditions in both developing and developed countries at all levels. Our ability to promote sustainable development, civil society, and international peace requires better educational and social institutions. Welcoming learners from abroad over the long term helps enormously to eliminate hostile preconceptions, to promote cultural relations and to attempt to solve conflicts peacefully."

According to IIE President Allan Goodman, "International students continue to see the U.S. as their premier study destination and our campuses continue to welcome them in record numbers, knowing that their presence in our classrooms strengthens our own understanding of global issues and improves the chances for peace and development around the globe."

6. EDUCATION IN EUROPEAN UNION

6.1 Focus on Europe

Diversity of European Union education system in all levels and structures between the Member states has to do with different cultures educational and professional needs and also different rates of development for each country.

For the concretisation of European educational policy they are essential the following:
Economic convergence
Alignment of titles
Equivalence
Transparency
National and European educational policy and strategy

The European Community has long been involved in the education matters, even from its very first stages. Articles No 126 and 127 of its establishing treaty, point out that "*the community shall contribute to the development of quality education by encouraging and supplementing their action"* and *"the Community shall implement a vocational training policy which shall support and supplement the action of the Member States*.

In 1996, the EU launched the *White paper on Education and Training-teaching and learning towards the leaning Society* [11]. This document analyzed the situation (of that time) in education and stated education in Europe suffered from.

The white paper states that Europe has to build the learning society as quickly as possible through radical changes. It also proposed changes and further action, setting the main guidelines for the implementation of the learning society.

Diversity of European Union education system in all levels has to take into account cultures educational and professional needs.

The objectives of these proposals were:
- Encouragement of new knowledge acquisition,
- Approaching of school and business,
- Fighting against social exclusion,
- Development of proficiency in three European languages
- Treatment of capital and training investment in equal basis.

We have to see if this objectives was rich and in which level, in order to redefine the target. We have to take in consideration that we have to examine and to discuss subjects like:

- What are higher education's fundamental values and how can they be reinterpreted in the current changing tides?
- How can higher education do a better job of articulating its service to society and its role beyond career preparation and the transfer of knowledge from teacher to student?
- How can higher education assess, demonstrate, and improve its results for increasingly sceptical and demanding policy makers, citizens and students?
- How can institutions find equilibrium between autonomy and responsiveness, and between themselves and the state as a partner, consumer, and regulator?
- How can institutions become sufficiently agile to adapt to the rapidly changing environment without losing their intellectual souls?

Europe has to build the learning society as quickly as possible through radical changes.

6.2 Higher Education

SORBONNE

Declaration of 29 countries on May 25, 1998 was submitted. In Declaration is written that Universities and others Institutions of Higher Education can choose to be actors, rather than objects of this essential process of change. Declaration stressed the University's central role in developing European cultural dimension.

BOLOGNA

In 1999, the European Ministers of Education, launched the Bologna Declaration. [47] This documents goes further on the concept of Learning Europe, considering it "as *irreplaceable factor for social and human growth"* and as *"an indispensable component to consolidate and enrich the European citizenship"*. A major role towards this target is allocated to European Universities, which should commit themselves to constructing the *European Area of Higher Education*, which should be internationally competitive and appealing.

In order to establish the European Area of Higher Education, and to promote the European system worldwide, the council of ministers, set the following objectives that should be accomplished by 2010. [51]

Application of a system of easily readable and comparable degrees
Implementation also of the " Diploma Supplement" in order to promote European citizens employability and International competitiveness of European higher education system.
Access to postgraduate cycle requires full completion of the undergraduate one, which lasts minimum three years and is considered the degree that certifies the qualification for entry into the labour market. The postgraduate cycle leads to master and doctorate degrees.

Formation of a common framework for higher education that will consist of two study cycles, the undergraduate and the postgraduate cycle.

Establishment of a system of credits-such as the ECTS as the proper means of promoting the most widespread student mobility.
Mobility of teaching staff and student should be promoted, by maximising relevant possibilities, optimising the terms and conditions and lessening the obstacles.

*Promotion of European co-operation in quality assurance***.**
Development of the relevant comparable criteria and methodologies

Promotion of European dimension in higher education with regards to specific issues like curricular development, inter–institutional co-operation, mobility, training and research.

LISBON

The Lisbon European Council (March 2000), has set the target of creation a European knowledge society of European States and governments.
The European Universities (all Institutes of higher education) are considered as vital players in this process, due to the key role they have in the production (research) and transmission (education) of knowledge, but also due to their involvement in the very important matter of social cohesion and economic competitiveness. The strategic goal of becoming defined by the Heads of State and Government: "*making Europe the most competitive and dynamic knowledge-based economy in the world".*

The European Universities have a long tradition and a record of academic excellence, but they do suffer from specific problems and they are going to face more challenges in the future, due to the constantly changing economic and social environment. [53]

The social environment, that is characterized by globalisation, intensive competition and rapid technology progress.

European universities have to establish two study cycles :
Undergraduate and Postgraduate.

They yet remain less attractive and competitive against Universities of Europe's major partners (mainly of the U.S.A.) and they also suffer from luck of resources and funding.
The formulation of term and conditions for the development of transnational education activities. This would help in the expansion of European higher education outside Europe on a competitive basis.

PRAGUE

Two years after the Bologna Declaration, the European Ministers met in Prague. They reaffirmed their commitment to the establishment of the *European Higher Education Area* by 2010 and reviewed the status of the objectives that were set in the Bologna Declaration.

The ministers strongly encouraged educational Institutes to adopt the system of the course units and called upon existing Organizations to promote this idea. They noted that:
The two cycles system as been tackled and discussed among the member states and some had already adopt it.

What is more important in their conclusions is the point that degree programs should include different orientations, in order to accommodate different academic and labor market needs.

Mobility is of the almost importance and should be supported by the ECTS credit system, which along with common quality assurance procedures will enhance the compatibility attractiveness and competitiveness of European higher education

The council of the ministers also stressed the importance of the European dimension of higher education, by introducing joint courses, modules and curricula with "European" content that would lead to joint degrees.

Sustainable economic growth with more and better jobs and greater social cohesion" was the message of the prime ministers for Europe.

Apart from the objectives of the Bologna declaration, some other aspects were also discussed, as follows:

The development of the European dimension of higher education, mainly through active and effective collaboration between the countries but also between Universities and other educational Institutions, will be priority.
The collaboration aims at fighting common problems but also the search for common strategic and relevant targets.

The vital role of quality assurance was recognized in both ensuring high education quality and also on comparability of qualifications across Europe. They stressed the necessity of the adoption of National Quality Assurance standards and urged educational Institutes in the open dialogue on this subject. European Network of Quality Assurance in Higher Education was considered as the central point, which in collaboration with states and institutes from both member countries and non-members would establish a common framework for quality assurance.

The ministers accepted the active involvement of higher education Institutes and also of their students in the development of the *European Higher Education Area*, stressing out that quality should be the main feature of it and by this way, enhancing its attractiveness (readability, comparability). Attractiveness would also be promoted by the common framework of qualifications, certification and accreditation mechanisms and by increased information efforts
An aspect that came under consideration was that of *Lifelong learning*, which was recognized as an essential element of the European Higher Education Area. Lifelong strategies were assessed as essential in order to increase European economy competitiveness, the use of new technologies and the fight against social exclusion. The ministers also accepted applications from future member states in taking place in the Bologna process and EU programs.

The quality should be the main feature of it and by this way, enhancing its attractiveness.

From PRAGUE to BERLIN

In November 2001, DG Education and Culture of the European Commission released a working document called "*From Prague to Berlin the EU Contribution"*.
There were putted 10 concrete measures, which could be implemented from the academic year 2003 – 2004.

These measures are following:

1. A wide scale introduction of the Diploma Supplement, increasing substantially the understanding and recognition of degrees at all levels. Synergies with similar documents in vocational training will be sought.
1. Abroad pilot scheme to test, building on the ECTS experience, a European Credit Accumulation System for Lifelong learning, enabling citizens to accumulate credits gained through formal, non-formal and in-formal learning.
2. The Socrates-Erasmus Student Charter. A one page leaflet or card stating clearly the rights and obligations of mobile students (no tuition fees, full academic recognition etc.).
3. The creation of models of European Virtual Universities, in order to offer citizens access to a Europe-wide course offer and provide incentives to combine physical and virtual mobility.
4. A special action to promote "quality culture" within universities, "bottom-up", in co-operation with the European University Association (EUA). This pilot scheme would help universities to introduce internal quality assurance mechanisms, improve their quality levels and being better prepared for external evaluations.
5. A pilot Scheme on European Higher Education Quality Evaluation in order to experience what European transnational evaluation would mean on a voluntary basis, covering regulated professions (such as medical doctors) and non-regulated professions (such as business managers).

Lifelong strategies are assessed as essential.

6. Define and support European Masters and Doctoral Courses. Well define European degrees can contribute to the quality and visibility of European Higher Education. The Commission would support the development and launch of a series of new European Masters and joint Doctoral courses, the latter together with DG Research.
7. A Data-base (Portal) on job and learning opportunities set up together with DG Employment, would help citizens find their way in the European education offer.
8. Other measures will be identified in Action Plan following the "Communication to the European parliament the Council on strengthening co-operation with third countries in the field of higher education countries.

Apart from the specific measures above, the Commission gives an overall support to the Bologna process through Monitoring/ Reports/ Seminars.

Necessity is to follow measures and reach the quality of higher education in Europe.

6.3 e-Learning

Among the goals that were set in the Lisbon European Council, was the need to exploit the advantage of new economy and of the Internet. The heads of States and Governments, urged the commission to build " *a comprehensive e-Europe Action Plan using an open method of co-ordination based on the benchmarking of national initiatives",* combined with the Commission's recent e-Europe initiative as well as its Communication *"Strategies for jobs in the Information society".* [54,50]

In the framework of *e-Europe Action Plan*, the Commission introduced a new initiative in March 2000, named *e-Learning.* [49]
The communication document on e-Learning, admits that although European citizens are amongst the best educated in the world, there are still disadvantages that should be overcome (the soon as possible), in order to remain competitive against United States.

Formal (schools, Universities) and non-formal (vocational, in-company) training still lack technological resources, mainly meaning computers.
There is a significant luck of ICT specialists and generally qualified staff. European teachers that are capable of using new technologies and effectively incorporate them into their work practice are a minority, even in the most advanced European countries.

There is no connection between the new technology industry and education. Consequently European production of multimedia educational services is very small.

The telecommunication tariffs remain expensive in Europe, which poses a major obstacle in the wide spreading of new technologies. Lower cost should be provided for educational purposes.

E-learning is a initiative in order the European citizens are amongst the best educated in the world.

Digital literacy for every European citizen was regarded as a high priority, in order to provide equal opportunities, enhance cohesion and employability and fight social exclusion.

e-Learning aims at the approaching of I.C.T. with education and training and it is based on efforts in four areas:

Quality of equipment and other resources and services (training software, multimedia products). The focus mainly on multimedia computers, stating that schools should be equipped with multimedia computers, so that the ratio of student per multimedia computer, reaches the figure 5-15 by the year 2004. Relevant actions should be adopted for the business sector and especially S.M.E.'s and also for vocational training. New technology should be used for learning purposes, shaping new teaching environments and teaching practices and also allowing the formation of new type relationship between students and teachers. Teachers should be trained in I.C.T. techniques, in order to effectively take advantage of them. Relevant actions should be adopted for vocational training.

Development of European educational services and software. European multimedia educational industry is weak, suffers from luck of qualified manpower and should be strengthened. Stimulation is needed, so that the gap between education and multimedia content industry is diminished, in order to promote the development of educational content multimedia applications (for all levels and forms of education and training).

Quality standards should be established for these applications. The matter of vocational guidance services is considered vital. The target is the strengthening of these services by the end of year 2002, so that everyone should have the opportunity to access the relevant information.

Acceleration of networking between levels of education and training. The target is the exchange of experience and practices, but also the exchange of educational content and material in the form of distance teaching and learning. e-Learning aims at the approaching of I.C.T. with education and training

e-Learning aims at the approaching of I.C.T. with education and training.

Interconnection of virtual learning environments and campuses, networking of various Institutes (Universities, colleges, research centres) and training or even cultural centres (libraries, museums). The relevant training should of course be provided to teachers and learners.

