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Ljubljana, September 2012

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Authors: Breda Ložar, Andreja Kozmelj, Jadranka Tuš, Tatjana Škrbec

Translated by: Matevž Meze, Breda Ložar, Jadranka Tuš, Tatjana Škrbec

Photo on the cover: Andreja Kozmelj

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Information: Information Centre
phone: +386 01 241 64 04
e-mail: info.stat@gov.si

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FOREWORD

Recent years have affirmed the belief that education and training have a key role in solving socio-economic, demographic, environmental and technological challenges, faced by Europe and its citizens. This belief was also acknowledged in various strategic documents on the European and national levels.

For successful solving of these challenges, the cooperation of EU Member States that are otherwise independently responsible for their educational systems with the European Commission that encourages and supports national activities for attaining common goals through the open method of coordination is essential.

This cooperation was affirmed in 2009 with the strategic framework for European cooperation in education and training up until 2020 (briefly put: Education and Training 2020). The document is a continuation of the work programme on this field till 2010 based on the Lisbon strategy and it will considerably support the efforts to achieve the objectives of the Europe 2020 strategy.

The abovementioned document defines lifelong learning should be regarded as a fundamental principle underpinning the entire framework, which is designed to cover learning in all contexts – whether formal, non-formal or informal – and at all levels: from early childhood education and schools through to higher education, vocational education and training and adult learning. The framework should address the following four strategic objectives until 2020: making lifelong learning and student mobility a reality; improving of the quality and efficiency of education and training; promoting equity, social cohesion and active citizenship; enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

The progress achieved on these strategic objectives is going to be monitored by reference levels for European average efficiency performance ("European benchmarks") and by indicators. Five such European benchmarks have already been defined whereas others are still in the process of formation. Individual EU Member States will, based on national priorities, determine how to contribute to the common achievement of the European benchmarks through their national actions and objectives.

As a member of the European Union, Slovenia will also actively cooperate in the creation of the common European policy of education and training and in the preparation of national actions and objectives with which it will contribute to the fulfilment of common European goals in this decade. The basis for the monitoring of the fulfilment of national and European objectives will be internationally comparable statistical data.

In the following publication and its four chapters that relate to the four previously mentioned European strategic objectives up until 2020, we try to demonstrate, through the available statistical data and indicators, the educational situation in Slovenia as an EU and OECD Member State. The focus is on the review of the trends, the current situation and the possibilities of fulfilling the European and Slovene national objectives in line with the defined European benchmarks up to 2020.

You are kindly invited to read through our new publication and make the best use of it.

Irena Križman
Director-General

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He who knows not, and knows not that he knows not, is a fool … avoid him.
He who knows not, and knows that he knows not, is ignorant … teach him.
He who knows, and knows not that he knows, is asleep … wake him.
He who knows, and knows that he knows, is wise … follow him.

(Chinese proverb)

EDUCATION IN SLOVENIA ON THE WAY TO EUROPE 2020

The educational system is part of society and as such it needs to respond quickly to the global changes. Slovenia is actively engaged in global flows where the development and progress of developed societies are based on knowledge and on the creation of new knowledge.

Common European strategic objectives in the field of education and training

As a part of the European Union, Slovenia cooperates in the realization of the common European strategic objectives in the field of education and training; among them the most important ones are those stated in the strategic framework for European cooperation in education and training (briefly put: **Education and Training 2020**) and in the **Europe 2020** strategy.

Two of the proposed leading initiatives are especially important for education and training in the Europe 2020 strategy, namely, the Youth on the Move initiative and the New Skills for New Jobs initiative. Among other important initiatives we find the Digital Agenda for Europe and the Innovation Union.

The strategic framework for European cooperation in education and training supports the efforts for the realisation of the objectives of the Europe 2020 strategy. In this framework, lifelong learning is defined as a fundamental principle underpinning the entire framework, which is designed to cover learning in all contexts — whether formal, non-formal or informal — and at all levels: from early childhood education and schools through to higher education, vocational education and training and adult learning. The framework should address the following four strategic objectives:

1. making lifelong learning and student mobility a reality;
2. improving of the quality and efficiency of education and training;
3. promoting equity, social cohesion and active citizenship;
4. enhancing creativity and innovation, including entrepreneurship, at all levels of education and training.

For the monitoring of the realization of these strategic objectives the following five basic benchmarks for 2020 have been defined (two of them are also the main objectives of the Europe 2020 strategy) as:

- at least 95% of children between the age of 4 and the age for starting compulsory basic education should participate in early childhood education;
- the share of early leavers from education should be less than 10% (also a main objective of the Europe 2020 strategy);
- the share of the young aged 15 with insufficient abilities in reading, mathematics and science should be less than 15%;
- the share of the young aged 30-34 with tertiary educational attainment should be at least 40% (also a main objective of Europe 2020 strategy);
- an average of at least 15% of adults (age group 25-64) should participate in lifelong learning.

The basis for the monitoring of the fulfilment of national and European benchmarks will be internationally comparable statistical data and indicators.

This publication presents the system of education and training in Slovenia, focusing on the current situation of achieving the key strategic objectives from the Education and Training 2020 document.

MAIN FINDINGS:

LIFELONG LEARNING AND STUDENT MOBILITY

In 2010, 93% of children aged 4 or above were enrolled in kindergartens. By 2020 the share should be at least 95%.

In 2010, 16% of adults participated in lifelong learning. ET 2020's objective is 15%. Slovenia has already surpassed this objective.

A Slovene 6-year old can expect to spend 18.5 years in the educational system, which is more than the EU-27 average (17.2 years).

In Slovenia, there are 2% of foreigners among tertiary students; this is significantly below the EU-27 average (near 10%).

QUALITY AND EFFICIENCY OF EDUCATION AND TRAINING

In 2009, 21% of 15-year olds achieved low scores in reading literacy. By 2020 this share should be lower than 15%.

In 2010, nearly 90% of young people attained upper secondary education. This places Slovenia in the 4th place among the EU-27 Member States.

In the 2009/10 academic year a half of young Slovenes participated in tertiary education; this places Slovenia in the 1st place among EU-27 Member States.

In Slovenia almost a third of people aged 30-34 attained tertiary education. By 2020, this share should be above 40%.

EQUITY AND SOCIAL COHESION IN EDUCATION

Among young people, the share of early school leavers is not high (it was 5 % in 2010). The objective of the Europe 2020 strategy and the ET 2020 is 10 %. The national goal is 5 %.

Among basic school pupils, there are 7% of children with special educational needs; approximately 5% of these are integrated into the mainstream basic school (from 2004 on, when the process of integration began, the share of children with special needs education attending mainstream basic school has doubled).

TRIANGLE OF KNOWLEDGE: EDUCATION, RESEARCH, INNOVATION

In 2010, a doctoral degree was attained by significantly more candidates than 10 years ago, in science and technology even twice as many.

The number of graduates in Mathematics, Science and Technology is increasing, however, considering the number of these graduates per 1000 population in the 20-29 age group, Slovenia lags behind the European average.

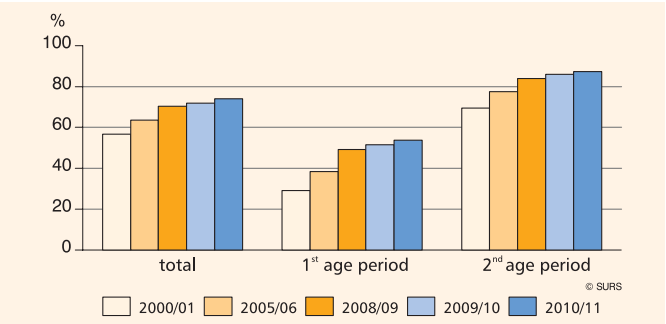
1
LIFELONG LEARNING AND STUDENT MOBILITY

Challenges presented by demographic changes and by the constant need for updating knowledge due to changing economic and social conditions demand a lifelong approach to learning (learning from cradle to grave) and educational systems that are more responsive to changes and more open to the world at large.

An essential element of lifelong learning is also the mobility of youth and teaching staff. The significance of mobility and with it the transfer of knowledge, experience, ideas and interconnectedness all form the main guideline of Europe which strives towards a society of knowledge and the competitive advantage of European graduates, employees and researchers as well as their comparability on a global scale.

1.1 Learning from cradle to grave

Chart 1: Children enrolled in pre-school education in kindergartens, Slovenia



Source: SURS

Table 1: Children, aged 4 or above, enrolled in pre-school education in kindergartens, selected EU-27 Member States, 2009

%

Slovenia	**91.3**
EU-27 average	**91.7**
Countries with the highest shares of enrolled children	
France	100.0
Netherlands	99.5
Spain	99.3
Countries with the lowest shares of enrolled children	
Poland	70.9
Finland	71.9
Ireland	73.4

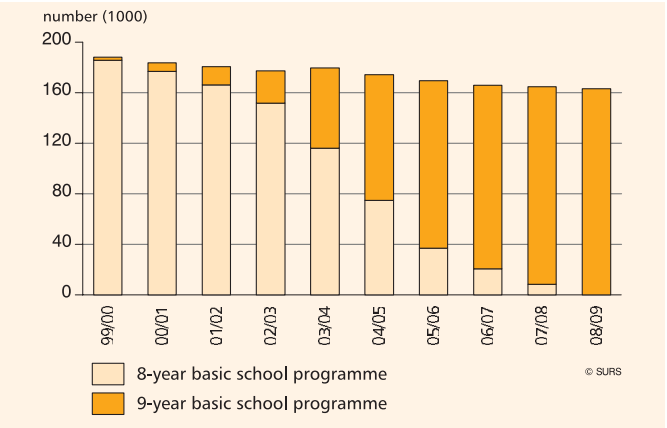
Source: Eurostat (http://ec.europa.eu/eurostat, 17. 10. 2011)

- Pre-school education in kindergartens is a good starting point for successful lifelong learning. High quality in pre-school education and its wide accessibility can help in fulfilling above all both main goals of the Europe 2020 strategy: to decrease early school leaving and to lower the number of people exposed to risk of poverty and social exclusion.
- In Slovenia, more children are enrolled in pre-school education in kindergartens each year: 20 years ago half of the children of appropriate age were enrolled in kindergartens, in 2010 already three quarters were enrolled. In the last few years there has been an increase in the number of even the youngest children (1-20 years of age) enrolled in and attending the kindergarten.

In Slovenia, already three quarters of children of the appropriate generation are enrolled in pre-school education.

- The objective of the Education and Training 2020 strategy (ET 2020) envisages a 95% participation rate of children (aged 4 or more) in pre-school education in kindergartens.
- A third of the EU-27 countries have already reached the objective. France, the Netherlands and Spain, with the participation rate above 99%, have already surpassed it; Ireland, Finland and Poland, with slightly above 70% in 2009, were the ones farthest away from this objective.
- With 91.3% in 2009, Slovenia qualified in the middle of the countries' ranking, the EU-27 average was 91.7% in that year. In 2010 the share of children (aged 4 or more) enrolled in kindergartens was 93%.

Chart 2: The dynamics of introducing the programme of nine-year basic school, Slovenia



Source: SURS

Table 2: Youth and adults, participating in basic education, Slovenia[1)]

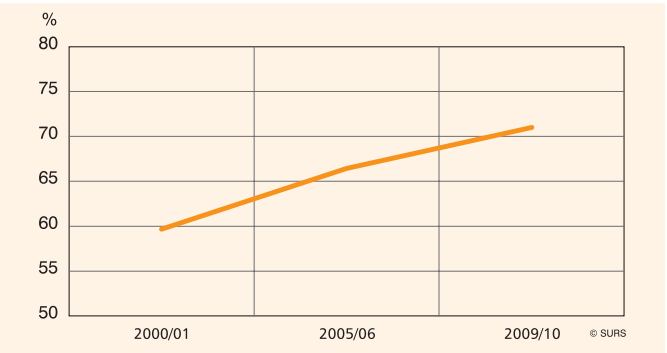
	2000/01	2005/06	2009/10	2010/11
Participants, total	187,077	172,110	164,616	164,001
Basic school programmes for youth	**184,924**	**170,548**	**163,099**	**162,632**
programme with regular curriculum	180,874	167,616	160,074	159,514
programme with adapted curriculum	2,703	1,690	1,550	1,617
programme with special curriculum	1,347	1,242	1,475	1,501
Programme for adults	**2,153**	**1,562**	**1,517**	**1,369**

1) Data refer to the end of the school year.
Source: SURS

The number of basic school population is still declining (due to unfavourable demographic trends in the recent years).

- The strongest foundation for lifelong learning is received in basic school. In the last 15 years basic education has changed considerably. The most important systemic change has most certainly been the introduction of the nine-year basic school programme.
- Gradual transition to the abovementioned programme began in the 1999/2000 school year, when the first 2,000 6-year olds were included, and finished in the 2007/08 school year, when the last 8,000 fifth-graders of the 8-year basic school switched to the seventh grade of the 9-year basic school.
- Basic education is compulsory and free of charge for children and youth.
- School offers various educational programmes to ensure, to the highest possible extent, an optimal development of each individual. Approximately 2% of basic school population participate in programmes with adapted and special curricula. For those who do not finish basic school final examinations, educational programmes for adults are organised as a "second chance".

Chart 3: Young people (aged 15-24) in formal education, Slovenia



Source: SURS

■ Public education is one of the main means of encouraging equality. The inclusion of all young people into schools and society is the priority task of public authorities and international or regional organisations. Education with the purpose of inclusion fulfils the learning needs of all children, youth and adults especially in those environments where there are the highest numbers of neglected, shunned, poor or socially excluded people.

In Slovenia, over 70% of young people participate in formal education, which is one of the highest shares among the EU-27 Member States.

■ In Slovenia, the share of youth (aged 15–24) participating in formal education increases each year. In 10 years it has risen by more than 10 percentage points; in 2010 it reached 70.4 which was considerably above the then EU-27 average (60.1%). Only Poland had a higher share than Slovenia; Finland and Lithuania also ranked highly.

■ The share of youth participating in formal education is increasing almost everywhere in the European Union, with the exception of the United Kingdom and France. In these two countries, this share even decreased in 2009 over 2000 (in the former by 5.8 percentage points, in the latter by 4.1 percentage points). The highest progress was observed for Romania: in 2000 it shared the last place with Cyprus and Malta (each by around 37%), but by 2009 this share has increased by almost 20 percentage points, to almost 57%.

