

Educational System

Educational system in Republic of Macedonia consists of: Pre-school education, primary education, secondary education, high education, master studies, Ph.D, Education of adults and Education for children with specific needs.

Pre-School Education

The pre-school education comprises several types of institutions (independent or associated): day nurseries, kindergartens and pre-school preparation centers.

The day nurseries are intended for children under the age of two. Children between the age of two years and the school age stay in kindergartens, and are divided according to their age. The pre-primary schools are intended for those children that are at an age of a year less than the age of attending first grade at school.

Primary Education

In the Elementary education, with the Law on Amending and Appending the Law on Primary Education ("Official Gazette of the Republic of Macedonia" No. 63/04), starting from the school year 2005/2006, it has been prescribed that the year of education before attending the first grade of elementary school becomes compulsory for all the children at the age of six. This means that all the children from the pre-primary schools, as well as those attending the topmost group of kindergarten groups, will be obliged to attend the so-called preparation year. This will enable more equal start of the children on their entrance into the elementary education.

According to the Article 1, the Article 22 and the Article 73 of the Law on Amending and Appending the Law on Primary Education ("Official Gazette of the Republic of Macedonia" No. 63/04), it is prescribed that the elementary education lasts nine years, starting from the sixth year of age. Each child at the age from seven to fourteen is entitled to regularly attend the teaching instruction up to the compulsory eight grade primary school. This legal obligation has contributed to crucial improvement of the educational structure of the population. According to the Article 8 of the Law on Primary Education ("Official Gazette of the Republic of Macedonia" No. 52/02 – consolidated text, 40/03, 42/03 and 63/04) the instruction is conducted in Macedonian language and in Cyrillic alphabet. For the members of the communities, the educational activity is conducted in the language and the alphabet of the

communities in a manner prescribed by law. The pupils of the communities learn the Macedonian as the official language of the Republic of Macedonia.

The internal structure of the eight-years' compulsory education is adapted to the age of the children (in two periods): from the first to the fourth grade - the so-called class instruction and from the fifth to the eighth grade - the so-called subject instruction. Conclusively with the fourth grade, as a rule, the instruction is conducted by only one instructor (teacher). In the upper grades (from the fifth grade to the eighth grade), as a rule, the children remain in the same classes, but new classes are formed when necessary.

In the populated areas where the number of pupils is small, regional schools are organised. Organisationally, they belong to the regular elementary schools (with classes from the first to the eighth grade). In the smaller settlements, if there aren't a sufficient number of children, combined classes are formed in the elementary schools. There, one teacher conducts teaching instruction simultaneously to children from the first to the fourth grade, using different and various methods. After that period, the children continue their education in schools with separate classes from the fifth to the eighth grade.

With the Law on Primary Education (Article 64) and with the Law on Secondary Education (Article 63), as well as in the pedagogical practice, children and youngsters of exceptional abilities and talent are enabled to advance faster in their education. Talented children are entitled to enroll in elementary school if they are at the age of six (before the start of the school year), and then they are enabled to advance extra-curricula (by undergoing examinations for the next grade). In the course of their education in elementary schools, children can take advantage of this right two times.

Secondary School

After completing elementary school, pupils are entitled to the right to enroll in any secondary school under equal criteria. This right is especially exercised by young people from urban areas, thus around 85% of the pupils after the compulsory education immediately enroll in some form of secondary education.

The Secondary Education is not compulsory. Pupils attend the secondary education free of charge. The Law on Secondary Education ("Official Gazette of the Republic of Macedonia" No. 44/95) extends the democratization of this segment of education. It grants the right to conduct secondary education not only in State, Municipal (public) secondary schools, but also in private schools. The teaching instruction in the secondary education is conducted in Macedonian language and in Cyrillic alphabet. For the members of the communities, the educational process in the public schools is conducted in the language and the alphabet of the communities, in a manner and under conditions which are prescribed by this Law. The pupils of the communities study the Macedonian language.

According to the Law on Secondary Education, the teaching instruction in the secondary schools can also be conducted in one of the World languages. According to the prevailing practice, the secondary schools carry out curricula for several special fields of occupation, but there also are schools for only one vocational profile or for high-school education. The level of presence of high-school or special field education in the secondary education is established with the programme which is brought by the Government of the Republic of Macedonia, upon a proposal made by the respective Ministry.