The following targets were set for *e-Learning*:

Objectives relevant to infrastructure
All schools and young people in Europe, should have access to the Internet by the end of 2001.
Creation of an educational trans-European high speed network by the end of 2001.
All pupils should have Internet and multimedia access in their classroom by the end of 2002.

Objectives relevant to digital literacy
Yearly increase of human resources investment per capita.
Provision of basic skills to every citizen so they can live and work in the new Information Society.
European population should become digitally literate.

Objectives to be adopted of education and training into the knowledge-based society

- All teachers should be provided with individual equipment and should be able to use the Internet and multimedia resources by the end of 2002.
- All people leaving schools should have obtained basic knowledge of computer use by end of 2003.
- Schools and training canters should provide knowledge versatile and accessible to everybody.
- Encourage mobility (for students, teachers, trainers, researchers) by the end of year 2000.

The minorities (women, elder, disabled etc.) should be helped, in order to have access to knowledge and new technologies.

Interconnection of virtual learning environments various institutes and training or even cultural canters will be in priority.

Definition of basic skills (Information technologies, foreign languages) that will be given through life-long learning are required.
The e-Learning initiative goes on by setting the framework for the implementation of the actions it contains:
There is a specific and rather tight timetable for accomplishing the targets that are set. A common benchmarking process is set (using indicators), in order to monitor the progress, the effectiveness of the actions and the dissemination of common experience and practice.

Observation mechanism of current evolutions concerning educational factors (infrastructure, services, content) in Europe as well as Japan and the USA will also be established. The results will provide source material for revision of the guidelines for employment policy in Europe. The Commission will also have to periodically edit reports of progress.
Financial support for the implementation of the e-Learning initiative is needed.
Funding by the member states of EU of relevant efforts as provision of equipment to teachers and local access centers.

Contribution of Community programs in the education area, to promote virtual education, networking, production of multimedia educational content.
Contribution of Community programs in the research area (Information Society Technologies, Targeted Socio-Economic Research, TEN-Telecom), in order to promote the entry of young people in the use of new technologies and provide high speed Internet access for students and researchers.
Contribution of other international co-operation programs (MEDA, EUMEDIS) which have an educational aspect.

Financial support of the E.U. financial Bodies (European Investment Bank) to the European multimedia industry, in order to promote the creation of educational material.
Specific action should be taken by the Commission that will bring in contact the key players in education, training and culture:

European Union is focusing on attractiveness (readability, comparability) of the educational systems and on the effective use on new technologies on education.

Enhancement of school networking (European Schoolnet-EUN), in order to set up a virtual and multilingual European campus and promote cooperation and knowledge exchange.

Creation of European Gateways for educational communities.
Framework for discussion on the future design process of European education.
Establishment of observation mechanisms that will help strategy formulation and pilot projects.
Creation of training network, that will assist trainers (and other players in this sector) to use new technology for educational purpose.

Setting up of an Internet e-Learning site, based on existing content developed under other community programs, so that exchange of experience and knowledge is stimulated and assisted.

Conditioning the qualifications for use of ICT in order to enhance employability and lifelong learning
Promotion of personal fulfillment and motivation of learners to work in groups, discuss with their teachers, work in synergies etc.

The adoption of education to the new conditions and the shift from the traditional to the modern paradigm is not yet included in its priorities.

7. CONTEMPORARY STATUS OF THE EUROPEAN UNIVERSITIES

7.1 Worldwide perspective of European Universities.

The whole world is moving towards the society of knowledge; some might argue that it is already a reality in the most developed countries:
Knowledge is produced by research, transmitted through education, disseminated (through information and communication technology) to the knowledge users, used through technological innovation.

Universities have the most significant role in the first two elements, and they also have a role in innovation. Consequently, we can consider them as the vital factor for success of the implementation of the knowledge society. They implement 80% of the fundamental and 34% of total research in Europe, while they also carry the load of knowledge transmission, providing education to continuously increasing number of students.

There were 3300 Universities in European Union in year 2000 and approximately 4000 in Europe as a whole (that means including western Europe and the candidate countries). The number of students has raised between years 1990 and 2000, from less than 9 million to 12.5 million. As a comparison, we mention that the USA has more than 4000 higher education Institutions. [Euro stat]

European Universities (at least the majority of them) are modelled according to the traditional way that stands for nearly two centuries, with their operation and research and training based on this. It has become apparent though, that higher education is changing, moving away from the traditional model.

Change in higher education in Europe and worldwide is already a fact originating from the change in economy and society.
It affects all the stakeholders (students, institutes, authorities and policy makers, labour market), although maybe not all of them accept change eagerly. Which are the factors that drive the changing force?

Universities are the vital factor for success of the implementation of the knowledge society.

*Increased demand for higher education***.** This requirement is posed by society but also by the labour market and is expected to rise even more in the following years, posing a major problem on the demand of financial resources and also inevitably to the lack of human resources (teachers, researchers).

The already underfunded European Universities (compared to the USA ones), will face even worse financial capacity (ratio of income per student) due to the rise in the number of students, which should be considered as sure. This fact will lead to reducing of quality and will destroy the vision of excellence for European Universities.

*Globalisation***.** Education could not be an exception to this worldwide trend and globalisation results to increased and intense competition. Competition exists in attracting financial resources (funds), students and also quality and productive staff (teachers, researchers). Competition is not only between Universities and countries but also between Universities and research institutes, public or owned by major companies.

The current position of European Universities is not very satisfying at this moment, always compared to the U.S.A. USA attracts more students from third countries (mainly Asia), especially at the advanced levels of education. The USA also is more successful in retaining the better students (doctorate qualification), including students from Europe. It is a fact that European Universities are less attractive to both teachers-researchers and students.

Collaboration with the industry. Technological innovation is very important for an economy to remain competitive and dissemination of knowledge from Universities to the business sector is one of the most critical steps in implementing innovation.

The companies outsource or subcontract their research activities in universities and it is a major challenge for the latter, to take advantage of this. It also quite common that small technological and knowledge intensive innovative companies, approach Universities geographically (in the so called technological parks), in order to facilitate knowledge transfer.

The current position of European Universities is not very satisfying .

It seems though, that the link between industry and Universities is still weak in Europe and this poses an obstacle in the efficient dissemination of knowledge and the growth of innovation.

Change in Universities organization. The market urges for diverse and specialized knowledge, in order to fulfil its needs. Companies need innovative solutions and they need them rather urgently. The new fields to explore, require interdisciplinary approach, but Universities still remain organized in the same old compartmentalized way. The borders between fundamental and applied research is also getting harder to distinguish, since whatever research takes place, it has to proof its application.

This is against the current academic culture which consider fundamental research as aiming to produce knowledge for its own sake. There seems to be a weak connection between fundamental and applied research and striving hard to collect funds, the European Universities move away from fundamental research, endangering their ability to produce knowledge.

New societal role of the University. Apart from initial training, the Universities should now provide opportunities for learning, such as life long learning, interdisciplinary skills etc. This means that the borders between formal higher education and vocational and other forms of informal training should be eliminated, training should become target oriented, new partners in education should be looking for (e.g. industry).

The link between industry, service sectors and Universities in Europe has to switch from week to strong.

7.2 What has to change in European Universities?

Change in European Universities is a reality as we discussed above, but it also remains a need. We need even more change. The European Universities are now playing in a European but even more in a global and very competitive field. They should be comparable not just to other national institutions, but to the world community of higher education and research. [57]

It is a must for the European Universities degrees to became competitive and comparable between them, but also with the rest of the world. This is one of the main targets of the Bologna declaration. [47]
Another fact is the students and teachers mobility. Although significant steps have been done towards this direction, mobility is still considered low, at least compared to the USA.

New facts and new challenges have appeared, such as the common European economic space and labour market, which means that people can now move and work all over Europe, a fact that intensifies the need for a formal way of skills certification. Another important issue, is the E.U. enlargement, which will of course bring in new players, increasing the complexity and heterogeneity of the higher education space.

European Universities have to face the four following challenges:

- Acquire and utilize more resources (both sufficient and sustainable)
- Use of the old ones efficiently,
- Consolidate their excellence, both in teaching and researching,
- Increase their attractiveness globally.

Is necessity for European Universities to be competitive and comparable.

Changes needed at Higher Education Institutions in order to create a coherent, compatible, open and competitive European Higher Education area.

An essential element of a science-based economic area must obviously be education and, in particular, higher education.
European higher education Institutions will have a two-fold task in this process: by achieving excellence in education, training and research, they will help to increase European competitiveness. At the same time, the challenges for European citizens with regard to mobility, flexibility, language skills and openness to the unknown will increase gently.

1. The mission of the University has always been simple and complex at the same time. In generating new knowledge and critically review existing knowledge. These complex tasks make it obvious that state guidance should limit itself to the prevision of general objectives and rules of procedure for the make of fairness and transparency.
2. The organisational of higher education, training and research is and should remain primarily a public task. A private commitment is always welcome.
3. Research needs the liberty to evolve in the expectation of the unexpected, freedom of research and teaching does not imply that staff can not be dismissed if they do not do their job, nor does it imply that students can remain indefinitely in their study programmes.
4. The practice of more autonomy and accountability in Universities requires professional management by academics trained for this purpose.
5. The regular assessment of department's performance in accomplishing these tasks is undoubtedly needed to improve quality. Equally necessary are new systems of incentives in the allocation of posts and funding, and in the salary structures for employees in Universities and research.

An essential element of a science – based economy must be education.

There are four tasks, however, which we consider of particular importance at this stage of the process:
- Firstly, the message is there. But we have to listen it. We have to get it through – to professors, staff, students, and by the media to the general public. With the Bologna Declaration and in the ensuing discussions, a majority of higher education Institutions and governments in Europe decide for this. This is not the end of the development, it is just the beginning. In each country, University leaders and government representatives will have to make an analysis of the present situation and decide how to proceed from there.

- The second task refers to the need for coordinating quality assurance and accreditation on a European level. There was a need for a trans-European quality assurance framework which would ensure the international visibility, compatibility and credibility of European higher education degrees.

- The third task refers to the importance of stimulating staff exchange. A more sustainable European dimension in education, however, can also be achieved by increasing staff mobility. We should aim at making mid- and long-term intra-European mobility of professors a much more common phenomenon that it is nowadays.

- The fourth task refers to strategic alliances has to be placed at many European colleges and Universities: gaining competitive advantage and the chance to increase income, greater visibility, and improved services. For example, the Vienna University of Economics and Business Administration has been successfully offering an IMBA degree (International Master of Business Administration) together with the University of South Carolina for many years.

Other similar example is in Austria also the cooperation of Danube University Krems - MBA program with Alaska Pacific University.
Academic Units as like Departments or Institutions would be motivated to redefine their roles and responsibilities within the Institution.

Will have to make an analysis of the present situation and decide how to proceed from there.

In this setting, academic freedom would be used to meet the needs and expectations of external and internal constituencies, and would serve the interests of the institution rather than the disciplines.

Through shared governance, professional management, and committed leadership, a "triangle of partnership" could be formed between administration and faculty. Administrations increasingly use management techniques to run Institutions and to support core academic activities.

From a structural perspective, the University of the future could be differentiated into core competencies. A focused mission could integrate these areas on an institutional level and provide direction and the overall goals toward which the University was developing. This new University would be characterised by an entrepreneurial culture in which all members work in accordance with changing environmental demands and for the common institutional good.

The functions of this new University would include efficient and effective decision making (doing the right things and doing them right) through the reduced size of governing bodies and the participation of external interest group representatives.
Consultation, dialogue, and consensus would continue to be traditions within institutions of higher education. But they would be used to serve the new functions of the University and engage administration, faculty, students, and external constituencies on equal terms.

Regarding services of the new University, the amount of interdisciplinary research would become the key measure for funding and promotion of specific academic units. Programs focused on specific job markets, general education including personal development and lifelong learning opportunities could develop and improve. Transparency of processes would help to fulfil the public for accountability and responsibility of Institutions of higher education.

Consultation, dialogue, and consensus would continue used to serve the new functions of the University.

Resources

European countries spent an average of nearly 5% of their G.D.P. (not all) on public funding to education, a figure close the level of the USA and quite higher than Japan 3.5%.