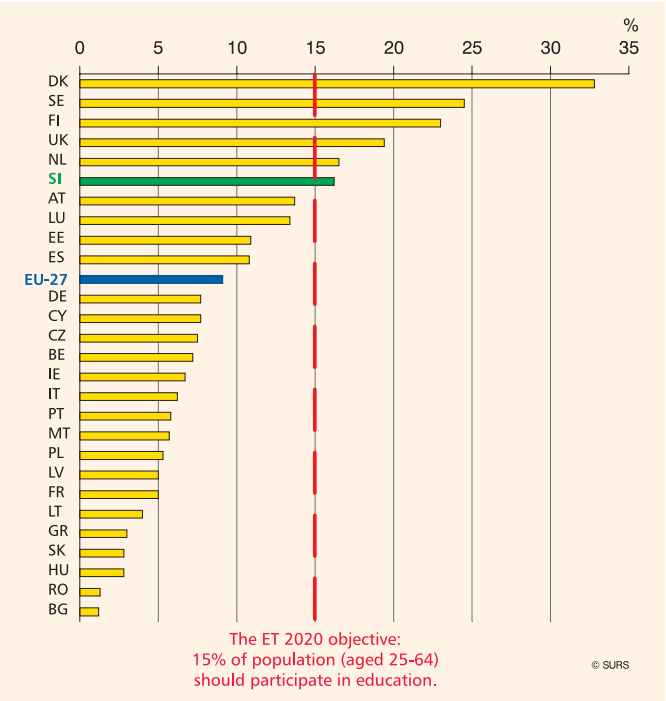
Table 3: Youth (aged 15–24) in formal education, selected EU-27 countries

%

	2000	2005	2009
Slovenia	**59.3**	**68.8**	**70.4**
EU-27 average	**54.8**	**60.2**	**60.1**
Countries with low shares			
Malta	37.1	39.7	47.0
Cyprus	37.0	40.2	46.6
Luxemburg	40.8	40.4	42.5
Countries with high shares			
Poland	61.6	69.8	71.7
Finland	67.5	70.8	69.9
Lithuania	60.1	70.4	69.3

Source: Eurostat (http://ec.europa.eu/eurostat, 1. 2. 2012)

Chart 4: Adults (aged 25–64), participating in education, selected EU-27 countries, 2010

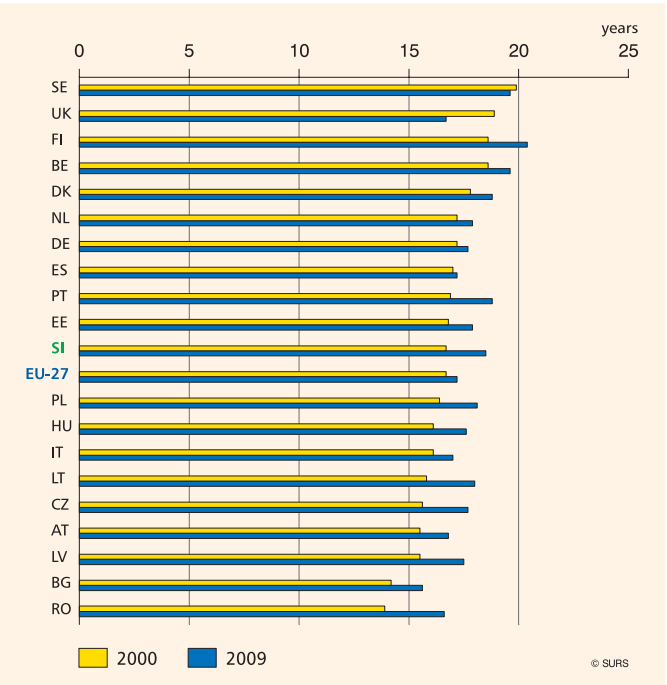


Source: Eurostat (http://ec.europa.eu/eurostat, 1. 2. 2012)

- From the beginnings of the EU, education has been considered a basic human right which should become one of the generally accessible public goods. The central aim of education is the formation of free, critical and independent young people. In their work, using the high level of knowledge needed to face new challenges, they will be able to contribute to the development of the society they live in.
- Slovenia has already reached and surpassed the objective of the Education and Training Strategy Europe 2020, i.e. 15% of adult population participating in education. Many countries have not yet reached the EU-27 average, the farthest from it are Bulgaria, Romania, Hungary and Slovakia (in 2010, this share was lower than 3% in each of these countries). In Slovenia, however, we cannot be satisfied with mediocre achievements and must instead look up to the most successful countries such as Denmark, Finland, Sweden and the United Kingdom. Unfortunately the shares of Slovenia and also some of the other EU-27 Member States have been decreasing for a number of consecutive years.
- Education and training can be efficient means in the fight against poverty and social exclusion. Adults facing specific difficulties (e.g. living in environments which offer fewer educational opportunities, being disadvantaged due to the socioeconomic or geographic status, being handicapped) have generally less advantages to succeed in their society.

Education is often
a way out of social exclusion and poverty;
all types of learning matter,
be they formal, non-formal or informal.

Chart 5: Expected duration of education, selected EU-27 countries



Source: Eurostat (http://ec.europa.eu/eurostat, 17. 10. 2011)

■ Expected duration of education is the estimated number of years a child entering compulsory education is expected to spend in the educational system, if the current enrolment pattern stays unchanged.

In 2009 a 6-year old in Slovenia could expect to spend 18.5 years in the educational system.

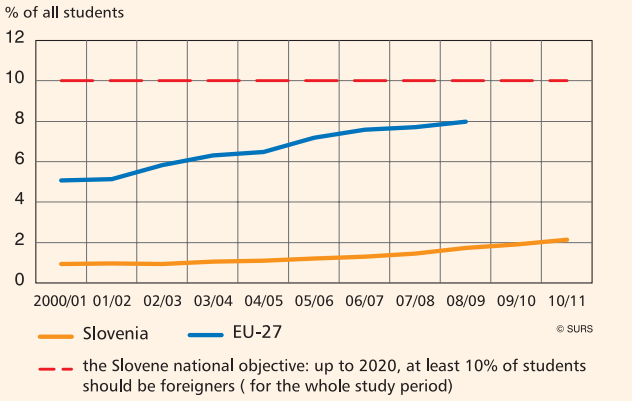
■ In 2009, pupils from the EU-27 Member States could expect to spend on average slightly over 17 years in the educational system. Individual countries' data differed considerably: pupils from Finland could expect to spend 20.4 years in education, those from Sweden and Belgium 19.6 years and pupils from Bulgaria only 15.6 years. Slovenia with 18.5 years ranked above the EU-27 average.

■ The data value on expected duration of education would decrease and become more equal between countries if adults participating in basic and upper secondary education were excluded. This would especially affect the data for countries with the longest expected duration of education, namely Finland, Belgium and Sweden (it would be 3 years shorter) and to a lesser extent other EU-27 countries' data.

1.2 Student mobility

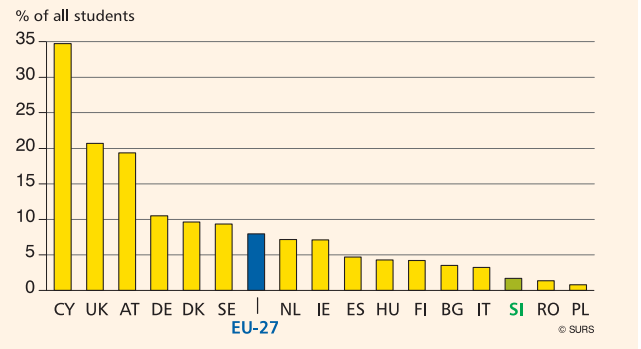
1.2.1 Mobility for acquiring a degree

Chart 6: Foreign students, Slovenia and EU-27



Sources: SURS, Eurostat (http://ec.europa.eu/eurostat, 20. 12. 2011)

Chart 7: Foreign students, selected EU-27 countries, 2008/09

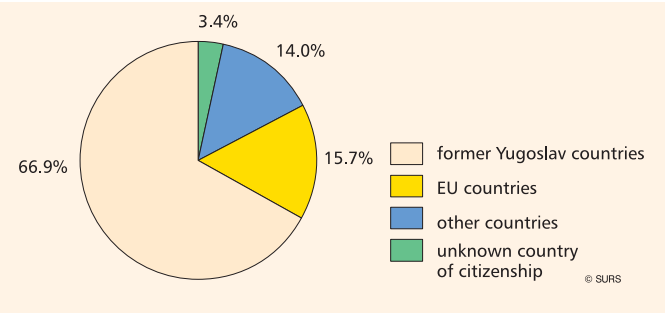


Source: Eurostat (http://ec.europa.eu/eurostat, 20. 12. 2011)

More and more foreigners decide to study in Slovenia each year, but nevertheless still significantly fewer than the EU-27 average.

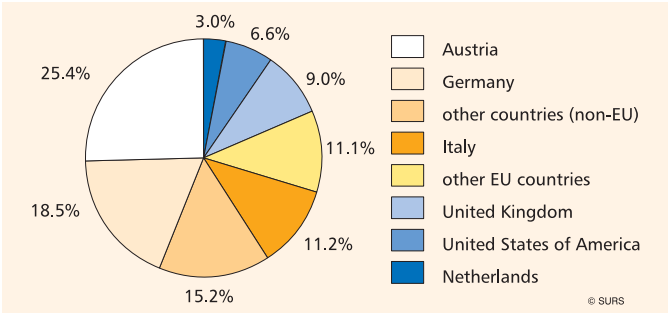
- A national objective that Slovenia set in its National programme of tertiary education 2011-2020 is to raise the share of foreign students enrolled in tertiary-education institutions to at least 10% for the entire study period by 2020.
- In Slovenia the share of foreign students for the 2008/09 academic year was significantly below the EU-27 average with only 1.72%. However, the share of foreign students in Slovenia is rising; in the 2010/11 academic year it rose to 2.12%.
- In the 2008/09 academic year there were 8% or 1.5 million foreigners (i.e. "non-citizens" of the country of their studies) among the students of tertiary education in the EU-27 Member States. In the United Kingdom the share of foreigners among students was 21%, in Austria 19% and on Cyprus even 35%. The lowest share of foreign students was in Poland (0.8%).

Chart 8: Foreign students in Slovenia by country of citizenship, Slovenia, 2010/11



Source: SURS

Chart 9: Countries where the Slovenes study, 2008/09



Source: OECD (http://stats.oecd.org/Index.aspx, 20. 12. 2011)

In the 2010/11 academic year there were 2,272 foreigners among students in Slovenia; two thirds were nationals of other former Yugoslav countries (the majority of them were Croats); among the nationals of EU-27, the majority were Italians, and among nationals of other counties the majority of them were Russians, Ukrainians and Chinese.

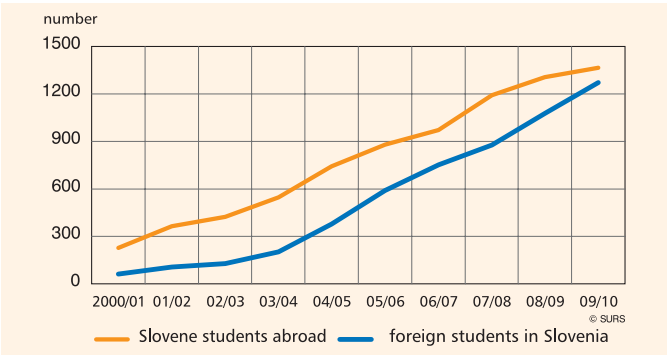
The majority of foreign students come from the former Yugoslav countries.

In the 2008/09 academic year, 3.3 millions of students studied outside their country, all over the world. Among them there were nearly 3,000 Slovene citizens. Compared to the number of students in Slovenia in that year, this amounts to 2.2% of students.

Slovene students, who decide to study abroad, usually go to the EU-27 Member States; in the 2008/09 academic year three quarters of those students went to these countries. The largest share, 26%, studied in Austria, followed by Germany with 18%, Italy with 11%, the United Kingdom with 9% and the United States of America with 7%.

1.2.2 Short-term mobility

Chart 10: Slovene students abroad, foreign students in Slovenia (exchange, Erasmus programme), Slovenia



Source: European Commission (http://ec.europa.eu/education/erasmus/doc920_en.htm#1, 20. 12. 2011)

Table 4: Slovene students abroad (exchange, Erasmus programme) and the percentage of them among graduates, Slovenia

%

	Students on exchange	Students on exchange as the percentage of graduates in the relevant (calendar) year
2007/08	1.03	7.15
2008/09	1.13	7.60
2009/10	1.20	7.56

Source: European Commission (http://ec.europa.eu/education/erasmus/doc920_en.htm#1, 20. 12. 2011)

■ The Erasmus programme is the most successful international student exchange programme in tertiary education, which offers students a short-term stay and advanced study abroad. By 2011, 33 European countries (including Turkey) have joined the programme. From the beginning, in the 1987/88 academic year, the programme has enabled more than two million students to complete a part of their studies abroad. The share of these students rises every year (on average by 7.4% a year) and by 2012/13 the programme is expected to reach the set objective, i.e. supporting the study exchange of 3 million students.

■ Also in Slovenia more and more students decide to complete a part of their studies abroad (the exchange lasts 6 months on average) each year and more foreign students come to Slovenia as well. In the 2009/10 academic year, the Erasmus programme of study exchange included 1,368 Slovene students or 1.2% of all Slovene students. At the same time 1,271 foreign students were on exchange at Slovene tertiary educational institutions.