In the Republic of Macedonia, the following types of secondary education are carried out: High-school education. Vocational education, Secondary education of arts and Secondary education for children with special educational needs (disabled persons).

The high-school education is of a general educational character. It lasts for four years and ends with matriculation examination. According to the Law on Amending and Appending the Law on Secondary Education ("Official Gazette of the Republic of Macedonia" No. 67/04) and the new Concept of Matriculation and Final Examination (Matura), starting with the school year 2006/2007, the high-school education will be concluded with State or School Matriculation Examination. The State Matriculation Examination will enable a right to enter the higher education, and the School Matriculation Examination will enable an entrance in the labour market. The basic function of the high-school education is preparation of the young people for successful entrance in the higher education.

The teaching curriculum of the high-school education includes compulsory teaching subjects, elective subjects as well as elective instruction materials. High-school students have an opportunity to choose elective subjects in one of the following areas: literature and arts; humanistic and social area; natural sciences and mathematics.

Around 35% of pupils of a generation enroll in the high-school education. A syllabus for an International Final Examination can be carried out in the high-school education, upon a consent by the Minister. The syllabus for an International Final Examination is of equal validity as the high-school education.

Higher Education in Macedonia

Macedonian system of high education is created by program studies from three to five years. Around 27% of the pupils who finished secondary education decide to apply for studies of high education. High educational process in Macedonia is organized on four universities: The University of "St. Cyril and Methodius" – Skopje, The University of "St. Climent Ohridski", – Bitola, University of Southeast Europe – Tetovo. The State University in Tetovo and the Private university in Skopje of social studies which are associated in the frames of Inter – university conference

Master and Ph.D Degree

After the graduation studies the students which fulfill certain criteria may continue their education on master studies. At the moment master studies are organized at the members on University of "St. Cyril and Methodius" and the University of "St. Climent Ohridski".

Ph.D degree is the highest educational title in Republic of Macedonia. It is not about studies because the Ph.D degree is organized only by supervision of the responsible professor while the candidate is preparing its thesis.

The final work of the candidate is being presented in front of commission of five members form a certain area. Reforms period for adapting Law on Higher Education regulates the legal status and the autonomy of the university; establishes state and private higher education institutions, assures system of quality (evaluation and accreditation), regulates financial issues, regulates the structure of degrees, provides institutional framework provides recognition of acquired degrees and qualifications, etc. For this purpose on the 19th of September 2003 the Republic of Macedonia signed the Bologna Declaration, committing itself to achieving the objectives set out

in the Declaration, aiming at constructing an Integral European Area of higher education, its main target being harmonization and gradual adjustment of all countries' higher education institutions into an integral one.

Number of Pupils and Students in the Educational System in Macedonia

Year	Primary	Secondary	High(3y)	High(4y)
1995-96	259 515	77 817	1 510	28 073
1996-97	258 587	80 903	886	29 868
1997-98	256 275	84 059	995	32 048
1998-99	255 150	87 420	1 026	35 141
1999-00	252 212	89 775	927	35 995
2000-01	246 490	90 990	840	39 406
2001-02	242 707	92 068	1 123	43 567
2002-03	235 516	93 526	839	44 731

Source:- we can see number of pupils and students enroll in period of 1995 to 2003 in Primary, Secondary, High(3y) and High(4y)

Number of Teacher in the Educational System of Macedonia

Year	Primary	Secondary	High
1995/96	13 254	4 776	1 285
1996/97	13 310	5 064	11 341
1997/98	13 376	5 226	1 408
1998/99	13 604	5 372	1 385
1999/00	13 782	5 557	1 483
2000/01	13 329	5 467	1 495
2001/02	13 508	5 550	1 561
2002/03	13 678	5 749	1 519

Source:- we can see number of enrolment students and pupils in period of 1995 to 2003

Number of Students and Pupils Who Finished Their Education in 2001-03

Year	Primary	Secondary	High(3)	High(4)
2001-03	30 252	22 724	300	3.180

Show as number of students and pupils who finished their education in period 2001 to 2003