The number of students though has increased and the public expenditure has increased accordingly, leading to a wide gap between Europe and the USA. Resources per students in the USA is two to five times higher than in Europe. This gap is not only due to the difference in public founding which in the USA includes research and defence founds, but also to the fact that USA Universities have a wider range of choices for private funding (donations) and of course the students fees.

It is clear that USA is more attractive compared to Europe and they have an serious advantage in striving for excellence. European Universities must explore new sources of funds and resources, taking into account that there is no margin for increase in the public founding. These new sources could be as follows:
Public founding for research: Although this source of funds could help and the E.U. has committed itself in increasing investment in human capital, it can not be accepted that it can sufficiently cover the future needs.
Private donations: It can be a substantial source of income for European Universities, but there are obstacles due to cultural and financial reasons and they must be addressed accordingly.
Service provision to the private sector: The existing framework does not help towards this direction (intellectual property royalties) and this also has to be changed.
Students fees: European Universities are starting to change in this area, and fees already exist in most countries, but due to political and partly cultural reasons fees can't rise that much, in order to provide a sufficient solution on itself.

The European Union has adopted the vision of "education for everybody" and in most states, everybody that completes secondary school, has the opportunity to enter higher education, without any more selection procedures.

European Universities not only have limited funding, but it also seems that they are not using their funds very efficiently.

In this way, just because they have the right to, students who are not really interested in a specific faculty, enter the relevant schools and after some time, when they realize what they really want to do, they dropout their studies.

Average dropout range is 40% in the EU, it is very high and is major problem concerning the efficient use of educational resources.

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There seems to be a gap between the skills provided by Universities and the skills required by the labour market. The needs of the latter are rather volatile and are requested in short terms (since this is the way that the market moves). Education generally should be oriented to serve (among the others) and the labour market (having an open ear in its requests). In this way, society will gain benefit from education and the educational resources will be considered as efficiently used.

Duration of studies is not common for every state. In fact, there are differences in the ratio of one to two. Countries like Germany or Greece, need five or six years to train an engineer and during this period, the studies are funded by the state. In U.K. though, an engineer would enter the labour market after three years and he would like to go on to postgraduate studies, he should finance the studies himself or his company would do it for him.

This (irrational) difference, a part from the aspect of studies cost and resources utilization subject, has also other significant impacts on education in E.U. and the Bologna declaration has set a target to align qualifications and degrees.

The cost of research in European Universities is not (reliably) known, since the accounting systems are different and not comparable. It is not possible though to calculate the efficiency of investing in research, in order to allocate investment and resources more efficiently.

There seems to be a gap between the skills provided by Universities and the skills required by the labour market.

Excellence

Excellence is a necessity for European Universities, but how can it be achieved? There are some prerequisites that should be in place:

Transparent, efficient, flexible and robust administration. The traditional administration scheme cannot cope with the urgent need for change.
Transparency will be throw public announcement of balance sheets, budget statements.

Communication of the vision towards excellence, building efficient teams, interdisciplinary team work, monitoring of the process, appropriate decision making and action, wise allocation of resources are rather complex tasks, that need persons with managerial skills, lucking at this moment in the administration organization of Universities.

Planning. Building excellence is a rather long process that includes finding sustainable and reliable sources of income, recruiting top performers and building worldwide reputation. It is a project and as such, proper long term planning is essential, otherwise the resources will not be efficiently utilized and the final target will remain impossible.

It is necessary to take decision, by the States and the Universities themselves, in which area are they going to concentrate their interest and effort. Every University cannot be excellent in every area and specialization is inevitable. Decision on this is depending on its University tradition, existing infrastructure, local society and market needs and prospective, possible networking with other Universities and Research centres.

Knowledge excellence requires top performers. Knowledge are produced by man and whatever are the resources and the administration, the most important element for success in excellence, remains human capital.

Europe has to work more towards making education and research more attractive to young graduates, providing professionally and financially motivation in this area..

Collaborative working and mobility should also be established, in order to attract Networking worldwide (and not only European) top performers

Exploitation of research results

Although research takes place in European Universities, the exploitation of its results is not extended, as it should be and is in the USA. Technological innovation companies have appeared in the previous years (particularly in some states), but they do not last long neither do they grow up quickly as they should. This is due to various reasons:

Cultural. The majority of Universities do not seem eager to balance between the autonomy, "knowledge for all" tradition and the managerial aspect of exploitation of knowledge.

Loyalties Framework. In the USA, where spin-off companies have developed rapidly and successfully, the loyalties of the research results is allotted to the Universities. In Europe the relevant framework does not allow this and it is rather complicated, discouraging Universities and researchers. E.U. has taken action towards making the framework simple, attractive and efficient, mainly though the European patent, but its results are still to be proved.

Worldwide perspective of European Universities

In Transatlantic dialog (Quebec), the participants concurred the partnerships and alliances, educational cooperation, and internationalisation are vehicles for riding the turbulence of the times. Inaction is not an option. [36]

Higher education leaders, who struggle daily to keep the ship afloat, face the central challenge or realizing higher education's potential – serving as a key instrument for political, social and economic change. Building commitment to a long-term perspective is a prerequisite for the continued health and vibrancy of higher education in the United State, Canada, and Europe, and this commitment underscores the importance of continued communication among higher education leaders.

European Universities should move their interest from their own state.

Not overlooking local and regional development, they should consider the world as their field for extension, compete with Universities from other regions (mainly the USA) and make themselves attractive to non-European students, teachers and researchers.

This needs some effort from E.U. to arrange matters concerning migration, visas etc, but there are mainly the conditions for studying and working in a European University should be improved.

The goal of the Higher Education reform is to increase flexibility and adaptability.

Conclusions

The target and the underlying goal of the Higher Education reform is to increase flexibility and adaptability in order to survive in an international competitive market. The European environment priority is to develop and to apply turning process in member states and to establish the Europeans Area of Higher Education.
The Modern University has to take in account the needs of society and economic reality and to apply simple minded rules like:

- Think global – act local
- Strong relations with outside environments
- Lean structures with areas of expenses inside environment
- Focusing and offering in an efficient and effective way on what they do best
- International relation with mobility of professors and students
- Quality has to be the priority for the offered services
- Create internal and external networks
- Differentiate their services instead of offering "everything for everybody" or "more of the same"
- The Higher education has to act in three directions: Literacy and numeracy, Qualification and ICT literacy
- Transparency management in economic, administrative and academic matters
- Knowledge management practices also in Higher Education for effective improving students knowledge and skills and for effective improving of staff skills
- New education culture for students and professors
- Fees in a normal way in order to develop the model "not trade but aid" meaning that the public - state fees will be the main fund for institution but also possibilities for cooperation with companies through commercial way (support)
- Flexible structure means basic departments with different centres of studies
- Core programs + speciality

8. SOME INTEREST ISSUES CONCERNING EDUCATION

8.1 Transatlantic dialogue

Contribution from "The brave new (and smaller) of Higher Education", ACE (American Council of Education). Centre for Institutional and International Initiatives, EUE written by Madeleine Green, Peter Eckel and Andris Barblan. Market forces, globalisation, internationalization, competition, new providers, the cost efficiency - these descriptors of the brave new world of higher education appear consistently in any discussion of its future. Even when used in the same national context, such terms describe different phenomena and elicit different interpretations; cross-cultural conversations are even more difficult. A shared understanding of the forces that are reshaping higher education within and among nations provides an essential foundation for the development of sound policy and effective institutional strategies to adapt to these new realities. Such challenges were the focus of the seventh Transatlantic Dialogue, cosponsored by the American Council on Education (ACE), the Association of Universities and Colleges of Canada (AUCC), and the European University Association (EUA) and hosted by the University Laval in Quebec.

The purpose of this meeting was to explore the forces shaping change in higher education in the United States, Canada, and Europe; analyse how Institutions and policy makers are responding; also assess the costs and benefits of these responses. This conversation of some 30 presidents, vice chancellors, and rectors (Annex 8.1) assumed the volatility of the current environment and the need for continuous change. However just how much change is necessary and desirable, and what kind of change should occur, were open to question.

The Transatlantic Dialogue explored strategies that Institutions use to be more responsive and relevant, and reflected on the conflicts these strategies can present with respect to historic institutional values and mission. Participants examined the promise and the peril of establishing alliances with partners outside the academy, such as businesses or for-profit educational Institutions, and the complexities of international collaborations that go beyond traditional student and faculty mobility. The new environment and the many strategic choices facing institutional leaders on both sides of the Atlantic provided the framework for a rich conversation.

The issues that participants discussed dramatically differed from the ones considered at the first Transatlantic Dialogue in 1989 in Hartford, Connecticut. At that time, the World Wide Web was virtually unknown to administrators, and e-mail use was in its infancy. The sharp differences among national contexts across the Atlantic and within Europe provided few common bases for discussion. The geopolitical situation was entirely different from the one that would exist half a decade later. The Berlin Wall was still intact; the Eastern Bloc countries were still part of the Soviet system.

The North American Free Trade Agreement was in its early stages, as was the European Union (EU), which was viewed as a zone of economic growth set up against Communism. In higher education, North American Institutions were entrepreneurial and customer-oriented; doing business in a pragmatic world of public relations and money management that was alien to their European counterparts. In continental Europe, the ministries very much controlled Universities' destinies, and the rigidities of centuries-old traditions of teaching and learning were difficult to loosen.

In the United Kingdom, the Polytechnics were not considered Universities, and the national assessment exercises had not yet taken place. The concept of the "European dimension" of higher education was just emerging. The appointed North American presidents saw themselves as leaders, the elected European rectors as first among equals. In brief, a little more than a decade ago, the Atlantic Ocean represented a formidable distance between European and North American higher education, between the old world and the new.
By 2001, and the seventh Transatlantic Dialogue, the picture looked quite different. Technology was a given, and competition - long established in Canada and the United States - was gaining ground in much of Europe. Europe had undergone vast political changes, and the move to harmonize the varying forms of national higher education in the EU by making them more transparent and compatible was intensifying under the auspices of the Bologna Declaration.

By 2001, there was no doubt that higher education was indeed a global enterprise, and although significant differences still exist among nations and continents, the fundamental challenges - especially those created by the new environment of technology, globalisation, and competition - are very much the same. The vision of the future seen by those USA., Canadian, and

European leaders at the 2001 Quebec seminar was more similar than dissimilar - a surprise to most, if not all, of the participants.

In order to secure a snapshot of the varying views, the seminar cosponsors asked each participant to vote on a series of statements about the future of higher education from his or her perspective. The participants indicated the extent to which they agreed or disagreed with each statement regarding the actual future they foresaw (versus the ideal future they desired) in their own country. They also noted the extent to which they agreed or disagreed with each assertion.

The high level of consistency among all participants came as a surprise. Of the approximately 20 assertions shown on the next page, the Americans and the Europeans disagreed on only four; and the Americans and Canadians differed on only one. The Canadians and the Europeans agreed on all the assertions. Further, even when disagreement occurred, it was mild. Indeed, the American, Canadian, and European leaders had remarkably similar views of what lay ahead for higher education.

How do American, Canadian, and European higher education leaders see the future?

In an informal opinion poll, the participants indicated their agreement or disagreement with the following assertions about the future.
The U.S., Canadian, and European presidents and rectors largely agreed on the following points:
• Society will place far greater emphasis on higher education's role in workforce preparation than in promoting social development and cultural identity.
• Borderless education will not undermine higher education's capacity to contribute to social development and cultural identity.
• Policy makers will not abandon the concept of higher education as a social investment (public good) in favor of higher education as a personal investment only (private good).
• Partnerships with businesses and other no educational organizations will not increasingly threaten academic integrity.

• Governments will increasingly require outcome-oriented quality assessments as an accountability measures.
• Technology will play a major role in expanding access to higher education around the world because traditional modes of instruction cannot fill the need.
• Competition and the power of the market will not allow "brand-name" institutions to dominate the higher education scene.
• National governments will not lose their influence on higher education and markets, and supranational bodies will not usurp their role.
• The amount of instruction conducted in English around the world will increase.
• The current patterns of governance and decision making in higher education in represent tremendous obstacles to institutions' ability to change.
• Interinstitutional collaboration will increase significantly, allowing institutions to expand their curricular offerings.