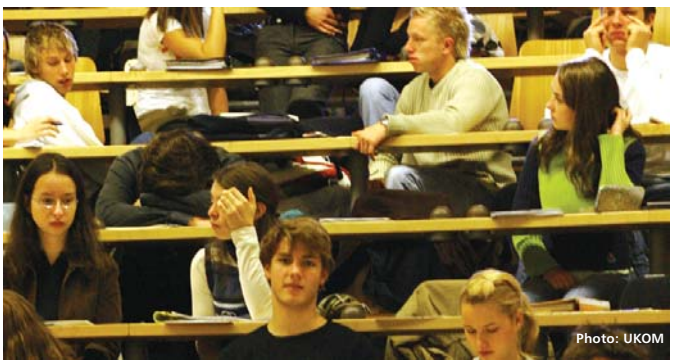
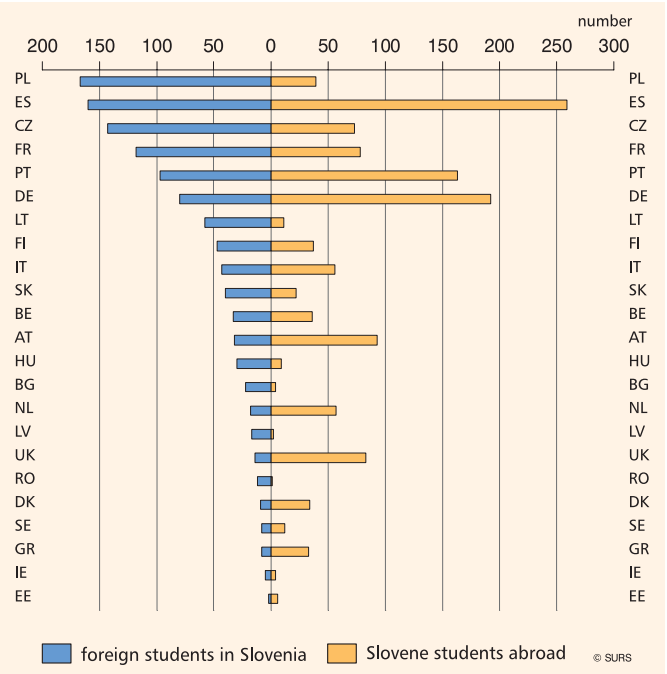


Photo: UKOM

Chart 11: Foreign students in Slovenia by the country of their origin and Slovene students abroad by the country of their destination (exchange, Erasmus programme), 2009/10



Source: European Commission (http://ec.europa.eu/education/erasmus/doc920_en.htm#1, 20. 12. 2011)

■ In the 2009/10 academic year, the majority of Slovene students went on exchange to Spain, Germany and Portugal. On the other hand, Slovene tertiary educational institutions hosted mostly Polish, Spanish, Czech and French students.

More and more students complete a part of their studies abroad (as a part of study exchange).

Photo: Primož Lavre

Photo: Dušan Weiss

2
QUALITY AND EFFICIENCY OF EDUCATION AND TRAINING

For the attainment of a higher level of knowledge and better employment opportunities, efficient and quality educational systems are of key importance. The most important challenge is to provide all people with the possibility of gaining key competencies from various fields of literacy (reading, mathematics, science, informatics, social sciences and culture) and with a capacity to communicate in foreign languages. These competencies cannot present the final goal of formal education, but are its minimum that should enable each individual a personal fulfilment, active citizenship, social cohesion and employment in a knowledge-based society.

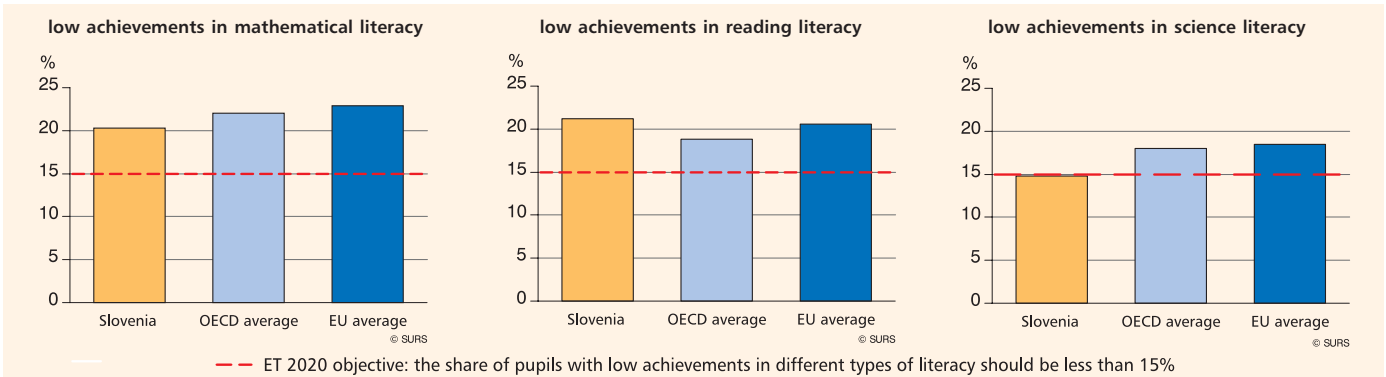
If all of this is to be achieved, the level of basic knowledge should increase and we should at the same time provide quality teaching, adequate initial education of teachers and constant professional development. It is important to invest financial resources into all levels of education, especially at the tertiary level, in a suitable and efficient way so they can stimulate an efficient study and a reconciliation of supply and structure of education with labour market requirements.

2.1 Acquiring key competencies

2.1.1 Literacy

Slovene 15-year olds are achieving low scores in reading literacy.

Chart 12: Pupils not achieving the basic level in different types of literacy, Slovenia, 2009

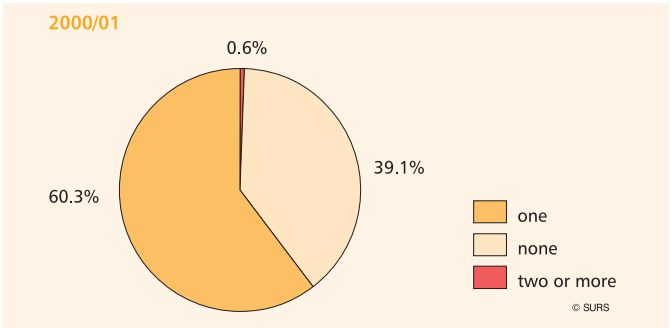


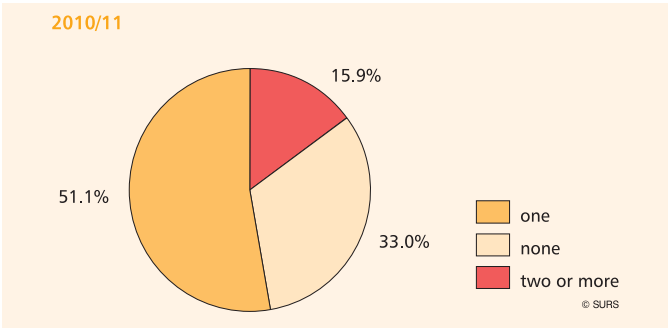
Source: PEI (Pisa survey, 2009)

- High level of literacy is a foundation for lifelong learning and it has to be assured in early youth. The PISA 2009 survey revealed that the scores of Slovene pupils in reading literacy were then lower than the average scores of pupils in selected EU-27 countries and pupils in OECD countries. In mathematics and scientific literacy the scores were higher than the average of the mentioned groups of countries (EU-27 and OECD). The share of Slovene pupils that have not achieved the basic level of reading literacy (first level or lower) amounted to 21.2% in 2009; the average of selected EU-27 countries was 20.6% and the average of OECD countries 18.8%.
- In Slovenia, 4.6% of pupils achieved the highest level of reading literacy (5th and 6th level on the proficiency scale); in selected EU-27 countries this share was 6.2% and in OECD countries 7.6%. This also shows that Slovene pupils lag behind in reading literacy.
- The goal of the Education and Training 2020 strategy is that the share of 15-year olds with insufficient knowlede in reading, mathematics and science literacy in each of these should be less than 15%.

2.1.2 Learning foreign languages

Chart 13: Learning foreign languages in basic school – in compulsory curriculum and optional electives, Slovenia





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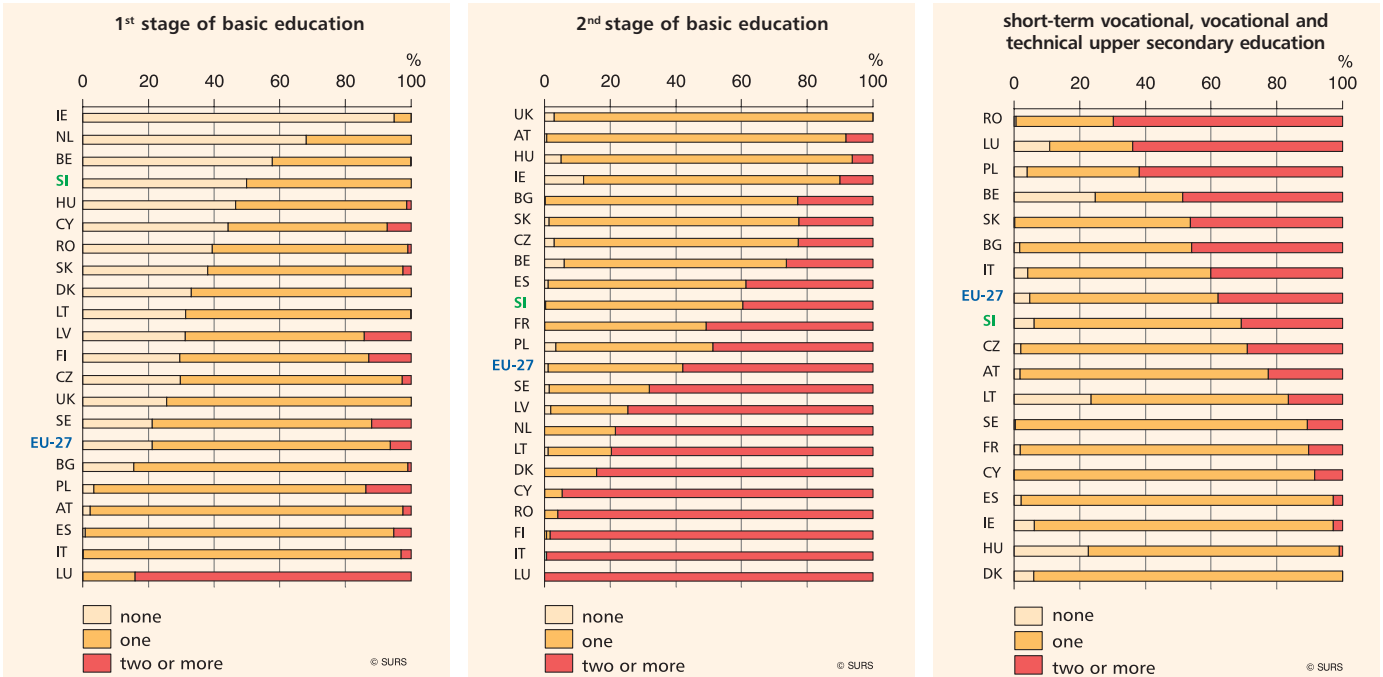
- Knowledge of foreign languages is an important part of lifelong learning, because it significantly influences many areas of a person's activity. It is important for carrying out one's work, for constant professional improvement and for keeping track of global developments in a selected profession, in further study and in strengthening intercultural ties.
- In the last 10 years, Slovenia significantly improved in teaching foreign languages in the basic school, especially in introducing early learning of the first foreign language and in gradual introduction of the second foreign language in the compulsory curriculum.
- In the 2000/01 school year, two fifths of basic school children did not learn any foreign languages, others learned one foreign language. Among these, there was less than 1% of pupils who learned two foreign languages.
- 10 years later, in the 2010/11 school year, the situation was significantly different: 50% of all pupils learned one foreign language and 16% learned two foreign languages.
- Pupils learn foreign languages in large numbers also as a part of non-compulsory optional electives. In the 2010/11 school year, the share of these pupils was 15%.

More and more pupils learn two foreign languages.

Chart 14: Learning foreign languages in basic and upper secondary schools, selected EU-27 countries, 2009

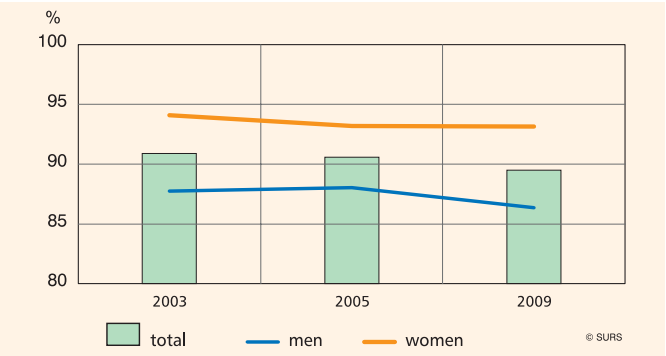


Source: Eurostat (http://ec.europa.eu/eurostat, 22. 11. 2011)

■ Learning at least one foreign language in basic school is compulsory in all EU-27 countries, except in Ireland; learning a second foreign language is usually optional. Luxemburg "leads" in learning foreign languages; there four fifths of pupils learn two foreign languages at the lower level of compulsory education and at the upper level all pupils learn two foreign languages. This holds true also of their upper secondary vocational and professional education programmes.

2.2 Young people attain at least upper secondary education

Chart 15: Young people (aged 20-24) with at least upper secondary education, Slovenia



Source: SURS

- In this decade, the demand for highly qualified and flexible workforce will increase because of the increasing number of job positions that will require new knowledge and new skills.

In Slovenia the share of young people with at least upper secondary education is among the highest in the European Union.

- In EU-27, the share of jobs requiring higher level of education is supposed to increase from 25.1% to 31.3% of all jobs by 2020 and the share of jobs requiring upper secondary education will increase from 48.3% to 50.1 %.
- At the same time, the share of jobs requiring lower levels of education should, despite 10 million new jobs, decrease from 26.2% to 18.5%.
- For the majority of non-physical occupations that require qualification, highly qualified workers will be needed. In these workplaces, workers with upper secondary education qualification will be employed more frequently.
- In Slovenia the share of young people with at least upper secondary education (nearly 90%) is among the highest in the European Union. In 2010 Slovenia was only slightly behind Slovakia, the Czech Republic and Poland (by 2-4 percentage points). There were significant differences between sexes: the share of women with such education was higher than the share of men.