The Canadians and the Americans differed only on the following point:

The Americans were more likely than the Canadians to see the lack of executive power as an increasingly significant obstacle to change. (The Europeans were in the middle of these two views.)

Will change just happen, steered periodically by reactive government policies and institutional strategies, or will higher education leaders and policy makers look ahead and be more intentional about creating the kind of higher education system their societies really need?

Technology is also driving organizational change. It has spurred the development of new organizational structures and partnerships, and it requires unprecedented decisions concerning strategy and resource allocation.

On both sides of the Atlantic, technology has facilitated the introduction of new players into tertiary education from the corporate sphere, expanding the marketplace of options for those potential students seeking advanced training and education.

Competition for students, staff, resources, and prestige requires Institutions to be more aggressive and competitive, creating a managerial and

entrepreneurial culture that frequently classes with the more traditional and collegial academic culture.

Universities worldwide are forming more partnerships - whether with other Institutions in the same country, with Institutions in other countries, or with other kinds of organizations - to enhance their capacity in a variety of areas.

In a rapidly changing and shrinking world in which political boundaries, market economies, and communication modes are shifting at an unprecedented pace, Colleges and Universities are reexamining the knowledge and skills that are required of today's and tomorrow's graduates.

The Europeans and the Americans disagreed on the following points:

- The Europeans were more likely than the Americans to believe that distance learning will not increase access, but rather will enable institutions to reach new markets of affluent students. (The Canadians were in between the Americans and the Europeans on this assertion.)

- The Americans were more likely than the Europeans to perceive that the inability of traditional higher education to adapt quickly enough to meet the needs of the knowledge economy will result in the growth of new providers. (The Canadians leaned more toward agreeing with the Americans on this issue.)

- The Europeans agreed more than the Americans with the idea that higher education must move from traditional content/curriculum-based teaching to competency-based teaching and learning. (The Canadians voted closer to the Americans than to the Europeans.)

- The Europeans were more likely than the Americans to see government policy as a significant force for change. (The Canadians were in the middle of the two views.)

8.2 Unesco

UNESCO, the United Nations Educational, Scientific and Cultural Organization, was established on 16th of November 1945 and it currently has 188 Member States.

The main objective of UNESCO is to contribute to peace and security in the world by promoting collaboration among nations through education, science, culture and communication in order to further universal respect for justice, for the rule of law and for the human rights and fundamental freedoms which are affirmed for the peoples of the world, without distinction of race, sex, language or religion, described by the Charter of the United Nations.

Education for All

In the World Declaration on Education for All (Annex 8.2), adopted in 1998, the world community established an expanded vision of what basic education means, calling for a learning environment in which everyone would have the chance to acquire the basic elements, which serve as a foundation for further learning and enable full participation in society. This vision implied both access to education for everybody, and meeting the diverse learning needs of children, youth and adults. It focused on learning societies, and addressed broader and deeper partnerships at every level as the way forward. (59)
Although education for all is everybody's business (governments, international agencies and society) the main responsibility for achieving education for everybody lies with countries. UNESCO was charged with coordinating the work of the EFA partners and to maintain the global trust.

The mentioned document is not isolated action of the UNESCO on the other hand UNESCO providing solutions to the challenges and setting in motion a process of in-depth reform in higher education and convened a World Conference on Higher Education. Participants in the World Conference recalling the principles of the Charter of the United Nations, the Universal Declaration of Human Declaration of Human Rights, the International Covenant of Economic, Social and Cultural Rights, and the Internal Covenant on Civil and Political Rights.

Also the Universal Declaration of Human Rights which states in Article 26, paragraph 1, that “Everybody has the right to education” and that “higher education shall be equally accessible to all on the basis of merit”, and endorsing the basic principles of the Convention against Discrimination in Education (1960), which by Article 4, commits the States Parties to it to “make higher education equally accessible to all on the basis of individual capacity”.

All these declare that education is fundamental pillar of human rights, democracy, sustainable development and peace, and shall therefore become accessible to all throughout life and that measures are required to ensure co-ordination and co-operation across and between the various sectors, particularly between general, technical and professional secondary and post-secondary education as well as between universities, colleges and technical institutions.

In this content, the solution of these problems will be determined by the vision of the future society and by the role that is assigned to education in general and to higher education in particular.
Threshold of the new millennium it is the duty of higher education to ensure that the values and ideals of the culture of peace prevail and that the intellectual community should be mobilised to end.

Substantial change and development of higher education require the strong involvement not only of governments and of higher education institutions, but also of all stakeholders, including students and their families, teachers, business and industry, the public and private sectors, of the economy, parliaments, the media, the community, professional associations and society and accountability in the use of public and private, national or international resources.

Higher education systems should enhance their capacity to live with uncertainty, to change and bring about the change, and to address social needs and to promote solidarity and equity.

The system should preserve and exercise scientific rigour and originality, in a spirit of impartiality, as a basic prerequisite for attaining and sustaining level of quality.

Should place students at the centre of their concerns, within a lifelong perspective, so as to allow their full integration into the global knowledge society of the coming century.
Last but not a least international co-operation and exchange are major avenues for advancing higher education throughout the world.

All these above mentioned reasons drive Unesco to submit the World declaration of Higher education accompanying from the Framework for Priority Action for Change Development in Higher education and were adopted by World conference on Higher Education in October 1998 in Paris.
The declaration contain 17 articles which are divided in 3 parts:

The First part: Mission and function of higher education with two articles:

- Missions to educate, to train and to undertake research
- Ethical role, autonomy, responsibility and anticipatory function

The Second part: Shaping a new vision of higher education with eight articles:

- Equity of access
- Enhancing participation and promoting the role of women
- Advancing knowledge through research in science, the arts and humanities and the dissemination of its results
- Long term orientation based on relevance
- Strengthening co-operation with the world of work and analysing and anticipating societal needs
- Diversification for enhanced equity of opportunity
- Innovate educational approaches: critical thinking and creativity
- Higher education personnel and students as major actors

The Third part: From vision to action with seven articles:

- Qualitative evaluation
- The potential and the challenge of technology
- Strengthening higher education management and financing
- Financing of higher education as a public serve
- Sharing knowledge and know-how across borders and continents
- From “brain drain” to “brain gain”
- Partnership and alliances

The Framework for Priority Actions contains tree parts:
1.Priority actions at national level
2. Priority actions at the level of system and institutions
3. Actions to be taken at international level and, in particular, to be initiated by Unesco

A summary of the WDEFO is given in the annex 8.2 and is official document provided to IAU (International Association of Universities) by Unesco.
The whole document will be find in: www.unesco.org/education/educprog /wche/declaration_eng.htm In other specific topic has to do with higher education and why human capital accumulation is an important determinant of individual's earning capacity and employment prospects, and therefore plays an important role in determining the level and distribution of income in society.

ISCED

The world's education systems differ significantly, not only in respect to their structures but also in respect to their educational contents. As a result, it is often difficult to compare the education systems of one country with those of other countries and to come to useful results from the educational experiences of other countries.

For this reason, UNESCO has been concerned with the design of a standard classification system for education that would make possible such comparisons of education systems of different countries.

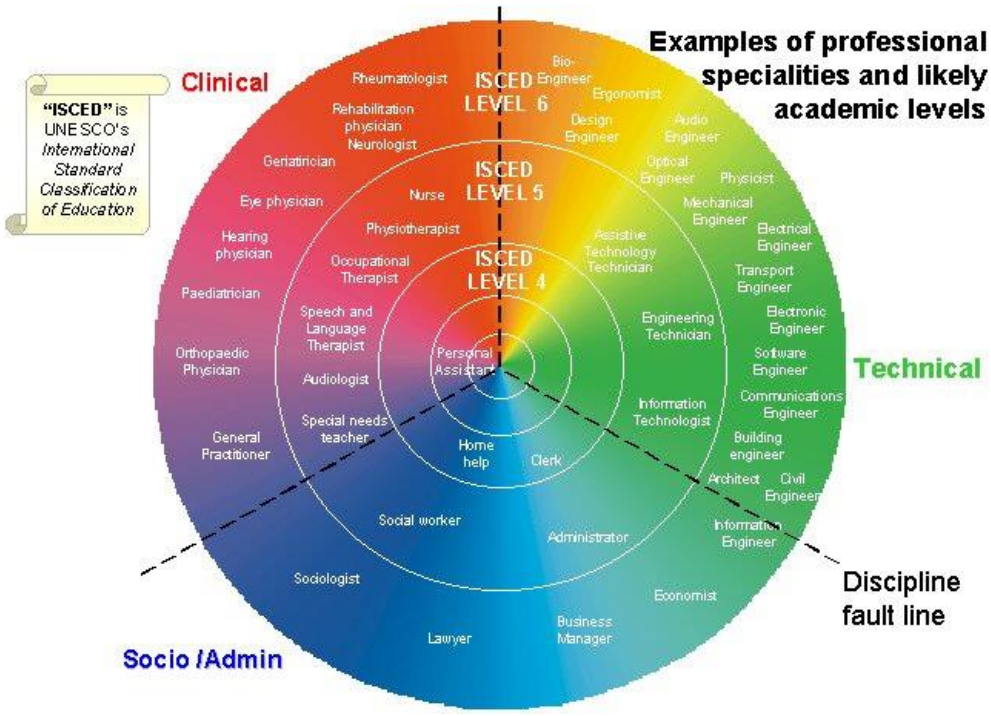
UNESCO developed the first ISCED during the 1970's; the present 'revised' version, known as ISCED-1977.

ISCED-1997 presents standard concepts, definitions and classifications. ISCED is designed to collect and present national and international education statistics allowing the comparison between different education systems and different countries. It covers all organized and continued learning activities for children, youth and adults.

It is important to add that the ISCED is a flexible system, designed for education policy analysis for every structure of the national education systems and for every stage of economic development of a country.

The basic concepts of ISCED have therefore been designed to be universally valid.

Programs of continuing education, special needs education and training outside the formal education system's institutional framework were not sufficiently covered in the past; the new ISCED provides relevant criteria for the classification of such programs. One of the main objectives of UNESCO was to set down the fundamental principles for the reform of higher education systems throughout the world. The core missions of higher education - to educate, to train, to undertake research and to provide services to the community - must be preserved, reinforced and further expanded.


Examples of professional specialities and likely academic levels
"ISCED" is UNESCO's International Standard Classification of Education
Clinical
Technical
Socio /Admin
Discipline fault line
ISCED LEVEL 6
ISCED LEVEL 5
ISCED LEVEL 4
Rheumatologist
Rehabilitation physician
Neurologist
Geriatrician
Eye physician
Hearing physician
Paediatrician
Orthopaedic Physician
General Practitioner
Nurse
Physiotherapist
Occupational Therapist
Speech and Language Therapist
Audiologist
Special needs teacher
Personal Assistant
Home help
Clerk
Social worker
Sociologist
Lawyer
Administrator
Business Manager
Economist
Information Engineer
Architect
Civil Engineer
Building engineer
Communications Engineer
Information Technologist
Software Engineer
Electronic Engineer
Engineering Technician
Transport Engineer
Electrical Engineer
Assistive Technology Technician
Mechanical Engineer
Physicist
Optical Engineer
Audio Engineer
Design Engineer
Ergonomist
Bio-Engineer

International Standard Classification of Education (ISCED); UNESCO

Proxy criteria for contents		Name of the level	Code	Complementary dimensions
Main criteria	**Subsidiary criteria**			
Educational properties School or centre-based Minimum age Upper age limit	Staff qualification	Pre-primary education	0	None
Beginning of systematic apprenticeship of reading, writing and mathematics	Entry into the nationally designated primary institutions or programmes Start of compulsory education	Primary education First stage of basic education	1	None
Subject presentation Full implementation of basic skills and foundation for lifelong learning	Entry after some 6 years of primary education End of the cycle after 9 years since the beginning of primary education End of compulsory education Several teachers conduct classes in their field of specialization	Lower secondary education Second stage of basic education	2	Type of subsequent education or destination Programme orientation
Typical entrance qualification		(Upper) secondary education	3	Type of subsequent education or

Minimum entrance requirement				destination Program orientation Cumulative duration since the beginning of ISCED level 3
Entrance requirement, Content, Age, Duration		Post-secondary non tertiary education	4	Type of subsequent education or destination Cumulative duration since the beginning of ISCED level 3 Program orientation
Minimum entrance requirement, Type of certification obtained, Duration		First stage of tertiary education (not leading directly to an advanced research qualification)	5	Type of programmes Cumulative theoretical duration at tertiary National degree and qualification structure
Research oriented content, Submission of thesis or dissertation	Prepare graduates for faculty and research posts	Second stage of tertiary education (leading to an advanced research qualification)	6	None

ISCO

ISCO is the result of a number of investigations in the 12 countries of the EU, and combines the expert knowledge in occupation classification in every country with practical results for coding information about the occupation concluded from various survey techniques.

In order to cumulate occupations into similar categories and at different levels, ISCO introduces the concept of skill, named as the skill level.

ISCO uses four skill levels in order to define the wide structure of the classification. These four skill levels operate in relation to the International Standard Classification of Education (ISCED).

How do the countries of EU develop the national occupation classification?

Denmark and Italy have developed a new national occupation classification based on ISCO principles, United Kingdom uses the same structure to ISCO, and Greece and Portugal have adapted ISCO with small variations. There are also countries of the EU such as France and Germany that have developed national occupation classification which do not link to ISCO.

ISCO and ISCED equivalence table

ISCO Skill Level	**ISCED Categories**
First skill level	ISCED category 1, comprising primary education which generally begins at ages 5-7 years and lasts about 5 years.
Second skill level	ISCED categories 2 and 3, comprising the first and second stages of secondary education. The first stage begins at the age of 11 or 12 and lasts about three years, while the second stage begins at the age of 14 of 15 and also lasts about three years. A period of on-the-job training or experience may be necessary, sometimes formalised in apprenticeships. This period may supplement the formal training or may replace it partly or, in some cases, wholly.
Third skill level	ISCED category 5 (category 4 has been deliberately left without content) comprising education which begins at the age of 17 or 18, last about four year, and leads to an award not equivalent to a first University degree.
Fourth skill level	ISCED categories 6 and 7, comprising education which begins at the age of 17 or 18, lasts about three, four or more years, and lead to a University or postgraduate University degree or the equivalent.

The World Trade Organization (WTO) was created on 1995. One of the youngest international Organizations, the WTO is the successor to the General Agreement on Tariffs and Trade (GATT) established at the beginning of the Second World War. The system was developed through a series of trade negotiations, or rounds, held under GATT. The first rounds dealt mainly with tariff reductions but later negotiations included other areas. The latest round – the 1986-1994 - Uruguay Round – led to the World Trade Organization's creation. Today the World Trade Organization has more than 130 members, accounting for over 90% of world trade.

The WTO's prime objective is to held trade flow smoothly, freely, fairly and predictably. This can be achieved by:

- Administering trade agreements
- Acting as a forum for trade negotiations
- Setting trade negotiations
- Reviewing national trade policies
- Assisting developing countries in trade policy issues, through technical assistance and training programmes
- Cooperating with other international organizations

The World Trade Organization (WTO) is a single institutional framework encompassing the GATT and all the agreements and legal instruments negotiated in the Uruguay Round: the General Agreement on Tariffs and Trade or GATT 1994 and other agreements such as the General Agreement on Trade in Services or GATS.

Goods

From 1947 to 1994, **GATT** was the forum for negotiating lower customs duty rates and other trade barriers. The Marrakesh Agreement Establishing the World Trade Organization states that the General Agreement on Tariffs and Trade 1994 (GATT 1994) is an instrument legally distinct from the General Agreement on Tariffs and Trade dated 30 October 1947.

Given the numerous agreements concluded under its support relating to non-tariff measures, the GATT 1994 is the centrepiece for rules on tariffs. Key obligations include non-discrimination through the most-favoured-nation principle; the national treatment of imported products once inside the border, and the protection of domestic industries essentially through tariffs.

Since 1995, the updated GATT has become the WTO's umbrella agreement for trade on goods.

Services

The creation of the **GATS** was one of the landmark achievements of the Uruguay Round, whose results entered into force in January 1995. The GATS was inspired by essentially the same objectives as its counterpart in merchandise trade, the General Agreement on Tariffs and Trade (GATT): creating a credible and reliable system of international trade rules; ensuring fair and equitable treatment of all participants (principle of non-discrimination); stimulating economic activity through guaranteed policy bindings; and promoting trade and development through progressive liberalization.

Principals such as banks, education, telecommunication companies could only be appeared in the new General Agreement on Trade and Services (GATS).

The General Agreement on Trade in Services is the first multilateral agreement on trade that has as its objective the progressive liberalization of trade in services. It will provide for secure and more open markets in services in a similar manner as the GATT has done for trade in goods. The Agreement covers trade in all services sectors and the supply of services in all forms (i.e. modes of delivery), including consumption abroad of services, cross-border supply of services, provision of services through a commercial presence and the movement abroad of the person supplying the service.

Although the coverage of the GATS in terms of service sectors is universal, the liberalization commitments follow a positive list approach, whereby each participant in its schedule lists the conditions of market access and national treatment for foreign service suppliers in the sectors and modes of supply for which it has undertaken a commitment.

The General Agreement on Trade in Services (GATS) extends the rules based multilateral trading system to the wide area of services. Similar advantages should accrue to developing countries from the operation of a rules based system in services as has been the case for merchandise trade. While many developing countries are not presently well placed to take advantage of some of the improved market access opportunities which the Agreement will provide, they will be in a position to do so in the future as their domestic supply capacity increases. Further, the GATS is unique in that it permits Member countries, including developing countries, to negotiate the conditions under which foreign services suppliers may establish in their countries.

GATS is designed to help service operators to provide their services around the world. The General Agreement on Trade in Services sets the basic trade rules for 130 countries. Each one of its Member States must make a commitment which clearly indicates which parts, or 'sectors' of its services markets are open to foreign business.

Educational services, including higher education, are one of the 12 broad sectors currently being negotiated under GATS.

In December 2000, the United States presented its first proposal concerning the inclusion of higher education in the General Agreement on Trade in Services (GATS) negotiations (Annex 8.4). In addition to the United States, three countries-Australia, New Zealand and Japan-have presented proposals on higher education (Annex 8.4). In the GATS process, the WTO member nations make commitments to negotiate on a particular area. These negotiations are in process, and the outcomes and consequences for colleges and universities around the world are as yet unclear. The American Council on Education, the Association of Colleges and Universities of Canada, the Council for Higher Education Accreditation (U.S) and the European University Association have expressed their concerns about these negotiations in a joint declaration and in communications with their respective governments.

The declaration appears on the EUA web site at http://www.unige.ch/eua/. The associations expressed concerns over several issues, including what they saw as unclear distinctions between public and private higher education and how each is covered by GATS; institutional autonomy concerning academic matters; state and provincial authority over fiscal policy; and independent

accreditation and quality assurance processes around the world. Because the negotiations are far from complete, it is important for higher education leaders to work with their governments to follow the negotiations as they proceed and shape their course constructively.

8.4 Organisation for Economic Co-operation and Development

The OECD groups 30 member countries sharing a commitment to democratic government and the market economy. With active relationships with some 70 other countries , NGOs and civil society, it has a global reach. Best known for its publications and its statistics , its work covers economic and social issues from macroeconomics, to trade, education, development and science and innovation.

A very important paper concerning investing in human capital was presented by OECD/ Economic department working paper (No 333) and provides many useful information and statistics about benefits of investing in post secondary education.
The introduction of this paper is in Annex 8.3 and gives estimation about net gains due to human capital investment from upper secondary and tertiary education.

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www.un.org (United Nation)

www.oecd.org (Organization for Economic Cooperation and Development

www.gats-info.eu.int (General Agreement of Trade and Service)

www.unige.ch/cre/ (Association of European Universities)

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APPENDICES

APPENDIX 1 - BASIC TERMS FOR EDUCATION

In order to facilitate the reader we will give also terms that we are using today in this field:

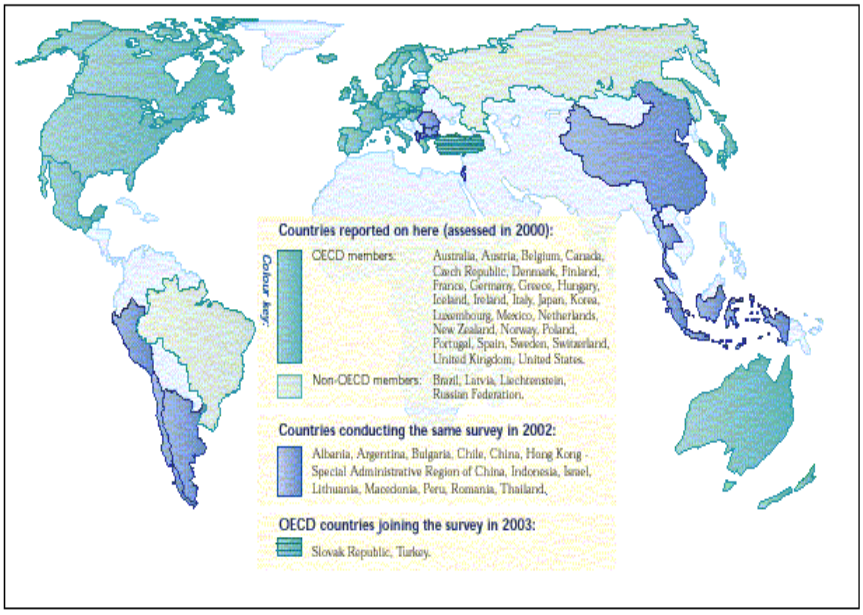
Learning
Cognitive learning
Distance learning
Distributed learning
Hyperlearning
Open learning environment
Situated learning

Knowledge
Impartive knowledge
Knowledge providers
Knowledge producers
Situated knowledge

Education
General Education
Specific Education
Formal Education
Informal Education
Public Education
Private Education
Primary Education
Secondary Education
Higher Education
Adult education
Higher Education
Linked Education
Global Education

APPENDIX 2 – PISA PROJECT

PISA, a new three-yearly survey of the knowledge and skills of 15-year-olds in the principal industrialised countries, provides some answers. It assesses how far students near the end of compulsory education have acquired some of the knowledge and skills that are essential for full participation in society. It presents evidence on student performance in reading, mathematical and scientific literacy, reveals factors that influence the development of these skills at home and at school, and examines what the implications are for policy development.



ANNEX 8.1 - TRANSATLANTIC DIALOGUE PARTICIPANTS

Université Laval-Quebec, Canada-July 2001

CANADA

François Tavenas, Rector
Université Laval

Robert J. Giroux, President and CEO
Association of Universities and Colleges of Canada
(AUCC)

Dominique Abrioux, President
Athabasca University

Thomas Traves, President and
Vice Chancellor
Dalhousie University

Martha Piper, President and
Vice Chancellor
The University of British Columbia

Jacquelyn Scott, President and
Vice Chancellor
University College of Cape Breton

UNITED STATES

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American Council on Education

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Rutgers, The State University of New Jersey
Molly Corbett Broad, President

The University of North Carolina

Michael F. Adams, President
The University of Georgia

Robert Glidden, President
Ohio University

Frank Newman, Visiting Professor and
Director, Futures Project
Brown University

Augustine P. Gallego, Chancellor and Chief Executive
Officer, San Diego Community College District

Madeleine F. Green, Vice President
American Council on Education

Peter Eckel, Associate Director for
Institutional Initiatives
American Council on Education

EUROPE

Lucy Smith, former Rector
University of Oslo
Institutt for Privatrett

Kenneth Edwards, former President
CRE: The Association of European Universities
Wilfried Hartmann, Prof. Dr. and Vice President
Universitat Hamburg

Jacques Diezi, Professeur et Vice Recteur
Université de Lausanne

Rainer Künzel, Prof. Dr. and President
University of Osnabrück

Andris Barblan, Secretary General
European University Association (EUA)

Rinaldo Bertolino, Professor and Rector
Università degli Studi di Torino

Eric Froment, Président
EUA ,Professeur,Université Lumière Lyon 2

Luciano Modica, Rector
Università degli Studi di Pisa
President, Italian Rectors' Conference

Paolo Blasi, Professor and Former Rector
Università degli Studi di Firenze

Emanuela Stefani, Executive Director
Italian Rectors' Conference

Gilbert Puech, Professeur et Président
Université Lumière Lyon 2

Pierre de Maret, Professeur et Recteur
Université Libre de Bruxelles

Jiri Zlatuska, Professor and Rector
Masaryk University

ANNEX 8.2 - Summary of the World Declaration on Higher Education

(This Summary is an official document provided to IAU by UNESCO)

1. Higher education shall be equally accessible to all on the basis of merit, in keeping with Article 26.1 of the Universal Declaration of Human Rights. As a consequence, no discrimination can be accepted in granting access to higher education on grounds of race, gender, language, religion or economic, cultural or social distinctions, or physical disabilities.