Table 5: Young people (aged 20-24) with at least upper secondary education, selected EU-27 countries

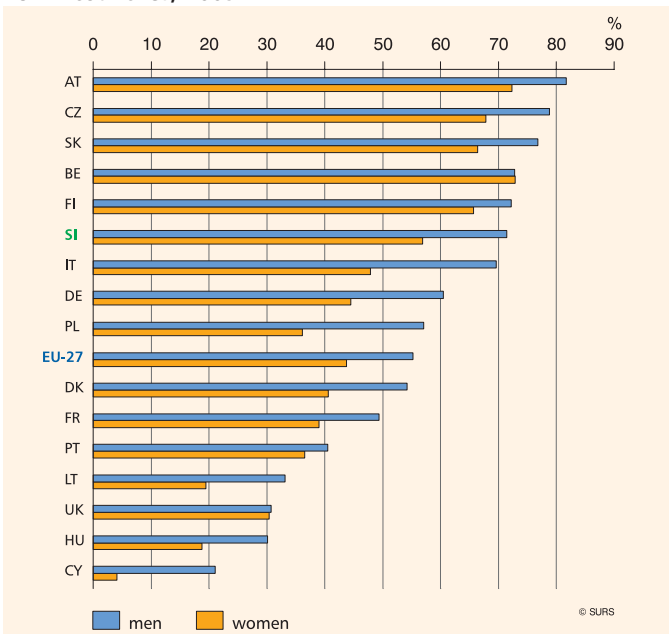
%

	2000	2005	2010
Slovenia	**88.0**	**90.5**	**89.1**
EU-27 average	**76.6**	**77.5**	**79.0**
Countries with low shares			
Spain	66.0	61.8	61.2
Portugal	43.2	49.0	58.7
Malta	40.9	53.7	53.3
Countries with high shares			
Slovakia	94.8	91.8	93.2
Czech Republic	91.2	91.2	91.9
Poland	88.8	91.1	91.1

Source: Eurostat (http://ec.europa.eu/eurostat, 1. 2. 2012)

2.3 Vocational and technical education

Chart 16: Students enrolled in initial vocational education[1], among all enrolled in upper secondary education, selected EU-27 countries, 2009

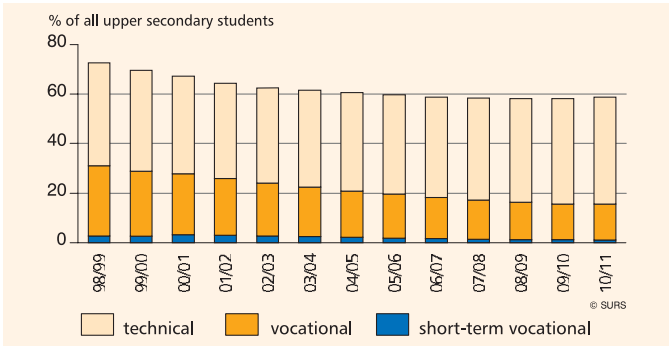


1) Initial vocational education in Slovenia includes short-term vocational and vocational upper secondary education and technical upper secondary education.
Source: Eurostat (http://ec.europa.eu/eurostat, 1. 2. 2012)

- In May 2010, the European Parliament (EP) issued a resolution on key competencies; in the chapter on Vocational education and training, it stresses that high-quality vocational education and training are fundamental to the supply of new professionals and essential for the New Skills for New Jobs campaign. Particular attention should be given to expanding work-based learning and apprenticeships. Work-based learning should also be organised for young graduates on the basis of agreements between universities and businesses.
- In 2009, more men than women were enrolled in initial vocational education in most countries, except in the United Kingdom and Belgium where the number of men and women was rather even. The highest share of men enrolled in initial vocational education among all men in secondary education was in Austria (more than 80%) and the lowest on Cyprus (slightly above 20%). In Slovenia, 71% of all men participating in upper secondary education were enrolled in initial vocational education; for women the share was 57% of all women participating in upper secondary education.
- The EP stresses the need to further modernise vocational training programmes, to make them more attractive to young people, to improve the transition between upper secondary vocational education and training and higher education, and it also stresses the viewpoint of lifelong learning.

Vocational training programmes have to be made more attractive to young people.

Chart 17: Students enrolled in short-term vocational, vocational and technical upper secondary education, Slovenia

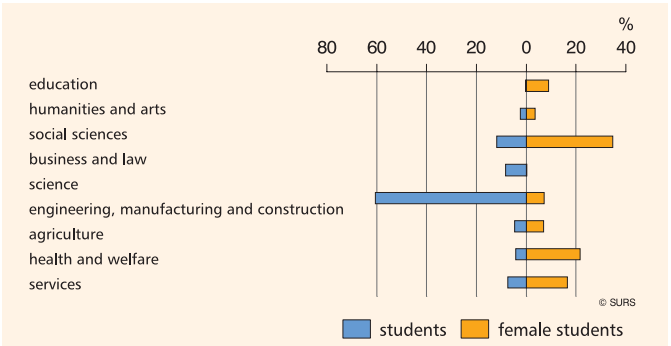


Source: SURS

■ In Slovenia, the share of students enrolled in "vocational" upper secondary education compared with the share of students enrolled in "general" upper secondary education has been declining for years. In the 1998/99 school year the share of the former was 72%, and only 58% in the 2010/11 school year. The decline in enrolment is highest in short-term vocational (from 2.8% to 1.1%) and vocational upper secondary programmes (from 28.2% to 14.5%). More and more young people opt for general upper secondary education, because many decide to continue their schooling; only the general school matura is a "ticket" to all programmes of tertiary education; vocational matura which concludes schooling in technical programmes, does not enable this in full. Nevertheless, the enrolment in these programmes remains stable over the years (around 40%) and is even slightly increasing in the last years.

Interest in vocational upper secondary education is decreasing noticeably.

Chart 18: Graduates in short-term vocational, vocational and technical upper secondary education, by fields of education[1)] and sex, Slovenia, 2009



1) Classification KLASIUS-P.
Source: SURS

■ Even though both sexes are evenly represented in the upper secondary education, the fields of study greatly differ by sex. We can speak about distinctly "feminine" fields of study or about distinctly "masculine" fields of study. 60% of all men enrolled in vocational and technical education can be found in the fields of engineering, manufacturing and construction; there are more men than women also in the field of science. Women, however, outnumber men in the fields of education, social sciences, business and law and in the field of healthcare and welfare. In 2009, 73% of all women participating in vocational and technical education were enrolled in these fields.

2.4 Learning environment and working conditions of teaching staff

Table 6: Average basic school and upper secondary school teacher, Slovenia, 2010

Average basic school teacher	
Sex	female
Educational attainment	academic higher (former)
Mean age	43 years
Average yearly net teaching hours (2009)	690
Average number of pupils per teacher	12
Average monthly gross earning[1)]	EUR 2,046

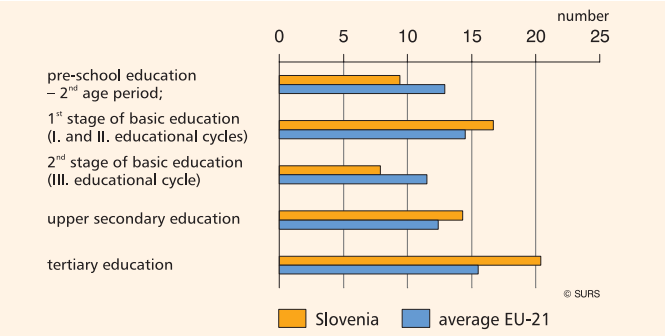
Average upper secondary school teacher	
Sex	female
Educational attainment	academic higher (former)
Mean age	44.3 years
Average yearly net teaching hours (2009)	633
Average number of students per teacher	14.3
Average monthly gross earning[1)]	EUR 2.224

1) The data on the average monthly gross earnings are temporary. We based the calculations on the pays of teachers who worked for the same employer the entire year and had full-time employment.

Sources: SURS, OECD

- The quality of teaching and school management are the most important internal factors which can explain the performance of learners. In order to cope with the requirements of the knowledge-based society, teachers need new competencies; the most important of these are: capacity to prepare learners for lifelong learning, ability to use information-communication technologies, high expertise and upgrading their own professionalism.
- In Slovenia, the teaching profession is a women's domain, especially at the lower levels of education; the situation is similar also in other selected EU-27 Member States. At the basic school level there are four fifths of women among the teaching staff and two thirds at the upper secondary level.
- Basic school teachers and upper secondary school teachers have academic higher education because the studies for subject teachers evolved from short-term higher to academic higher already in 1987. Two years later, the studies for class teachers underwent the same change.
- The average age of a basic school teacher in Slovenia is 43 years, whereas the average age of an upper secondary school teacher is 44.3 years. Unlike some of the other European countries, Slovenia does not yet have to deal with an ageing teaching staff because only a quarter of basic school teachers are older than 50; for upper secondary school teachers this share is a little less than a third.
- The average yearly net teaching hours is comparable to the average of selected EU-27 Member States.

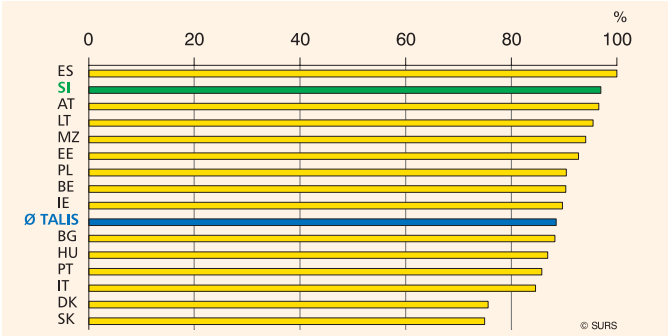
Chart 19: Number of children, pupils and students per teacher[1)], Slovenia and EU-21 average, 2009



1) The calculations are based on the conversion to full time equivalent study load and workload respectively.

Source: OECD

Chart 20: Participation of basic school teachers[1)] in further professional development, selected EU-27 countries, 2008



1) The survey encompasses subject teachers at the 2nd stage of basic education.

Source: PEI (TALIS survey (Teachers Professional Development: Europe in international comparison))

- Student-teacher ratios are - along with teachers' average working time and students' instruction time - among the determinants of the size of countries' teaching force. Regarding the student-teacher ratio, EU-21 Member States (according to 2009 data) differ most in pre-school education (from 5.5 children per teacher in Denmark to 19.7 children per teacher in France) and at the 2nd stage of basic education (from 7.5 pupil per teacher in Portugal to 16.1 pupil per teacher in the United Kingdom).
- In Slovenia, the student-teacher ratio is very favourable in pre-school education (under 10) and at the 2nd stage of basic education. Student-teacher ratio in tertiary education is unfavourable (over 20).
- In Slovenia, quite a lot of attention is devoted to further professional development of teachers and to the quality of the pedagogical process in general. According to the data on teacher participation in professional development, Slovenia ranked second in 2008 (with 96.9%), just behind Spain (where all teachers working at the schools included in the survey had undergone professional development in various forms).
- The lowest share of teachers who cooperated in some form of further professional development (in the last 18 months) was recorded in Slovakia (75%) among the selected EU-27 countries; the EU-27 average was 88.5%.

Basic school teachers participate in further professional training programmes in large numbers.

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2.5 Modernising and improving the quality of tertiary education

Table 7: Tertiary education students, Slovenia and EU-27

	2000/01	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11
Number of students (SI)	91,494	99,214	101,458	104,396	112,228	114,794	115,944	115,445	114,391	114,873	107,134
Number of students (EU-27)	14,595,132	15,161,054	15,607,168	16,071,639	16,342,307	18,775,041	18,876,681	19,037,163	18,832,740	...	...

... not available
Sources: SURS, Eurostat (http://ec.europa.eu/eurostat, 23. 12. 2011)

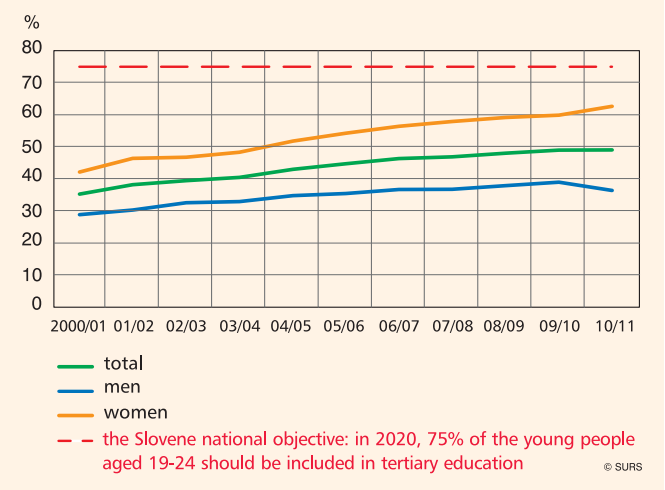
Table 8: Tertiary education graduates, Slovenia and EU-27

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Number of graduates (SI)	11,497	11,991	14,278	13,931	14,888	15,787	17,145	16,680	17,221	18,103	19,694
Number of graduates (EU-27)	2,848,912	3,075,560	3,208,865	3,466,797	3,595,504	3,860,274	3,986,583	4,120,253	4,368,285	4,305,148	...

... not available
Sources: SURS, Eurostat (http://ec.europa.eu/eurostat, 23. 12. 2011)

- In the last decade the number of students enrolled in tertiary education has grown considerably in Slovenia; in the 2002/03 academic year it exceeded 100,000 for the first time; in 2008/09, the number of enrolled students exceeded that of 2000/01 by a quarter, however, the number dropped slightly in 2010/11.
- Also in other EU-27 Member States the number of students rose most in the first half of the last decade. The rise in numbers has slowed down in the last few years, but the number of students is nevertheless slowly nearing 20 million.
- The number of tertiary education graduates is also growing at a considerable speed: in 2010, there were almost 20,000 new graduates in Slovenia in short-term higher education and higher education, which is 8,000 (71%) more than in 2000. The number of graduates is growing quickly also elsewhere in Europe (in 2009, there were 50% more new tertiary education graduates than in 2000); the number is growing markedly especially in the Czech Republic, Slovakia and Romania (on average, there are more than 10% more graduates each year in comparison with the year before).

Chart 21: Young people (aged 19-24) enrolled in tertiary education, Slovenia



Source: SURS

- At the end of 2000 there were 181,000 Slovenes aged 19–24; they form a group which represents the highest number of people enrolled in tertiary education.

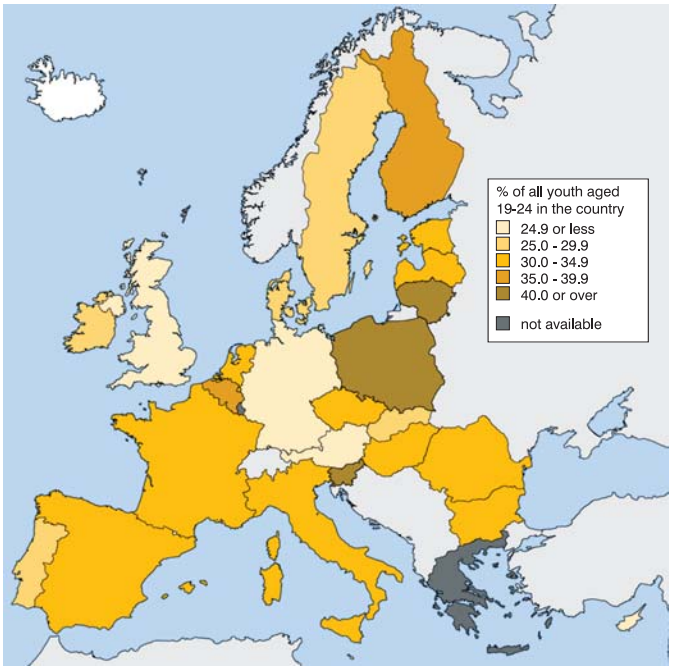
- In the 2000/01 academic year, 35% of population of this age group was enrolled in programmes of tertiary education. In the last decade this age group of population has shrunk significantly – at the end of 2010 they numbered around 150,000.