2. The core missions of higher education systems (to educate, to train, to undertake research and, in particular, to contribute to the sustainable development and improvement of society as a whole) should be preserved, reinforced and further expanded, namely to educate highly qualified graduates and responsible citizens and to provide opportunities (espaces ouverts) for higher learning and for learning throughout life. Moreover, higher education has acquired an unprecedented role in present-day society, as a vital component of cultural, social, economic and political development and as a pillar of endogenous capacity-building, the consolidation of human rights, sustainable development, democracy and peace, in a context of justice. It is the duty of higher education to ensure that the values and ideals of a culture of peace prevail.

3. Higher education institutions and their personnel and students should preserve and develop their crucial functions, through the exercise of ethics and scientific and intellectual rigour in their various activities. They should also enhance their critical and forward-looking function, through the ongoing analysis of emerging social, economic, cultural and political trends, providing a focus for forecasting, warning and prevention. For this, they should enjoy full academic autonomy and freedom, while being fully responsible and accountable to society.

4. Relevance in higher education should be assessed in terms of the fit between what society expects of institutions and what they do. For this, institutions and systems, in particular in their reinforced relations with the world of work, should base their long-term orientations on societal aims and needs, including the respect of cultures and environment protection. Developing entrepreneurial skills and initiatives should become major concerns of higher education. Special attention should be paid to higher education's role of service to society, especially activities aimed at eliminating poverty, intolerance, violence, illiteracy, hunger, environmental degradation

and disease, and to activities aiming at the development of peace, through an interdisciplinary and transdisciplinary approach.

5. Higher education is part of a seamless system, starting with early childhood and primary education and continuing through life. The contribution of higher education to the development of the whole education system and the reordering of its links with all levels of education, in particular with secondary education, should be a priority. Secondary education should both prepare for and facilitate access to higher education as well as offer broad training and prepare students for active life.

6. Diversifying higher education models and recruitment methods and criteria is essential both to meet demand and to give students the rigorous background and training required by the twenty-first century. Learners must have an optimal range of choice and the acquisition of knowledge and know-how should be viewed in a lifelong perspective, based on flexible entry and exit points within the system.

7. Quality in higher education is a multidimensional concept, which should embrace all its functions and activities: teaching and academic programmes, research and scholarship, staffing, students, infrastructure and the academic environment. Particular attention should be paid to the advancement of knowledge through research. Higher education institutions in all regions should be committed to transparent internal and external evaluation, conducted openly by independent specialists. However, due attention should be paid to specific institutional, national and regional contexts in order to take into account diversity and to avoid uniformity. There is a perceived need for a new vision and paradigm of higher education, which should be student-oriented. To achieve this goal, curricula need to be recast so as to go beyond simple cognitive mastery of disciplines and include the acquisition of skills, competencies and abilities for communication, creative and critical analysis, independent thinking and team work in multicultural contexts.

8. A vigorous policy of staff development is an essential element for higher education institutions. Clear policies should be established concerning higher education teachers, so as to update and improve their skills, with stimulus for constant innovation in curriculum, teaching and learning methods, and with an appropriate professional and financial status, and for excellence in research and teaching, reflecting the corresponding provisions of the Recommendation concerning the Status of Higher-Education Teaching Personnel approved by the General Conference of UNESCO in November 1997.

9. National and institutional decision-makers should place students and their needs at the centre of their concerns and should consider them as major partners and responsible stakeholders in the renewal of higher education. Guidance and counselling services should be developed, in co-operation with student organizations, to take account of the needs of ever more diversified categories of learners. Students who do drop out should have suitable opportunities to return to higher education if and when appropriate. Institutions should educate students to become well-informed and deeply motivated citizens, who can think critically, analyse problems of society, look for solutions to the problems of society, apply them and accept social responsibilities.

10. Measures must be taken or reinforced to ensure the participation of women in higher education, in particular at the decision-making level and in all disciplines in which they are under-represented. Further efforts are required to eliminate all gender stereotyping in higher education. To overcome obstacles and to enhance the access of women to higher education remains an urgent priority in the renewal process of systems and institutions.

11. The potential of new information and communication technologies for the renewal of higher education by extending and diversifying delivery, and by making knowledge and information available to a wider public should be fully utilized. Equitable access to these should be assured through international co-operation and support to countries that lack capacities to acquire such tools. Adapting these technologies to national, regional and local needs and securing technical, educational, management and institutional systems to sustain them should be a priority.

12. Higher education should be considered as a public service. While diversified sources of funding, private and public, are necessary, public support for higher education and research remains essential to ensure a balanced achievement of its educational and social missions. Management and financing in higher education should be instruments to improve quality and relevance. This requires the development of appropriate planning and policy-analysis capacities and strategies, based on partnerships between higher education institutions and responsible state authorities. Autonomy to manage internal affairs is necessary, but with clear and transparent accountability to society.

13. The international dimension of higher education is an inherent part of its quality. Networking, which has emerged as a major means of action, should be based on sharing, solidarity and equality among partners. The "brain drain" has yet to be stemmed, since it continues to deprive the developing

countries and those in transition, of the high-level expertise necessary to accelerate their socio-economic progress. Priority should be given to training programmes in the developing countries, in centres of excellence forming regional and international networks, with short periods of specialized and intensive study abroad.

14. Regional and international normative instruments for the recognition of studies and diplomas should be ratified and implemented, including certification of skills, competencies and abilities of graduates, making it easier for students to change courses, in order to facilitate mobility within and between national systems.

15. Close partnership amongst all stakeholders - national and institutional policy-makers, governments and parliaments, the media, teaching and related staff, researchers, students and their families, the world of work, community groups - is required in order to set in train a movement for the in-depth reform and renewal of higher education.

ANNEX 8.3 - Investing in human capital through post –compulsory education and training,
Selected efficiency and equity aspects

Economic Department working paper No 333

A very important paper concerning investing in human capital was presented by OECD/ Economic department working paper (No 333) and provides many useful information and statistics about benefits of investing in post secondary education. We will present the introduction that we believe is very important. More data can be obtained from the web site.

Human capital accumulation is an important determinant of individuals' earning capacity and employment prospects, and therefore plays an important role in determining the level and distribution of income in society. Recent OECD work has confirmed the importance of investment in education as a determinant of economic growth and education is also found to be associated with various non-economic benefits. Across countries, there is a broad consensus that some degree of government involvement is needed in the provision of educational services. All OECD countries seek to ensure that all young people enter working life with a minimum amount of human capital acquired during the years of compulsory education. However, governments are also heavily involved in the financing and delivery of post-compulsory education and training where returns may to a larger extent accrue to the individual and where participation is by choice. This element of discretion highlights the importance of incentives, raises certain equity issues and indeed questions about the appropriate role of government in the provision of such education and training.

Human capital investment in all countries is associated with significant labour market gains:

- Higher post-tax earning on average
- Improved employment probability
- Stronger attachment to the labour market in the form of increased labour force participation

The opportunity and direct costs for individuals of pursuing post-compulsory education differ across countries and are strongly influenced by policy-related factors:

- Foregone earnings depend on the length of study periods
- Private tuition costs tend to be low at the upper-secondary level in most countries
- Financial support to students in the form of grants and favourable loan arrangements

The net gains due to human capital investment from upper-secondary and tertiary education, as summarised in private internal rates of return, are estimated to vary from 7 to 19 per cent.

These private internal rates of return that are available to those who successfully complete upper-secondary and tertiary education programmes suggest that there are strong incentives for the average student to engage in education activity.

ANNEX 8.4 - Higher (Tertiary) Education, Adult Education, and Training

The attached communication has been received from the delegation of the United States, Australia, New Zealand and Japan with the request that it be circulated to Members of the Council for Trade in Services.

UNITED STATES

I. INTRODUCTION

1. For consideration of all WTO Members, the United States presents this proposal on higher (tertiary) education, adult education and training services. At the outset, it is important to note that the proposal recognizes that education to a large extent is a government function, but that most countries permit private education to coexist with public education. The proposal, therefore, envisions that private education and training will continue to supplement, not displace, public education systems. This paper is intended to stimulate discussion and help liberalize trade in this important sector in the world economy.

II. IMPORTANCE OF HIGHER (TERTIARY) EDUCATION, ADULT EDUCATION, AND TRAINING SERVICES

2. Higher (tertiary) education (hereinafter referred to as "higher education"), adult education, and training services are expanding rapidly, particularly through the use of the Internet. These services include academic and training courses on information technology; languages; executive, management and leadership training; driver education; and hotel and tourism education. They also include educational testing services and corporate training services. Many of these are practical courses for use on the job. Some can be used as credits toward degrees; and some are non-degree courses. Increasingly, educational institutions and publishers are teaming up with information technology companies and other experts to design courses of instruction on a variety of subjects. Large companies also are developing education and training courses to improve the skills of their employees and to keep them up to date on their latest products. Such services constitute a growing, international business,

supplementing the public education system and contributing to global spread of the modern "knowledge" economy. Availability of these education and training services can help to develop a more efficient workforce, leading countries to an improved competitive position in the world economy.

III.PURPOSE

3. The purpose of this proposal is to help create conditions favorable to suppliers of higher education, adult education, and training services by removing and reducing obstacles to the transmission of such services across national borders through electronic or physical means, or to the establishment and operation of facilities (schools,

classrooms or offices) to provide services to students in their home country or abroad. This would apply to countries that permit private education, not to countries that maintain exclusively public systems.

IV.COVERAGE

4. The informal WTO Classification List (W/120) divides educational services into five parts: (a) primary education services; (b) secondary education services; (c) higher education services; (d) adult education; and (e) other education services. The scope of coverage of particular types of education (e.g., liberal arts, business, professional) is not specified. Clarification of the coverage is needed.

5. In terms of this proposal, "higher education" includes all tertiary education (i.e., education beyond secondary education), adult education, and training services. Such education and training encompass degree courses taken for college or university credits or non-degree courses taken for personal edification or pleasure or to upgrade work-related skills.

Such education and training services can be provided in traditional institutional settings, such as universities or schools, or outside of traditional settings, including at workplaces, in the home, or elsewhere.

6. This paper proposes that coverage should clearly indicate that two types of services are included as part of the concept of education: (1) training services; and (2) educational testing services. Training services are particularly related to higher education, adult education, and other education services, whereas testing services generally are related to all types of education.

·Training services are very similar to education services, but training courses are generally less theoretical and more job-related than academic courses, often requiring hands-on operation of tools, equipment and certain devices.

·Educational testing services are a fundamental and essential part of the learning process, used to evaluate the student as well as the course material. These services include designing and administering tests, as well as evaluating test results.

V. PROPOSAL

7. This paper proposes discussion of various aspects of an open regime in the education and training sector. This would entail countries considering to apply existing GATS market access and national treatment disciplines, as well as additional GATS disciplines addressing sector-specific regulatory issues, including transparency and fairness of administration. Consistent with these disciplines, governments would retain the right to regulate to meet domestic policy objectives. Moreover, this proposal recognizes that in this sector governments will continue to play important roles as suppliers of services.

8. In addition to clarifying the classification for education, this proposal for higher education, adult education, and training services encompasses market access, national treatment, and additional commitments. The proposal is limited to education and training beyond the primary and secondary level and does not apply to primary and secondary schools. It recognizes that education to a large extent is a government function and it does not seek to displace public education systems. It seeks to supplement public education systems, affording opportunities for suppliers to make their services available to students in other countries.

The intent is to help upgrade the knowledge and skills through these educational and training programs, while respecting each country's role of prescribing and administering appropriate public education for its citizens. Although a small number of WTO Members has made commitments in this

area, nearly all Members allow the provision of higher education, adult education, and training services by private sector service providers.