- In the 2010/11 academic year almost a half of this age group population were enrolled in tertiary education. According to the National programme of tertiary education their share should grow to 75% in the 2011–2020 period.

- Considering the share of young people aged 19-24 and enrolled in tertiary education Slovenia is the first among the EU-27 Member States. In the 2008/09 academic year, 48% of the members of a typical generation of the young were enrolled in education on this level in Slovenia, whereas the EU-27 average was 30%.

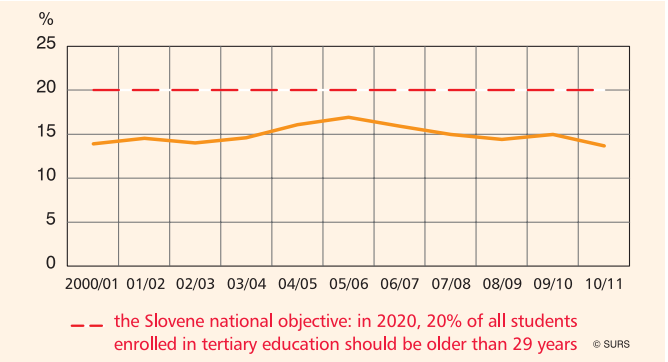
A half of Slovene youth is enrolled in higher vocational education or higher education.

Map 1: Youth (aged 19-24), enrolled in tertiary education, EU-27 Member States, 2008/09



Source: Eurostat (http://ec.europa.eu/eurostat, 10. 1. 2012)

Chart 22: Students over the age of 29, enrolled in tertiary education, Slovenia

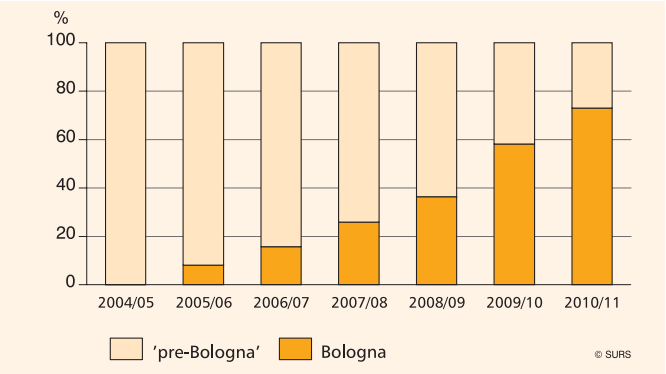


Source: SURS

■ In the scope of lifelong learning Slovenia has set itself an objective to provide easier access, within this decade, to tertiary education also to older generations. By 2020, 20% of all students enrolled in tertiary education should be older than 29 years. From 2000 to 2005 the share of students from this age group rose persistently, in the 2005/06 academic year they accounted for almost 17%. Later on the trend reversed and in the 2010/11 academic year their share again fell below 14%.

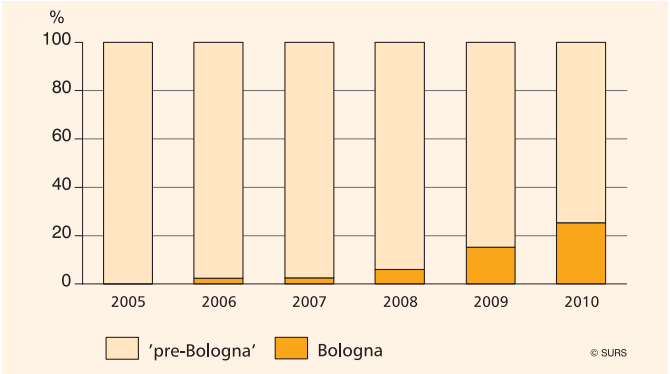
Considering
the share of the young in tertiary education
Slovenia is the first among EU-27 countries.

Chart 23: Students, enrolled in Bologna and 'pre-Bologna' higher education study programmes, Slovenia



Source: SURS

Chart 24: Graduates from Bologna and 'pre-Bologna' higher education study programmes, Slovenia



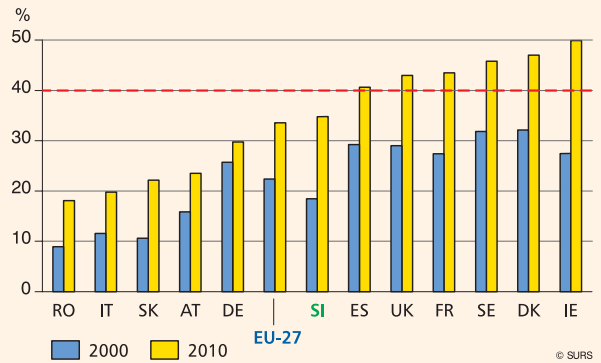
Source: SURS

■ In the 2005/2006 academic year the first students were enrolled in higher education study programmes adapted to the Bologna reform. From then on the share of the so called Bologna students is significantly larger each year. In the 2009/10 academic year, when the old study programmes were no longer available for the new entrants, the Bologna students represented the majority of all students for the first time. In the 2010/11 academic year already three quarters of students were enrolled in Bologna study programmes.

■ By the end of 2005 Slovenia already had also the first graduates who have completed the higher education study programme adapted to the Bologna declaration. In 2010 the graduates who completed the Bologna study programmes represented a quarter of all graduates.

Last year three quarters of all students were enrolled in Bologna study programmes and a quarter of all graduates have already completed the Bologna programme.

Chart 25: Population (aged 30-34) with tertiary educational attainment, selected EU-27 countries

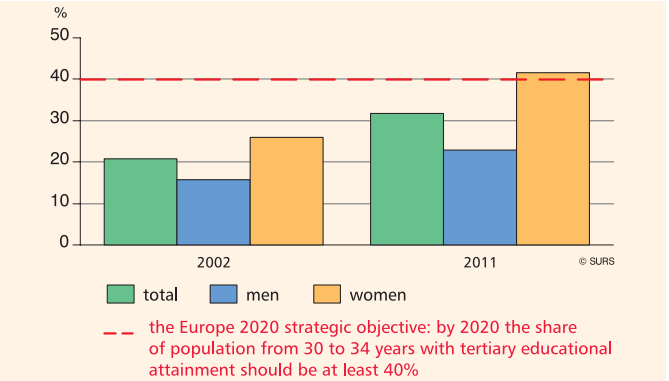


Source: Eurostat (LFS, http://ec.europa.eu/eurostat, 10. 1. 2012)

- One of the five main objectives of the Europe 2020 strategy is to raise the share of the population aged 30–34 with completed tertiary education to at least 40%. The growth trend of this share shows that the set objective is attainable; in the last 10 years, the share in EU-27 Member States rose from 22% (in 2000) to 33% (in 2010) and, moreover, 13 countries have already reached the 40% mark. But nevertheless, the share does not reach even 30% in many countries.

- Considering the share of population aged 30–34 with at least higher educational attainment (they account for 35%), Slovenia ranked slightly above the EU-27 average in 2010.

Chart 26: Population (aged 30–34) with tertiary educational attainment, Slovenia



Source: SURS, 2002 and 2011 Censuses

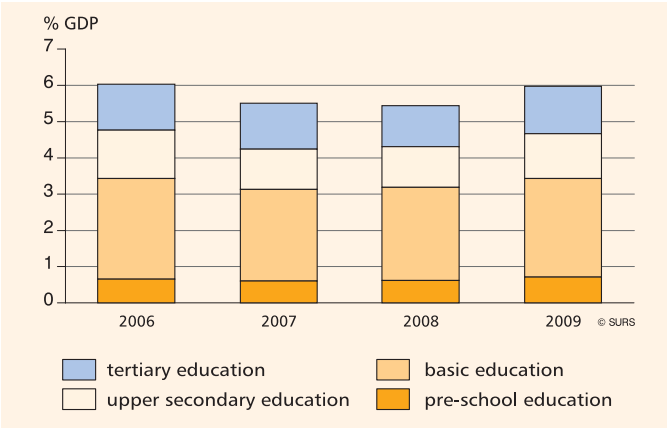
- According to the census data, 31.7% of population aged 30-34 reached tertiary education qualification at the beginning of 2011. The female part of this population surpassed the 40% mark already in 2011 (41.5%), whereas the male part lagged behind considerably with only 22.9%.

Among the population aged 30-34 23% of men and 42% of women have at least short-term higher education qualification.

- According to the 2002 Census the share of the population with tertiary education qualification was 20.8% in Slovenia. If this growth keeps its pace also in this decade Slovenia will most likely be able to reach the set objective.

2.6 Investment in educational institutions

Chart 27: Total expenditure for educational institutions, as a share of GDP, by levels of education, Slovenia



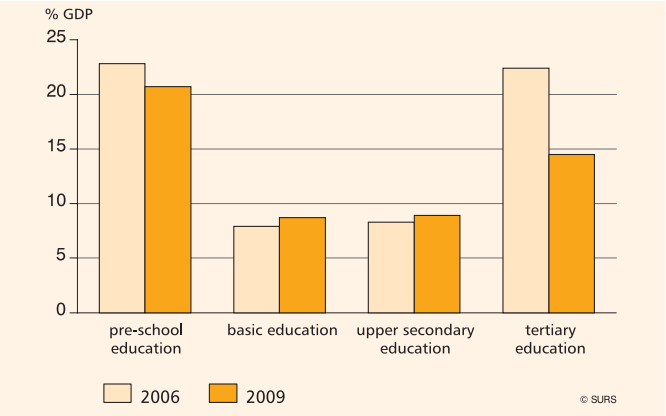
Source: SURS

Compared to 2007 and 2008, in 2009 the share of GDP represented by the expenditure for educational institutions grew the most for tertiary and upper secondary institutions.

- Total (i.e. public and private) expenditure for educational institutions (teaching educational institutions - kindergartens, schools, faculties ... and non-teaching educational institutions – MŠŠ, MVZT ..., where formal education is concerned) was EUR 2,112 million in 2009. Its share in GDP grew from 5.44% in 2008 to 5.98% in 2009, but remained relatively the same if compared with 2006.
- The expenditure for educational institutions, as a share of GDP, grew on all levels of education in 2009 over 2008, with the increase being largest at the levels of tertiary education (from 1.13% to 1.30% GDP) and upper secondary education (from 1.12% to 1.23% GDP), mostly due to an increase in public expenditure.


Photo: UKOM

Chart 28: Private expenditure as part of total expenditure for educational institutions, by levels of education, Slovenia



Source: SURS

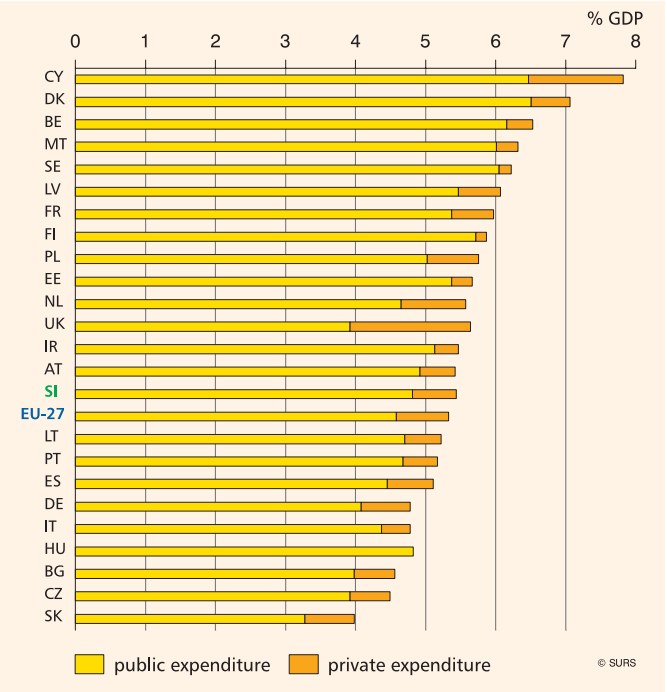
■ More than 11% of all expenses (or 0.68% GDP) were financed from private sources in 2009 (expenses of households and other private entities, paid directly to educational institutions, e.g. costs of tuition fees, snacks, lunches, school camps, costs of staying at residence halls for students, etc.). The rest, almost 89% of expenses for educational institutions (5.26% GDP), was covered by public or state budget expenditure, at the levels of municipalities and the state.

■ Among the private expenditure in 2009, like in the years before, the largest shares were spent on pre-school education, taking up more than a fifth (21%) of all expenditure for educational institutions, and on tertiary education; the latter share represented a little less than 15% of all expenditure for educational institutions.

From 2006 on the share of public expenditure for educational institutions in GDP has been increasing and the share of private expenditure has been decreasing.

■ The share of private expenditure as part of all expenditure for educational institutions has shrunk considerably since 2006, when it amounted to 12.7% (or 0.76% of GDP), especially due to the smaller size or share of private expenditure for tertiary education institutions. This decrease was significantly influenced by the termination of enrolment in old masters programmes (from the 2008/09 academic year on) and the increase of enrolment in the 2nd stage Bologna programmes (these are financed by public means for full-time students). The share of private expenditure has dropped also on the pre-school level of education, largely due to the change in legislation which guarantees that from 2008/09 on the kindergarten for the second child is free of charge.

Chart 29: Total expenditure for educational institutions by sources of financial means, selected EU-27 countries, 2008



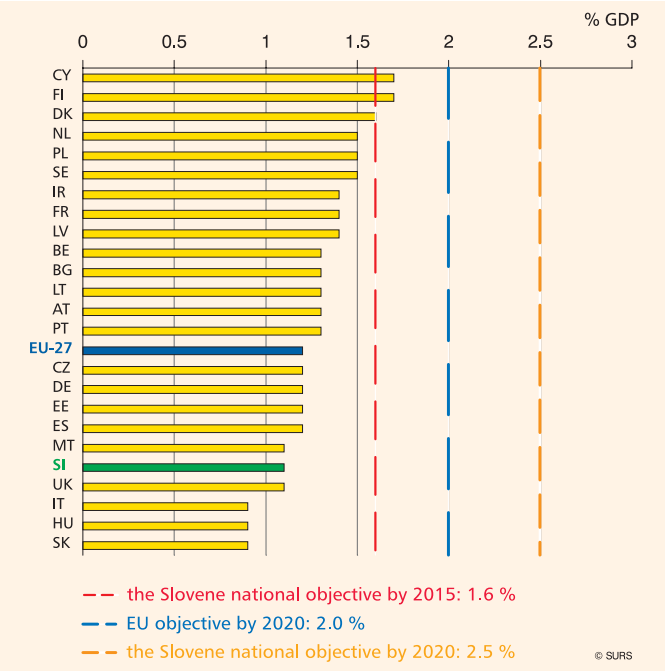
Source: Eurostat (http://ec.europa.eu/eurostat, 3. 2. 2012)

- In 2008, Slovenia's share of total expenditure for educational institutions was 5.4% of GDP which was slightly above the EU-27 average (5.3% GDP) and slightly below the OECD average (5.9% GDP).

- Private expenditure for educational institutions in each EU Member States amounted to on average 0.75% of GDP and 0.9% of GDP in OECD countries. Among the EU Member States, the highest share of private expenditure among total expenditure for educational institutions was reported for the United Kingdom and Cyprus in 2008 (1.7% and 1.4% of GDP, respectively), whereas this share was less than 0.2% of GDP in Sweden and Finland. With 0.63% of private expenditure as part of GDP, Slovenia ranked below the EU-27 average in 2008. (We need to take into consideration that the comparison of private expenditure in different countries cannot be entirely reliable due to different levels of inclusion of such expenditure.)

In 2008, Slovenia was slightly above the EU-27 average considering the share of total expenditure for educational institutions as part of GDP; taking into account only the share of private expenditure Slovenia was slightly below this average.

Chart 30: Total expenditure for educational institutions of tertiary education, selected EU-27 countries, 2008



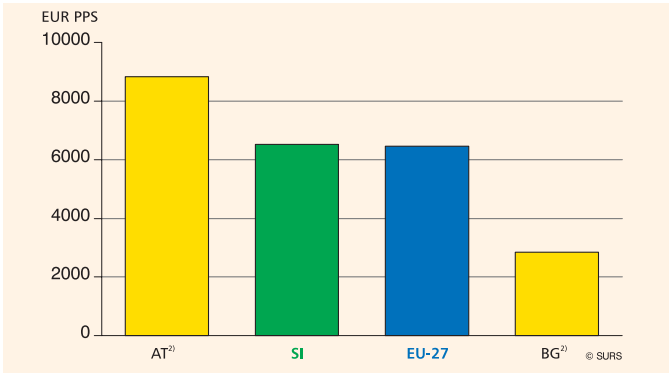
Source: Eurostat (http://ec.europa.eu/eurostat, 3. 2. 2012)

■ In 2008, the share of total (public and private) expenditure for educational institutions of tertiary education as part of GDP was 1.2% in EU-27 Member States, which was similar to that in the previous years. This is below the OECD countries average (with 1.5% of GDP) and also significantly below the EU's set objective till 2020; in that year, this share should be 2.0% of GDP.

In 2008 both in EU-27 Member States and in Slovenia the average share of total expenditure for educational institutions of tertiary education as part of GDP was far away from the objectives which should be realised by 2020.

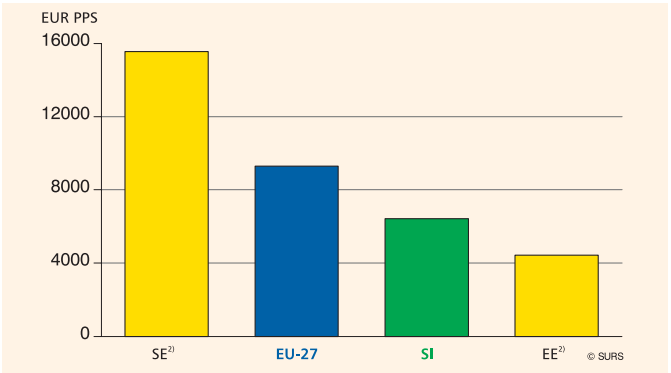
■ The countries which planned the highest amount of financial means for institutions of tertiary education as part of GDP in 2008 were Cyprus and Finland, each with 1.7% of GDP. Less than 1% of GDP was planned for this purpose in Italy, Hungary and Slovakia. In 2008, Slovenia also ranked in the bottom part of the scale of EU-27 countries with its 1.1% share of expenditure for educational institutions; in 2009, however, this share already amounted to 1.3% of GDP, as was already stated. Slovenia's goals regarding the investment into tertiary education (in the National programme of higher education 2011-2020 proposition) are even higher than those of the EU-27, i.e. 1.6% of GDP (with 1.3% of GDP covered by state budget means) should be set aside for institutions of tertiary education by 2015 and, in total, 2.5% of GDP (with 2.0% of GDP from state budget sources) by 2020.

Chart 31: Total expenditure[1] for educational institutions per participant, Slovenia, EU-27 average, 2008



1) The calculation is based on the conversion to full time equivalent study load of a participant/student.
2) Countries with the lowest and the highest expenditure per participant.
Source: Eurostat (http://ec.europa.eu/eurostat, 3. 2. 2012)

Chart 32: Total expenditure[1] for educational institutions of tertiary education per participant, Slovenia, EU-27 average, 2008

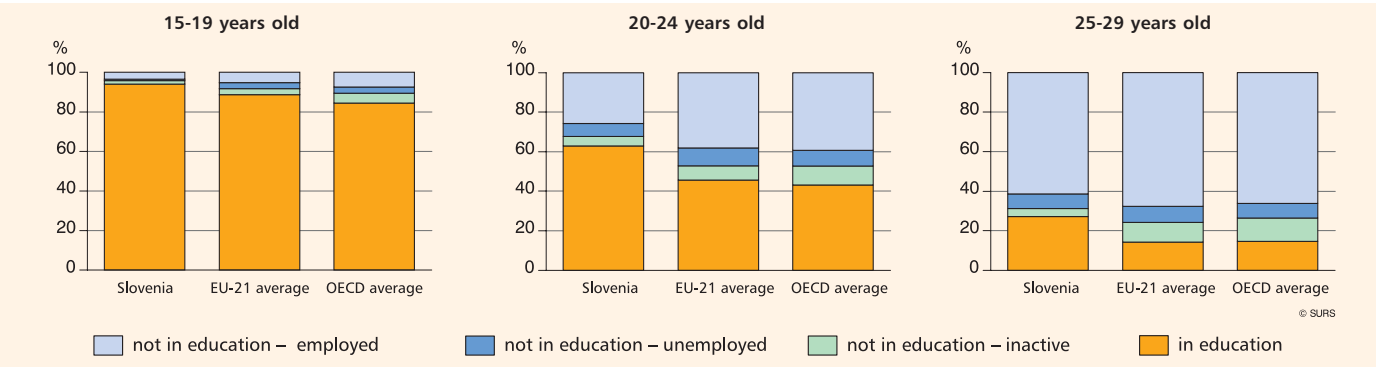


1) The calculation is based on the conversion to full time equivalent study load of a participant/student.
2) Countries with the lowest and the highest expenditure per participant.
Source: Eurostat (http://ec.europa.eu/eurostat, 3. 2. 2012)

- The expenditure for educational institutions per participant, measured in purchasing power standards in EUR (EUR PPS), is frequently used on an international level as one of the indicators of the quality of education and at the same time as an indicator of investment into the education of an individual enrolled in education.
- In the majority of EU-27 countries in 2008 the expenditure per participant on all levels of education combined was between EUR PPS 6,000 and EUR PPS 7,000. This holds true also for Slovenia which ranked slightly above the EU-27 average (EUR PPS 6,459) with EUR PPS 6,529. Between 2001 and 2008 the expenditure for educational institutions per participant measured in EUR PPS increased in Slovenia and the growth was higher than in EU-27.
- Considering the level of expenditure per participant for tertiary education institutions (in 2008 it amounted to EUR PPS 6,441), Slovenia – like in the previous years – lagged significantly behind the EU-27 average (EUR PPS 9,296 in 2008).

2.7 Transition from school to work; where are young people aged 15-29?

Chart 33: Young people aged 15-29, by education and work status, Slovenia, OECD average and EU-21 average, 2009

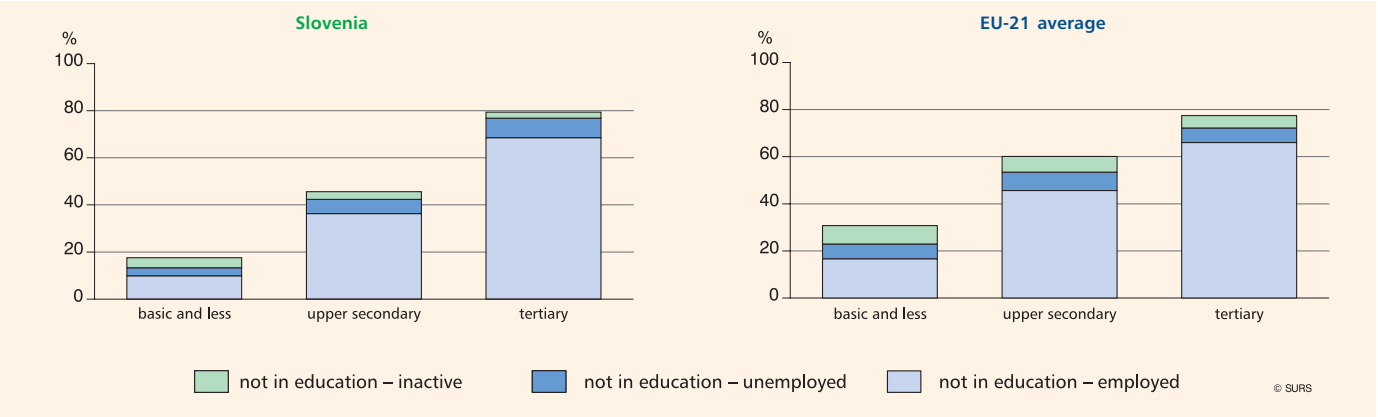


Source: OECD

- Education and the labour market are necessarily connected activities and both are essential on the national and local levels. The transition to labour market is not easy for the majority of young people and it is especially difficult if young persons find themselves in the labour market as unemployed persons.
- Since the young in Slovenia participate in upper secondary education more and more, there were not many citizens aged between 15 and 19 in 2009, who were not part of the educational system. 94% of the young of this age group were participating in education; this is even slightly more than the EU-21 and the OECD averages. This share also includes those young people who were simultaneously in educational system and on the labour market as employees.
- Among the young people in Slovenia aged 20-24, there were 63% still participating in education in 2009, the share in the 25–29 age group was 27%.

Because the young in Slovenia participate in education for a very long time, they enter the labour market later than the average EU-21 citizen.

Chart 34: Young people aged 15-29, who are not in education, by work status and educational attainment, Slovenia and EU-21 average, 2009



Source: OECD

■ The indicator shows the influence of completed education on the work status of the young people (aged 15-29) who are no longer in the educational system.

The young people with tertiary educational attainment have increasing difficulties in finding employment.

■ The data for Slovenia show that young people with completed tertiary education qualification have in the recent years been the ones who have had the most difficulties in finding employment. Nowadays the human capital is developing faster, often with no regard to the real needs of the labour market. We are facing the phenomenon of over-educated people as concerns the needs of the labour market.

■ In EU-21 countries in 2009, the share of the unemployed and of those inactive among the young was the highest for the young with completed upper secondary education (14.5%); in Slovenia, it was the highest for the young with completed tertiary education (10.8%).

Photo: UKOM

3
EQUITY AND SOCIAL COHESION IN EDUCATION

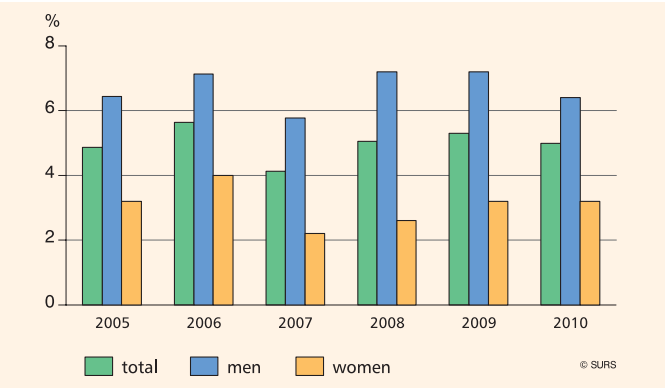
Knowledge, education and personal characteristics are the most important factors in the prevention of poverty and social exclusion.

Systems of education and training should ensure that all learners, including those from disadvantaged backgrounds, those with disabilities and migrants, finish education, if needed also as a part of second chance education and personalized teaching. The fundamental role of educational institutions is to focus all their attention to the development of the students' individual potential, taking into account their developmental characteristics and to systematically raise the students' self-esteem, motivation and ambitions.

This especially applies to a small country such as Slovenia where every individual and every child with their potentials and capabilities are important.

3.1 Equity

Chart 35: Early school leavers[1)2)], Slovenia



1) Population aged 18–24 with at most basic education qualification and not included in any form of education.
2) Data for women are less accurate.
Source: SURS (LFS)

- Young people who leave their education and training early belong to the educationally disadvantaged population. They are typically more often at risk of poverty and social exclusion.
- There are not a lot of young people who leave their education early in Slovenia, around 5%. There are, however, significant differences in the data for men and women.
- The objective of the Europe 2020 strategy is that the share of early school leavers should not exceed 10% and according to the Slovene national strategy the share should not exceed 5%.

Table 9: Early school leavers, selected EU-27 countries

%

	2000	2008	2009
Slovenia	...	5.1	5.3
EU-27 average	17.6	14.9	14.4
Countries with low shares			
Slovakia	...	6.0	4.9
Poland	...	5.0	5.3
Czech Republic	...	5.6	5.4
Countries with high shares			
Malta[1)]	54.2	39.0	36.8
Portugal	43.6	35.4	31.2
Spain	29.1	31.9	31.2

... not available

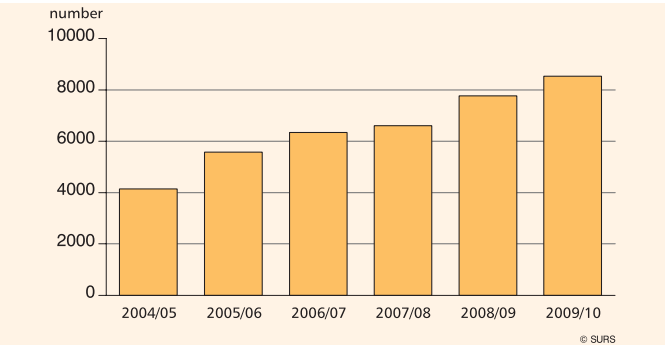
1) Provisional data.
Source: Eurostat (http://ec.europa.eu/eurostat, 17. 10. 2011)

- The problem of early school leaving is much more pronounced in Europe than in Slovenia, since this share is greater than 10% in 19 of the EU-27 countries.
- In 2009, the highest shares of early school leavers were in Malta, Portugal and Spain (31-36%) and the lowest in Slovakia, the Czech Republic, Slovenia and Poland (4-6%).