9. This paper proposes that WTO Members that have not yet made commitments on higher education, adult education, and training services formulate their commitments based on the list of obstacles identified below. Members are invited to inscribe in their schedules "no limitations" on market access and national treatment, as some Members already have done. Further, the paper proposes that all Members consider undertaking additional commitments relating to regulation of this sector. The United States has taken commitments for adult and other education, and is willing to consider undertaking additional commitments for higher education and training.

10. This proposal is not presented as a legal text, but rather as a list of obstacles identified in reviewing this service sector. Some items on the list may be market access restrictions, or national treatment limitations, or both. In addition, some obstacles, although not limitations on market access or national treatment per se, may result from regulatory provisions or other measures which make it difficult for foreign suppliers to market their services.

Obstacles in this sector

· Prohibition of higher education, adult education, and training services offered by foreign entities

· Lack of an opportunity for foreign suppliers of higher education, adult education, and training services to obtain authorization to establish facilities within the territory of the Member country

Lack of an opportunity for foreign suppliers of higher education, adult education, and training services to qualify as degree granting institutions

· Inappropriate restrictions on electronic transmission of course materials

· Economic needs test on suppliers of these services

· Measures requiring the use of a local partner

· Denial of permission for private sector suppliers of higher education, adult education, and training to enter into and exit from joint ventures with local or non-local partners on a voluntary basis

· Where government approval is required, exceptionally long delays are encountered and, when approval is denied, no reasons are given for the denial and no information is given on what must be done to obtain approval in the future

· Tax treatment that discriminates against foreign suppliers

· Foreign partners in a joint venture are treated less favourably than the local partners

· Franchises are treated less favourably than other forms of business organization

· Domestic laws and regulations are unclear and administered in an unfair manner

· Subsidies for higher education, adult education, and training are not made known in a clear and transparent manner

· Minimum requirements for local hiring are disproportionately high, causing uneconomic operations

· Specialized, skilled personnel (including managers, computer specialists, expert speakers), needed for a temporary period of time, have difficulty obtaining authorization enter and leave the country

· Repatriation of earnings is subject to excessively costly fees and/or taxes for currency conversion

· Excessive fees/taxes are imposed on licensing or royalty payments.

JAPAN

Japan presents the following proposal for consideration by Members regarding Education services. Japan reserves its right to make additional proposals on the same and other services as well as on other aspects of the negotiations on trade in services.

BASIC PROPOSAL

Recently, it has become extremely important for each country to improve the quality of education and research, responding flexibly to the rapidly changing needs of the society. Japan recognizes that, in order to pursue these policy objectives, it is effective to promote a certain level of liberalization, while taking various governmental policy measures.

From this viewpoint, Japan encourages each Member in the course of the forthcoming request and offer negotiations to promote liberalization in the education services sector through better market access, further assurance of national treatment and deregulation of related domestic regulations.

SUGGESTIONS FOR NEGOTIATIONS

Japan recognizes the importance of the role of the government in the education sector, and in particular takes note of the fact that many Members reserve responsibility on primary and secondary education to sate. In the course of liberalizing this sector it is necessary to take into consideration aspects of government policy objectives and the specificity of the education sector as indicated below, some of which have already been pointed out by other Members.

Any measures in the education services sector should be considered with primary interest in maintaining and improving the quality of the service. Due consideration needs to be taken to the following points among others.

(i) maintenance and improvement of the quality of education and research activities in each Member

(ii) protection of consumers (learners) -- measures to ensure that consumers are not damaged by services of low quality, and a safety-net in such areas

(iii) measures to ensure international equivalence of degrees, diplomas, etc

The educational system (for example, authorization of establishment, third-party evaluations and degree-granting system) varies from country to country, due to different social background and varied course of development of system. The roles of the central and local governments also seem to vary from country to country due to the difference in their administrative structures. Therefore, while seeking the liberalization of education services, these differences should be carefully taken into consideration.

The development of globalisation and information technology has given rise to the question of how to maintain the quality of higher education supplied across borders. There are cases, for example, where the quality of a service supplied by a "university" in one country is not necessarily of the same level as that supplied by a university of another country, due to the difference in higher education system of the two countries. It has also emerged that the quality of education services fails to be correctly judged, in cases where the service is supplied by a "degree mill" of one country by means of e-Learning.

From the viewpoint of protecting consumers (learners), Members should thus recognize the significance and necessity of constructing an information network on the higher education supplied across borders. Moreover, in international organizations such as the OECD as well as in international groups consisting of university evaluation organs in each country, Members should make intensive efforts for realizing a collaborative research.

NEW ZEALAND

A. INTRODUCTION

1. The education sector is vitally important to all Members, given the critical role of education in economic and social development. Trade in education services is of increasing international significance, but the sector remains one of the least committed under the GATS.1 This in part may be attributed to the need Members see to strike a balance between pursuing domestic education priorities and exploring ways in which trade in education services can be further liberalised. New Zealand considers that there is scope for Members to find such a balance, in order to permit further benefit from international trade in education.2

B. BACKGROUND

2. In addition to generating revenue for private and state sector education institutions, and Members' economies, trade in education services provides benefits to participating economies at the individual, institutional and societal level, through academic exchange, increased cross-cultural linkages and technology transfer. Increased access for members to education where it has previously been limited is a vital component in the development of human capital.

3. The reduction of barriers to trade in education does not equate to an erosion of core public education systems and standards. An international trade in education services can provide a means of supplementing and supporting national education policy objectives. For example, in New Zealand's experience it can help reduce the infra-structural commitments required of governments, and so free resources to be concentrated in other aspects of education policy.

4. Education is at present one of the least committed of services sectors, due to recognition of its "public good" element and the high degree of government involvement in its provision. New Zealand's own commitments are confined to the private provision of education services in the primary, secondary and tertiary sectors. Such sensitivities notwithstanding, international trade in education services continues to expand. In New Zealand's case, education exports are the fourth largest services sector export earner, and fifteenth largest foreign exchange earner overall.3 Both state and private sector

education providers, in New Zealand and other Members, see opportunities for further growth through the resumed services negotiations.

C. PROPOSAL

5. New Zealand believes that certain education services sub-sectors may be less subject to the sensitivities relating to the divide between public policy and commercial activity than others. The possibility of making commitments on these sub-sectors should be given due consideration by Members. This process may be facilitated by discussion of how the current education classifications might more accurately reflect the realities of education delivery, to give Members greater certainty about the precise nature of commitments sought and offered, and assist them in determining where domestic sensitivities lie. Currently, the W120 and CPC define education services by level, from primary to higher education. Two further definitions cover education services provided largely outside the formal education system; "Adult education services not elsewhere classified" (CPC 92400) and "Other education services" (CPC 92900). There would seem to be scope for clarifying the delineation of services between the "higher", "adult" and "other" categories.

6. For New Zealand, an area of particular interest is "Other education services" (CPC 92900), which is currently the least committed of any education sub-sector. While CPC 92400 includes examples of adult education services which illustrate the range of services the definition is intended to cover, CPC 92900 refers only to "Education services at the first and second levels in specific subject-matters not elsewhere classified, and all other education services that are not definable by level." The present definition offers little guidance as to the range of services it is intended to encompass, and does not acknowledge recent changes in the delivery of some education services, specifically that many "other education services" are increasingly being offered by organisations or institutions from outside traditional education systems.

7. These shortcomings might be addressed through the addition of an illustrative list to CPC 92900, in order to more accurately reflect the scope of the sub-sector. Such a list would be best kept brief to avoid it assuming an exhaustive nature, along the following lines:

"All other education services not defined by level. These include short term training courses, language training and practical/vocational courses in a range of subjects, for example computing, hospitality, resource management and

primary production, together with education services offered by non-traditional providers, such as driver education programmes and corporate training services."

8. There may also be scope to add to the current definition of CPC 92400 the term "community education" to better capture the type of general interest study the classification seems designed to address.

9. Another consideration for New Zealand is whether trade in education services would be facilitated by commitments on education agency services, e.g. student recruitment and placement services. There is currently some ambiguity in the coverage of this area. While New Zealand would argue agency services are integral to the provision of education services, one Member has scheduled separate commitments on student placement services under "Other business services". New Zealand considers that in respect of education institutions doing their own marketing and processing of students, this falls within the scope of the provision of education services.

The situation is less clear in respect of agencies (usually located in the student's home country) performing these functions on a fee or contract basis on the behalf of overseas institutions. On balance New Zealand considers that there might be some benefit to the addition to the education services classifications of a definition of education agency services of this type. (The CPC tourism and travel-related services classifications include a similar definition for travel agency services). The definition might read:

"Education agency services including the advertising and marketing of education services, the processing and payment of applications, etc, provided by agencies on behalf of education institutions or directly to students, on a fee or contract basis"

10. A further issue for New Zealand is the exclusion in the current CPC definition of education services of "education services primarily concerned with recreational matters", which are classified in subclass 9641 (sporting services). New Zealand considers that education services concerning the academic study and teaching of sport and recreational activities, as distinct from the instruction of groups or individuals in the practice of a sport, would be more appropriately classified as education rather than sporting services.

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1 Report to the APEC Group on Services 2000, Measures Affecting Trade and Investment in Education Services in the Asia-Pacific Region, published by the APEC Secretariat, page 24. (A copy of which could be obtained through the New Zealand Permanent Mission).

2 New Zealand reserves the right to submit further and more detailed proposals on the sector at any time and would note that this proposal should be read together with New Zealand's initial objectives for the resumed services negotiations, as contained in S/CSS/W/90 of 26 June 2001.

3 Research report compiled by the Trade and Economic Analysis Division of the New Zealand Ministry of Foreign Affairs and Trade, New Zealand Exports of Education Services, dated 20 May 2000, page 7, para 6. (A copy of which could be obtained through the New Zealand Permanent Mission).

AUSTRALIA

Negotiating Proposal for Education Services
The following communication has been received from the delegation of Australia with the request that it be circulated to the Members of the Council for Trade in Services.

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I. INTRODUCTION

1. This paper sets out a negotiating proposal from Australia for the education services sector. Australia reserves the right to submit further and more detailed proposals on this sector at a later date.

2. Australia recognises that governments across the globe play a significant role in the financing, delivery and regulation of education, alone and/or in partnership with individuals and other private and non-governmental organisations. This reflects the importance of education in the preparation for life as a citizen, the transmission of values and culture, and development of national well being. Accordingly, Australia believes that governments must retain their sovereign right to determine their own domestic funding and regulatory policies/measures.

II. ROLE OF TRADE LIBERALISATION IN ENHANCING EDUCATIONAL OPPORTUNITIES

3.Trade in education services is of increasing international significance, but the sector remains one of the least committed under the GATS. Very few WTO members have documented commitments in the GATS on the openness of the education sectors in their country.

4. Australia views the liberalisation of trade in education services primarily as a means of providing individuals in all countries with access to a wide range of educational options. The benefits associated with liberalising education services and facilitating greater cross-border flows of students and education service providers include the following:
· facilitating access to education and training courses that in qualitative and quantitative terms are not otherwise available in the country of origin; and

· providing a competitive stimulus to institutions with flow-on benefits to all students.

5. Australia also sees the liberalisation of trade in education services as the most effective way of encouraging the internationalisation of education and enhancing flows of students between countries. The long-term benefits accruing from internationalising education include:
· fostering a knowledge and appreciation of other languages, cultures and societies. The skills and knowledge that are acquired will benefit students both professionally and culturally;
· facilitating an exchange of people, ideas and experiences. These exchanges add a richness of diversity at the national and international levels, as well as contributing to the international cross-fertilisation of academic knowledge;
· networking relationships among individuals, groups and institutions which can facilitate future economic, political and socio-cultural alliances.
6. These significant benefits underpin the desirability of facilitating greater cross-border flows of students as well as educational services providers.

III. IMPEDIMENTS

7. Research undertaken by the Australian Government identifies a number of impediments to further liberalisation of the education services sector. These include:

Consumption Abroad:
· Visa requirements regulating the free flow of international students;
· Foreign exchange requirements regulating the free flow of international students;
· Qualification recognition issues which act as a deterrent to gaining qualifications at overseas institutions.

Commercial Presence:
· Limits on ownership/foreign equity;
· Rules on twinning arrangements which restrict the development of these institution-to-institution arrangements;
· Lack of transparency of government regulatory, policy and funding frameworks.