The share of early school leavers in Slovenia is very low compared to the EU-27 average.

3.2 Social cohesion

Chart 36: Inclusion of children with special educational needs in the mainstream basic schools, Slovenia



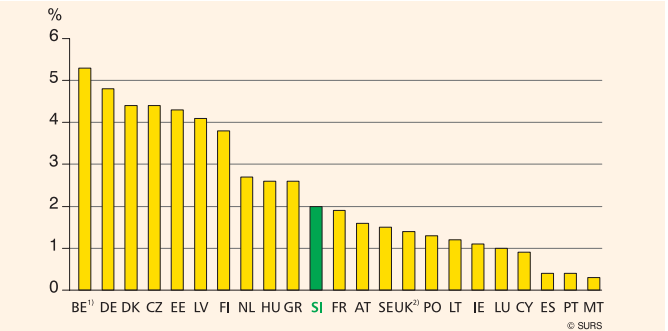
Source: SURS

■ There are always some children in education that differ from the rest. In the past several models were made on how to integrate children with special educational needs into the mainstream basic schools. Recently the inclusive approach has become ever more advocated (the school system and learning environment are to be adjusted to the extent that all children reach their optimum potential).

■ In Slovenia the inclusive approach to education was introduced gradually. In the 2004/05 school year basic schools enrolled the first 4,000 children with special educational needs into mainstream school programmes. In 2009/10 their number doubled (to 5.2% of all basic school population).

An increasing number of children with special educational needs is being incorporated in the mainstream basic school.

Chart 37: Children with special educational needs, educated in special schools, institutions or classes, selected EU-27 countries, 2010



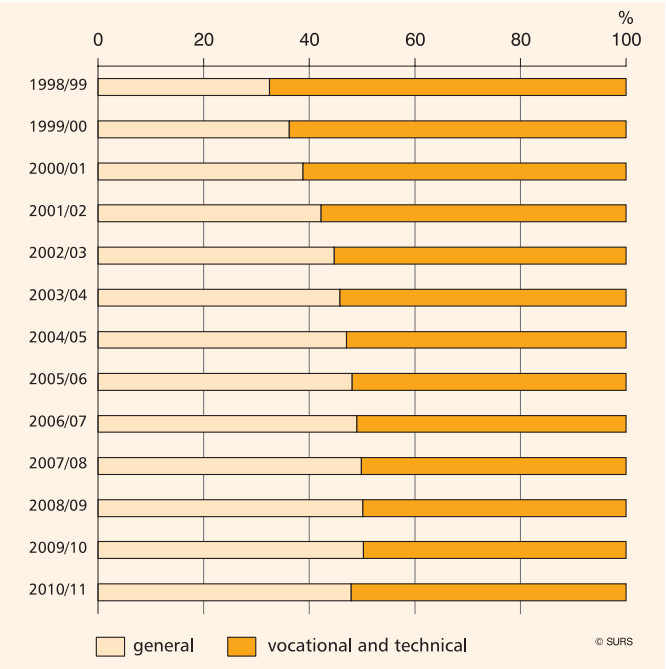
1) Data refer only to the Flemish-speaking community.
2) Data for England.
Source: Agency for Development in Special Needs Education

■ Not all children with special educational needs can be included in the mainstream basic schools. In 2010 there were 2% of children and youth who needed more intensive forms of assistance and more material and other resources. They reached an optimum environment when studying in segregated settings.

■ Among the selected countries of the EU-27 the Czech Republic, Denmark, Germany and Belgium (Flemish Community) had, at that time, a relatively high share of basic school population (over 4%) who were educated in segregated settings, the lowest share (less than 1%) was in Malta, Portugal and Spain.

3.3 Differences between sexes

Chart 38: Women, enrolled in upper secondary education, Slovenia



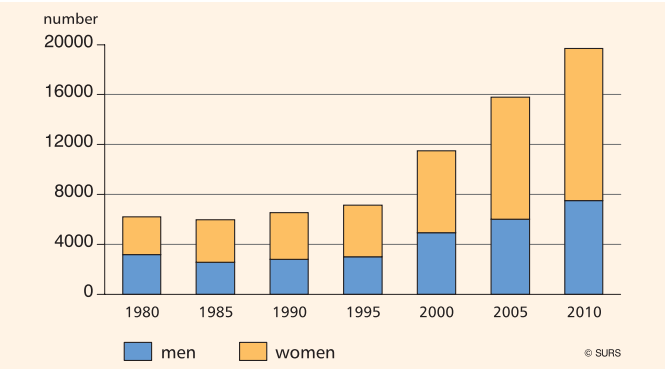
Source: SURS

■ The European Commission report on the EU 2020 emphasizes that "the employment rate of women is particularly low" (only 63% of women are in employment while the share of men in employment amounts to 76%) and to achieve a better gender balance, policies to promote gender equality are necessary. Education and training policy must be designed in such a way to eliminate this gap in the labour market and ensure sustainable growth and social cohesion. Therefore it emphasizes the importance of education of both genders from the lowest possible age.

■ Up to 2008/09 the share of women among all students enrolled in vocational upper secondary programmes was persistently decreasing in Slovenia. Only in the last 2 years girls have shown a little more interest in vocational education. The reason for this is probably more difficult employability of girls with vocational qualification compared to boys, so many girls decide to enter the general upper secondary education and then continue their education.

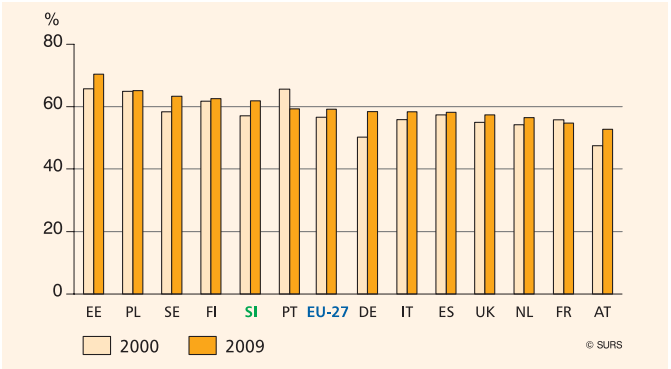
Women prefer general upper secondary education to vocational or technical education.

Chart 39: Tertiary education graduates by sex, Slovenia



Source: SURS

Chart 40: Women among tertiary education graduates, selected EU-27 countries



Source: Eurostat (http://ec.europa.eu/eurostat, 23.12. 2011)

■ The share of people participating in tertiary education has significantly increased in Slovenia in the recent years, especially in case of women. Even more notable was the increase in the share of women among tertiary education graduates. The scales tipped in favour of women around 1980; since then the share of women rapidly increased. In the last thirty years the number of male graduates has increased by 135% and the number of female graduates increased by 300%. In 2010 there were almost two thirds of women among graduates.

■ Similarly, the share of women increased in the majority of other European countries. In 2009, there were on average 60% of women among the tertiary education graduates in the EU-27. Most female graduates among all graduates were recorded in Estonia, more than 70%, and the fewest in Austria (there the gender ratio was almost equal).

There are
two thirds of women
among tertiary education graduates.

Word cloud 1: Narrow fields of education (ISCED 97) according to the share of men among tertiary education graduates in these fields, Slovenia, 2010

Source: SURS

Word cloud 2: Narrow fields of education (ISCED 97) according to the share of women among tertiary education graduates in these fields, Slovenia, 2010

Source: SURS

Table 10: Tertiary education graduates by fields of education (ISCED 97) and by sex, Slovenia and EU-27, 2009

	SI		EU-27	
	graduates	female graduates %	graduates	femal graduates %
TOTAL	18,103	61.8	4,305,148	59.2
Education	1,421	86.8	405,938	78.7
Humanities and Arts	1,120	70.9	498,521	68.5
Social sciences, Business and Law	8,704	70.0	1,525,157	61.8
Science, Mathematics and Computing	803	36.0	393,068	40.3
Engineering, Manufacturing and Construction	2,434	21.7	551,930	26.2
Agriculture and Veterinary	452	58.6	71,665	48.2
Health and Welfare	1,359	82.3	661,488	76.2
Services	1,810	48.2	179,474	52.4

Source: Eurostat (http://ec.europa.eu/eurostat, 23. 12. 2011)

- In 2009, female graduates represented the highest share of graduates in the fields of education, and health and welfare (more than 80%).
- Women also strongly dominated among graduates in the fields of humanities and arts, and social sciences, business and law (with 70%).

Men are more interested in science and technology and women more in social sciences.

Table 11: Women among graduates in Mathematics, Science and Technology, Slovenia and EU-27, 2000-2009

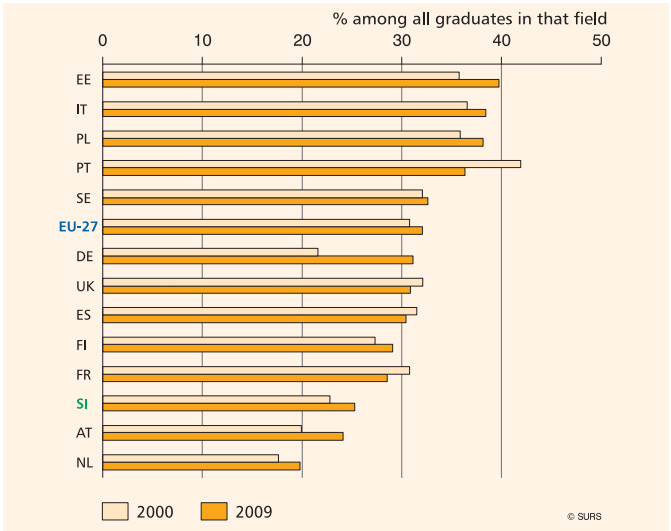
%

	SI		EU-27	
	2000	2009	2000	2009
Mathematics, Science and Technology	**22.8**	**25.3**	**30.8**	**32.1**
Science, Mathematics and Computing	35.0	36.0	42.7	40.3
Life sciences	73.0	71.2	61.2	61.8
Physical sciences	33.9	44.4	38.9	45.7
Mathematics and statistics	22.9	59.4	49.4	51.4
Computing	9.5	7.9	23.9	17.8
Engineering, Manufacturing and Construction	20.8	21.7	21.8	26.2
Engineering	3.5	5.6	15.6	18.4
Manufacturing and processing	70.2	54.7	40.7	50.0
Architecture and building	34.3	34.6	32.1	35.6

Source: Eurostat (http://ec.europa.eu/eurostat, 23. 12. 2011)

- In the fields of Mathematics, Science and Technology female graduates were in the minority (in 2010 there were only 28% of them).
- Men graduates markedly dominated in narrow fields of Computing and Engineering; there were less than a tenth of female graduates in these fields.
- The gender ratio was more equal among graduates of programmes within the narrow fields of Manufacturing and processing and in Mathematics and statistics.
- Among graduates within the narrow field of Life sciences (biology, ecology, etc.) there were almost three-quarters of women.

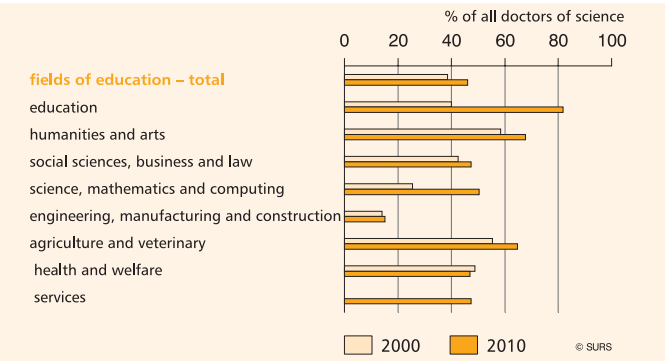
Chart 41: Female graduates in the fields of Mathematics, Science and Technology, EU-27



Source: Eurostat (http://ec.europa.eu/eurostat, 23. 12. 2011)

- Increasing the share of women among the graduates of programmes from the fields of Mathematics, Science and Technology was part of one of the five most important objectives of the European countries in the field of education and training for 2010. The programme aimed at increasing the number of graduates in these fields. Slovenia managed to increase the share of female graduates in programmes in these areas, but it is still lower than the EU-27 average (which has already exceeded 30%).

Chart 42: Women doctors of science by fields of education (ISCED 97), Slovenia



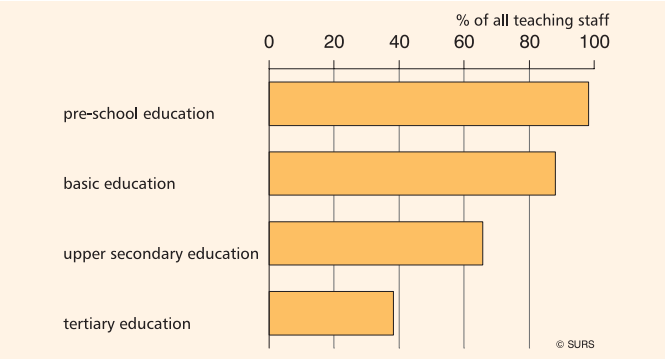
Source: SURS

- Women are nevertheless still in the minority at the highest level of higher education – among doctors of science. However, their numbers are increasing with time; in 2010 their share amounted to 46% (in 2000 there were 38.5% women among all doctors of science).

There are still more men than women among doctors of science.

- Women are prevalent among the new doctors of science in fields of Education and Humanities and Arts. Among doctors of science in the field of Science, Mathematics and Computing there were only a quarter of women ten years ago, and a half in 2010. Among doctors of science in the field of Engineering, Manufacturing and Construction there was the lowest proportion of women, only 15%.

Chart 43: Women among teaching staff at different levels of education, Slovenia, 2010



Source: SURS

Table 12: Women among teaching staff at different levels of education, Slovenia and EU-21, 2009

%

	Slovenia	EU-21 average	Minimum	Maximum
Pre-school education (2nd age period)	98.2	96.9	82.4	99.9
Basic education				
1st stage (1st and 2nd educational cycles)	97.5	85.6	73.6	97.6
2nd stage (3rd educational cycle)	78.8	69.1	53.4	81.1
Upper secondary education	65.4	59.1	47.2	73.7
Tertiary education	36.6	40.7	33.1	50.5

Source: OECD

- The teaching profession has become dominated by women through the course of history.
- Occupational differentiation (segregation) by gender is the biggest social problem of female employees. Professions in which women prevail are usually poorly paid, less prestigious and less autonomous. This causes such professions to become less attractive to men, resulting in a further feminization of the profession.
- The highest share of women among the teaching staff is recorded in pre-school education in kindergartens; the higher up the pedagogical professions' ladder we go, the lower the representation of women is. The lowest share of women is among higher education professors (v 2010 there were 36% of them).
- The European Union Member States are also characterized by a feminization of the teaching profession, since in 2009 the average proportion of female teachers in the EU-21 exceeded 50% at all levels of education - except at the tertiary level, where it reached 40.7%.