Presence of Natural Persons:

· Visa issues regulating the free flow of academics;
· Employment rules regulating the free flow of academics;
· Restrictions on the use/import of educational materials (academic tools of trade).

Cross-Border Supply:
· Erection of new barriers as governments respond to growing use of the internet for delivering education services;
· Restrictions on the use/import of educational materials (academic tools of trade).

IV. PROPOSAL

8. Australia believes that the following specific principles are relevant to achieving liberalisation of trade in education services.
(a) The education services negotiations should aim to give consumers (students) in all countries access to the best education services wherever they are provided and through whatever mode of supply they are provided.
(b) The education services negotiations should not prevent Member countries from establishing their own education policy objectives, or prevent Member countries from applying regulatory measures necessary to achieve those objectives.
(c) The education services negotiations should not prevent Member countries from providing public funds for education to meet domestic policy and regulatory objectives.
(d) There are significant linkages between the regulatory frameworks governing the international trade in education services and other service sectors (for example, the telecommunications/audiovisual sector and movement of natural persons). Given these linkages, the education services negotiations should be viewed within the context of a comprehensive services round.
(e) The education service negotiations should continue to recognise the sovereign right of Member countries to continue to determine their right to screen for temporary entry immigration purposes.
9. Australia currently enjoys the benefits of having a relatively open education and training regime. This openness is reflected in the significant number of commitments that Australia has entered in its current GATS schedule for the following educational services: secondary education, higher education and

other education services. Australia believes that all Members should, in the context of the current round, consider entering commitments on education services similar to those already entered by Australia.
This particularly applies to those Members who have previously failed to enter any commitments in relation to education services.

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1 Report to the APEC Group on Services 2000, Measures Affecting Trade and Investment in Education Services in the Asia-Pacific Region, published by the APEC Secretariat, page 7.

2 Report to the APEC Group on Services 2000, Measures Affecting Trade and Investment in Education Services in the Asia-Pacific Region, published by the APEC Secretariat.

ANNEX 8.5 –INSTITUTES AND ORGANIZATIONS

INTERNATIONAL INSTITUTES AND ORGANIZATIONS

1. GIN - Global Information Network (http://ginfo.net)
2. GSH - Global School House (http://www.globalschoolhouse.com/)
3. IAU - International Associated Universities (http://www.unesco.org/iau/index.html)
4. IIEP - International Institute for Education Planning (http://www.unesco.org/iiep)
5. OCDE-Organization for Economic Cooperation and Development (http://www.ocde.org/els/edu)
6. The Resources for your Education and your Future (http://www.embark.com)
7. UNESCO – United nations Educational, scientific and Cultural Organisation (http://www.unesco.org/els/edu)
8. UNESCO/OREALC (http://www.education.unesco.org/orealc)
9. UNEVOC - International centre for technical and vocational Education and Training. of Unesco (http://www.unevoc.de)
10. WEF - World Education Forum (http://www2.unesco.org/wef/)

INSTITUTES AND ORGANIZATIONS FOR HIGHER EDUCATION IN AMERICA AND CANADA

1.- AACC-American Association of Community Colleges, USA (http://www.aacc.nche.edu/home_index1.htm)
2.- AAHE-American Association for Higher Education, USA (http://www.aahe.org/)
3.- AASCU-American Association of State Colleges and Universities, USA, (http://www.aascu.org/)
4.- AAUA-American Association for University Administration
5.- AAUP-American Association of University Professors, USA (http://www.aaup.org)
6.- AAUW-American Association of University Women, USA (http://www.aauw.org)
7.- ACCC-Association of Canadian Community Colleges, Canada (http://www.accc.ca/index.htm)
8.- ACE-American Council on Education, USA (http://www.ACENET.edu/)
9.- ACUTA-Assoc. Of College and Univ. Telecomm. Administrators, USA (http://www.acuta.org/)
10.- ADEK-American Distance Education Network, USA
11.- AED-Academy for Educational Development, USA (http://www.aed.org/)
12.- AERA-American Educational Research Association, USA (http://www.aera.net/)
13.- AIEA-Association of International Education Administrators, USA. (http://www.aieaworld.org)
14.- AIR-Association for Institutional Research USA (http://www.airweb.org/)
15.- Alliance for Higher Education and Enterprise in North America, CANADA (http://www.northamericaninstitute.org/alliance/index.html)
16.- ASHE-Association for the Study of Higher Education, USA (http://www.ashe.missouri.edu/)
17.- Association for Canadian Studies, Canada, (http://www.acs-aec.ca/)
18.- BALAS-Business Association Of Latin American Studies, USA (http://www.balas.org/)
19.- BHEF-Business-Higher Education Forum, USA (http://www.acenet.edu/About/programs/Programs&Analysis/BHEF home.html)

20.- Border Information & Solutions Network (BISN), USA (http://www.bisn.org/)
21.- CAEL-Council for Adult and Experimental Learning USA (http://www.cael.org/)
22.- CCIS-College Consortium for International Studies, USA (http://www.ccisabroad.org/)
23.- CEC-Canadian Education Center Network/Reseau des CEC,Canada (http://www.studyincanada.com/)
24.- CETAI-Center d'études en administration international, Canada (http://cetai.hec.ca/)
25.- CGS-Council of Graduate Schools, USA (http://www.cgsnet.org/)
26.- CHEF-Corporate Higher Education Forum/Le Forum Enterprises Universités, CANADA, (http://www.cheforum.ca/)
27.- CICIC-Can info Ctr. Intl Credentials/Center d'info can dip intx, Canada, (http://www.cicic.ca/)
28.- CIEE-Council on International Educational Exchange, USA (http://www.ciee.org)
29.- CIES-Comparative & International Education Society USA. (http://www.indiana.edu/~comped/cies_Frame.htm)
30.- CIES-Council for International Exchange of Scholars, USA (http://iserver.iie.org/cies/)
31.- CIHE-Centre for International Higher Education, Boston College, USA, (http://www.bc.edu/bc_org/avp/soe/cihe/Center.html)
32.- CMEC- Council of Minister of Ed./conseil des ministres de I'Éd, CANADA, (http://www.cmec.ca/index.stm)
33.- College Board, USA (http://www.collegeboard.org/)
34.- CONAHEC-Consortium for North American Higher Education Collaboration, USA (http://conahec.org/)
35.- Council for North American Business Studies, Canada (http://www.harbour.sfu.ca/)
36.- CQAIE-Centre for Quality Assurance in International Education, USA, (http://www.cqaie.org/)
37.- Inter-American Distance Education Consortium, USA (http://www.cde.psu.edu/DE/CREAD/Cread.html)
38.- CVA/ACFP- Canadian Vocational Assoc./I'Assoc. Can. Formation prof., Canada, (http://www.cva.ca/)
39.- DFAIT/MAECI-Dept For Affs& Intl Trade/Min des Affétrg et du Comm intl, Canada, (http://www.dfait-maeci.gc.ca/)

40.- ESC-Education Commission of the States, US (http://209.151.83.18/)
41.- EDUCAUSE, USA (http://www.educause.edu/)
42.- FIPSE-Fund for the Improvement of Postscondary Education, USA, (http://www.ed.gov/offices/OPE/FIPSE/index.html)
43.- FOCAL-Can Found for the Americas/Fondation canadien pourles Amériques, Canada, (http://www.focal.ca/)
44.- Fulbright Association, USA (http://www.fulbright.org/)
45.- Fulbright,Canada-US Program, Canada (http://www.usembassycanada.gov/fulbrigh.htm)
46.- Global Alliance for Trasnational Education (http://www.edugate.org/)
47.- GATE- Global alliance for Transnational Education, USA (http://www.gchera.iastate.edu/)
48.- HACU-Hispanic. Association of Colleges & Universites, USA (http://www.hacu.net/)
49.- HEWI- Higher Education Washinton, Inc, USA (http://www.hewi.net/)
50.- HRDC/DRHC-Human Res Devt. Canada/Dvtp des resources Humaines, Canada, CANADA, (http://www.hrdc-drhc.gc.ca/)
51.- ICCS/CIEC-intl Coun For Canadian Sudies/Cons intl d'études canadienne, CANADA, (http://www.iccs-ciec.ca/)
52.-IHEP-Institute for Higher Education Policy
53.- IIE-Institute of International Education, USA (http://www.iie.org/)
54.- Interamerican University Studies Institute, USA. (http://www.iusi.org/)
55.- International Federation of Institutes for Advanced Study, CANADA, (http://www.ifias.ca/)
56.- LASPAU- Academic and Professional Programs for the Americas, USA, (http://www.laspau.harvard.edu/)
57.- Mexican American Studies & Research Centre, USA (http://w3.arizona.edu:180/masrc/)
58.- Milken Institute, USA (http://www.milken-inst.org)
59.- Mobility International USA, USA (http://www.miusa.org/)
60.- NAFSA-Association of International Educators, USA (http://www.nafsa.org/)
61.- NAFTA-Information Centre, USA http://www.tamiu.edu/coba/usmtr/)
62.- NAMI-North American Institute, USA (http://www.northamericaninstitute.org)
63.- NASULGC-Natl Assoc. Of State Univ. & Land- Grant Colleges

USA (http://www.nasulgc.org/)
64.- NCES- National Centre for Education Statistics, USA (http://nces.ed.gov/)
65.- NCHEMS- National Centre for Higher Education Management, USA, (http://www.nchems.org.)
66.- NCITE-National Committee for International Trade in Education, USA, (http://www.tradeineducation.org/)
67.-NEA-National Education Association
68.- North American Commission for Environmental Cooperation, CANADA (http://cec.org/)
69.- NSERC/CRSNG-Nat Sci & Eng Reserch Coun/Cons de recherche enscience nat, CANADA (http://www.nserc.ca/)
70.- OUI/IOHE- Org Univ InterAm./InterAm. Org for Higer Ed. CANADA (http://www.oui-iohe.qc.ca/)
71.- SEDL-South-western Educational Development Laboratory, USA. (http://www.sedl.org/)
72.- SHEEO- State Higher Education Executive Officers, USA (http://www.sheeo.org/)
73.- U.S Department. Of Education, USA (http://www.ed.gov/index.html)
74.- US State Department Bureau of Educational and Cultural Affairs, USA (http://exchanges.state.gov/education/)
75.- Udall centre for Studies in public Policy, USA (http://udallcenter.arizona.edu/)
76.- US-Conflict Resolution centre, USA (http://crc.nmsu.edu/)
77.- USNEI-U.S.Network for Education Information, USA (http://www.ed.gov/NLE/USNEI/HP0B1.html)
78.- Western Cooperative for Educational Telecommunications, USA (http://www.wiche.edu/Telecom/index.htm)
79.- WICHE-Western Intersate Commission for Higher Education, USA (http://www.wiche.edu)

EUROPEAN INSTITUTES AND ORGANISATIONS

CEDEFOP European Centre for the Development of Vocation Training (http://www.cedefop.gr)
EAIE – European Association for International Education (www.eaie.nl)
EATA- European Association for Telematic Application (www.netties.net)
EDEN (www.eden.hu)
EIFEL-L.org-European Institute for E-Learning (www.eife-I.org)
ENQA-European Network of Quality Assurance (www.bologna-berlin2003.de/en/htm)
ESIB-National Unions of Students in Europe (www.esib.org)
EUA-European University Association (www.unige.ch/ena/)
EURAB-European Research Advisory Board (www.europa.eu.int/comm./research/eurab)
EURASHE-European Association of Institute in Higher Education (www.eurashe.be)
EOPEI-European Observatory for Population Education and Information (www.evop-aede.be)
EURODICE (www.his.ox.ac.uka)
European Association of Teachers (http://www.aede.org)
Generation Europe (http://www.generation-europe.org)
HESA-Higher Education Statistic Agency (www.hesa.ac.uk)
IEA.nl International Association for evaluation of Educational Achievements. (www.ibe.unesco.org)
NIDI – Information: consultants en Netherlands. Interdisciplinary Demographic Institute (http://www.nidi.ni)
NARIC(www.europa.eu.int)
NETWORKING FOR EDUCATION (http://www.edex.net.uk)
OPEN & DISTANCE LEARNING LIAISON COMMITEE (www.odl-liason.org)