Women dominate in the teaching profession at all levels of education, except in short-term higher education and higher education.

Foto: Primož Lavre

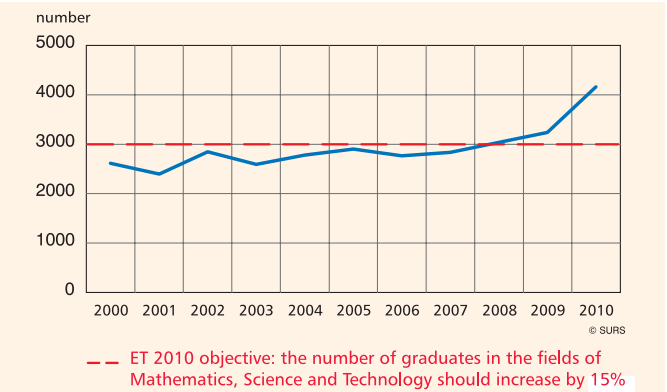
4
TRIANGLE OF KNOWLEDGE: EDUCATION, RESEARCH, INNOVATION

The Europe of knowledge, creativity and innovation requires systems of education and training, which will encourage creativity, innovation and entrepreneurship among all participants in education (pupils, students), teachers and researchers.

We need to ensure the functioning of a triangle of knowledge that would connect education, research and innovation, as well as a partnership between the business environment and the different levels of education.

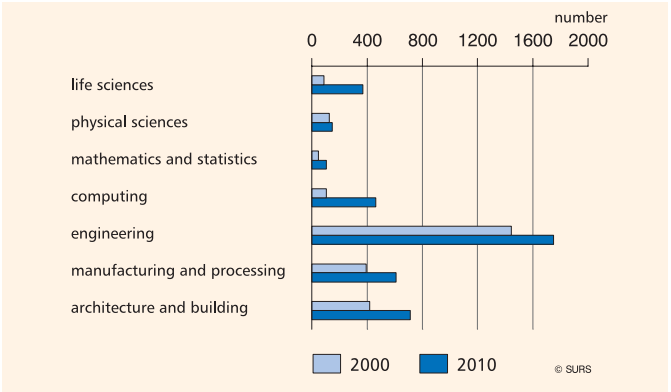
4.1 Graduates in the fields of Mathematics, Science and Technology

Chart 44: Tertiary education graduates in the fields of Mathematics, Science and Technology, Slovenia



Source: SURS

Chart 45: Tertiary education graduates in the fields of Mathematics, Science and Technology by narrow fields of education (ISCED 97), Slovenia



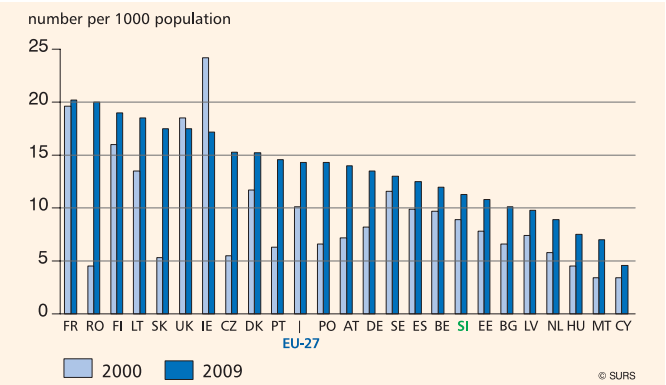
Source: SURS

■ At the beginning of the previous decade, Europe committed itself to increase the number of persons qualified for research and development, and the number of tertiary graduates in the fields of mathematics, science and technology by 15% (compared to 2000). The EU Member States, including Slovenia, soon reached this goal. In 2010, there were 1500 graduates more (or 59% more) than in 2000 in Slovenia in the mentioned areas of tertiary education.

■ The number of graduates was higher in 2010 than in 2000 in all areas within the narrower fields in the field of science. The most significant increase was seen in the fields of life sciences and computing, where the number of graduates has increased three-fold.

The number of graduates in the fields of Mathematics, Science and Technology is increasing.

Chart 46: Tertiary education graduates (20-29) in the fields of Mathematics, Science and Technology, selected EU-27 countries



Source: Eurostat (http://ec.europa.eu/eurostat, 25. 1. 2012)

- Slovenia lags behind the European average in the number of graduates in education programmes in the fields of Mathematics, Science and Technology. In the EU-27 Member States, on average 14.3 graduates per 1,000 population (aged 20-29) completed their education in the mentioned fields in 2009, while in Slovenia there were 11.3 graduates on average.

- The highest shares of graduates in programmes in the field of Mathematics, Science and Technology per capita were recorded in France and Romania in 2009 – both had around 20 graduates per 1,000 population aged 20-29.

Table 13: Doctors of science by fields of education (ISCED 97), Slovenia

	2000	2005	2010
Fields of education - TOTAL	**296**	**369**	**465**
Education	5	25	11
Humanities and Arts	53	40	62
Social sciences, Business and Law	40	70	76
Science, Mathematics and Computing	55	92	155
Engineering, Manufacturing and Construction	64	87	93
Agriculture and Veterinary	38	11	17
Health and Welfare	41	36	32
Services	0	8	19

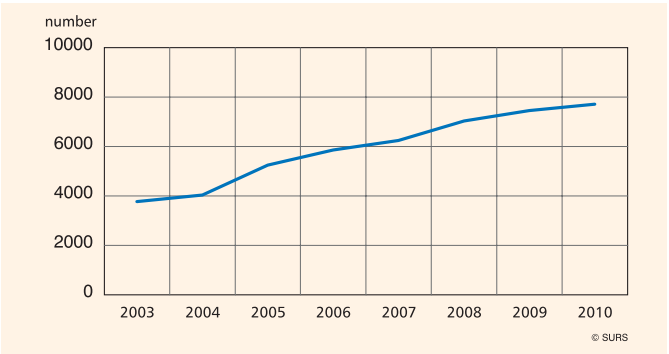
Source: SURS

- In Slovenia, the total number of doctors of science increased by 57% over the past ten years; in 2010 thus 465 people obtained a doctoral title.
- The largest increase was in the number of doctorates in the field of Science, Mathematics and Computing and in the field of Engineering, Manufacturing and Construction, in total by 100%. Yet the number of new doctors of science in the fields of Health and Welfare, and Agriculture and Veterinary has even declined in the last 10 years. In the European Union 110,500 new doctorates (or 40% more than in 2000) were conferred in 2008.

In 2010 significantly more candidates obtained a doctoral degree than 10 years ago.

4.2 Researchers on the labour market

Chart 47: Researchers[1], Slovenia

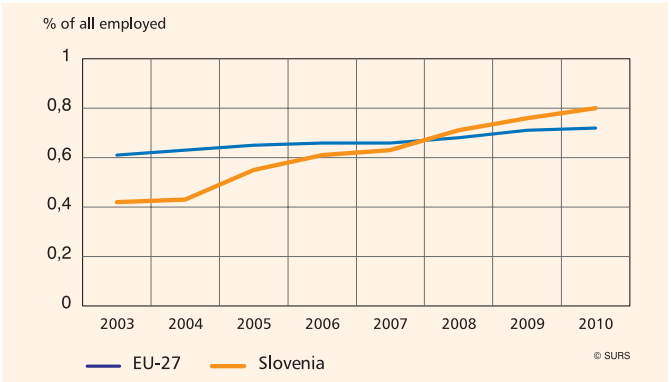


1) Expressed in full time equivalent (FTE).
A larger number of researchers and also an expanded selection of reporting units in the business sector affected the higher value of the data on the total number of researchers (in FTE) in the 2008-2010 period.

Source: SURS

■ With the increasing number of graduates in the fields of Mathematics, Science and Technology, as well as the increasing number of doctors of science, we also expect an increase in the number of researchers; they are that part of the workforce of which we expect the most in the development of society. The number of researchers in Slovenia, expressed in full time equivalent (FTE), grew continuously in the years from 2003 to 2010. The number of researchers then increased by 104% (or for 3928 researchers). If the number of researchers (in FTE) is expressed as a percentage of total employed, this share has risen from 0.4% to 0.8%.

Chart 48: Researchers, Slovenia and EU-27



Source: Eurostat (http://ec.europa.eu/eurostat, 25. 1. 2012)

■ The share of researchers among all employed is also increasing in most of the EU-27 Member States. Up to 2007 Slovenia was lagging behind the EU-27 average, but in the recent years the share of researchers in Slovenia among all employed has been growing faster than the EU-27 average. Nevertheless, Slovenia is still far behind the leading countries such as Denmark and Sweden, where the share of researchers among all employees exceeded 1%.

The number of researchers has increased substantially in the recent years.

5 METHODOLOGICAL EXPLANATIONS

Definition of key terms

Education (and training) is an activity which relates to recognizing, accepting, giving and/or creating knowledge, developing skills, developing personal and professional competencies and values. The most common form of organization of educational or training activities is educational or study programmes.

Educational or study programme is a form of organization in which learning activities are organized as a series, with different methods of learning/teaching different subjects are learnt/taught. Educational programs are defined on the basis of their content as a series of activities organized in order to achieve a predetermined goal or a specific set of educational tasks.

Type of education is as a rule determined indirectly through educational or study programme which the person was attending or finished. "Type of education" is a systemic or difficulty characteristic (content) of the programme. "Type of education" expresses (determines) into which segment of the national system of education and training the programme falls, particularly into which level it falls (for example: short-term vocational upper-secondary education, higher education, etc.).

Field of education is as a rule determined indirectly through educational or study programme which the person was attending or finished. "Field of education" is a subject-specific characteristic (content) of the program. "Fields of education" are, for example, engineering, manufacturing and construction, health and welfare, etc.

Educational attainment is the highest publicly verified education that a person achieves by successfully finishing:

- by a publicly verified educational programme in regular school;
- in a school which replaces regular schooling (part-time study, long-distance learning, etc.), with courses, exams or other ways as prescribed by regulations of publicly verified education.

Highest publicly verified educational attainment is demonstrated by an official document (certificate, diploma, etc.).

First stage of basic education includes grades 1 to 6 of the 9-year basic school programme.

Second stage of basic education includes grades 7 to 9 of the 9-year basic school programme.

Full work time equivalent for teaching staff is the measure which reflects the actual work load of an individual teacher in accordance with law regulations of work load or the work load prescribed by the school statute.

Classifications for presenting data

In defining programs by **"type of education"** a new national standard classification of education activities/outcomes (KLASIUS-SRV) was used. In defining programmes by **"field of education"** the International Standard Classification of Education ISCED 1997, namely that part of the classification referring to field of education and the new national standard classification of fields of education activities/outcomes (KLASIUS-P) were used.

6 STATISTICAL SIGNS, ABBREVIATIONS AND UNITS OF MEASUREMENT

… not available
- no occurrence of event

EP	European Parliament
EU	European Union
EU-21	21 Member States of the EU
EU-27	27 Member States of the EU
Eurostat	Statistical Office of the European Union
ET 2010	Lisbon strategy objectives within the EU in the field education and training by 2010
ET 2020	strategic framework for European cooperation in education and training (short: Education and Training 2020)
FTE	full time equivalent
GDP	gross domestic product
ISCED 97	classification
LFS	Labour Force Survey
OECD	Organisation for Economic Cooperation and Development
PISA	Programme for International Student Assessment
TALIS	Teaching and Learning International Survey

Institutions of the Republic of Slovenia:

MŠŠ	Ministrstvo za šolstvo in sport (Ministry of Education and Sports)
MVZT	Ministrstvo za visoko šolstvo, znanost in tehnologijo (Ministry of Higher Education, Science and Technology)
PEI	Pedagoški institute (Educational Research Institute)
RS	Republic of Slovenia
SURS	Statistical Office of the Republic of Slovenia

%	percentage
EUR	euro
EUR PPS	purchasing power standards in EUR

List of countries: names and abbreviations (geonomenclature)

Country name	Abbreviation	
TOTAL EU-27	**EU-27**	
TOTAL EU-21		**EU-21**
Austria	AT	AT
Belgium	BE	BE
Bulgaria	BG	-
Cyprus	CY	-
Czech Republic	CZ	CZ
Denmark	DK	DK
Estonia	EE	EE
Finland	FI	FI
France	FR	FR
Greece	EL	EL
Ireland	IE	IE
Italy	IT	IT
Latvia	LV	-
Lithuania	LT	-
Luxemburg	LU	LU
Hungary	HU	HU
Malta	MT	-
Germany	DE	DE
Netherlands	NL	NL
Poland	PL	PL
Portugal	PT	PT
Romania	RO	-
Slovakia	SK	SK
Slovenia	SI	SI
Spain	ES	ES
Sweden	SE	SE
United Kingdom	UK	UK

7 FURTHER READING

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Special Days and Holidays, SURS:

- http://www.stat.si/eng/novica_prikazi.aspx?id=4231

First Releases, SURS:

- http://www.stat.si/eng/novica_prikazi.aspx?id=4195
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Rapid Reports:

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Zakon o osnovni šoli (Uradni list RS, št. 81/06)
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Zakon o višjem strokovnem izobraževanju (Uradni list RS, št. 86/04)

How to obtain statistical data and information

- **on Statistical Office's website**
  www.stat.si/eng

- **via mail, phone, fax and e-mail**
  address: Statistical Office of the Republic of Slovenia
  Litostrojska cesta 54, 1000 Ljubljana, Slovenia
  phone: +386 1 241 64 04
  fax: +386 1 241 53 44
  answering machine: +386 1 475 65 55
  e-mail: info.stat@gov.si

- **by ordering statistical publications**
  address: Statistical Office of the Republic of Slovenia
  Litostrojska cesta 54, 1000 Ljubljana, Slovenia
  phone: +386 1 241 52 85
  fax: +386 1 241 53 44
  e-mail: prodaja.surs@gov.si

- **by visiting the Information Centre**
  office hours: Monday to Thursday from 9.00 to 15.30
  Friday from 9.00 to 14.30