Information for school year: 2002-03, Information for population for 2002

Level	Total enrolment	School Age Population	Gross Enrolment Rate (total)	Percentage in private school
Pre-primary	36417	177050 (0-6 years)	20.57	No data
Primary	237124	249230 (7-14 years)	95.3	No private school
High/Secondary	95352 (total) 94530(public school) 823(private school)	132380(15-18years)	72.03	0.86% out of total enrolment

Source: Statistical Office of the Republic of Macedonia, Statistical Review 411, and Census data 2002

Rate of Growth of Enrolment during past five years period

Level	Years				
	1998	1999	2000	2001	2002
Pre-primary	37766	38348	37801	36502	36417
Primary	255150	252212	246490	242707	235516
High/Secondary	87420	89775	90990	92068	93526
Tertiary	35141	35995	39406	43567	44731

Source: Statistical Office of the Republic of Macedonia

Teacher deployment situation

Level	Number of teachers	%of Qualified teachers	Pupil/Teacher Ratio
Pre-primary	No data	No data	No data
Primary	13590	91.4	17
High/Secondary	5772	98.7	17
Tertiary	1519		29

Source: Source: Statistical Office of the Republic of Macedonia, Statistical Review 411

The analyses of data of the State Statistics Office that are related to the leaving of education in different phases and at different levels, shows the following: the yearly drop out rate of students in the elementary education is 1.42%; the yearly school leaving in the elementary education is 0.29%; The percentage of the children who completed elementary education and enrolled in secondary education is 83.35%; The largest drop out rate of students happens at the transition from elementary to secondary education and is 16.65%; The yearly drop out rate of students in the secondary education is 2.84%. The total coverage of children in the pre-school education is 18.67%; The coverage in the first year before starting elementary school is 82.23%; The coverage in the elementary education is 95%; The yearly school leavers of the number of students in the elementary education is 1,42%; The yearly termination of education in the elementary education is 0,29%; The coverage of the children who completed elementary education and enrolled in secondary education is 83.35%; The largest school leavers of the number of students happens at the shift from elementary to secondary education and is 16.65%; The yearly school leavers of the number of students in the secondary education is 2.84%; The yearly termination of education in the secondary education is 0,88% ;The number of students per 100.000 population is 30.43; The lowest school dropout of the number of students during the education is present among the Macedonian population and the largest among the Roma population

Financing of Education

Total Public expenditure on education as a percentage of government expenditure in 2005 is 7.85 %. Total Public expenditure on education as a percentage of GDP/GNP in 2005 is 3.05 %. In accordance with the Law on Budgets and the Law on Amending and Appending the Law on Budgets ("Official Gazette of the Republic of Macedonia" No.85/03), the institutions in the field of education (elementary and secondary schools) which are budget beneficiary units, are obliged to submit annual financial plan within the scheduled deadline since the adoption of the Budget, so that they could use the funds that have been allocated with the budget. The financial activity of the institutions is established with the Law on the Execution of Budget of the Republic of Macedonia in accordance with approaching of the form towards the international classification of expenditures. The Budget for 2005 means further

approaching towards the standard economy classification of expenditures which is needed for external financial reporting. The funds for performing the activity of the elementary education are provided by the Budget of the Republic of Macedonia. Except providing the funds from the Budget of the Republic of Macedonia, the elementary schools also provide financial resources from self-financing services (giving school premises under lease, commissions from food supplement for students, commissions from students' magazines and journals, etc). The revenues earned in this way are mostly used for covering the schools' expenditures, with regard to the fact that the resources that are allocated by the Ministry are not sufficient. The starting foundation for financing the elementary schools is their annual financial work plans and programs. The Ministry of Education and Science approves the financial plans of the elementary schools and in an aggregated form for all the units, submits a financial plan for the activity 'elementary education' to the Ministry of Finance. The financial plan contains funds for: Wages and fees, Material expenditures, Students' standard ,Capital expenditures (equipping of schools; running-investment maintenance and reconstruction, as well as building of new school premises).

	2002	2003
Education Expenditure as a percentage of GDP (household consumption)	0.8	0.8
Education Expenditure as a percentage of GDP (household consumption)	3.6	3.7
Education Expenditure as a percentage of GDP	4.4	4.6
Education Expenditure as a percentage of state budget	15	17.9

Source: Source: Statistical Office of the Republic of Macedonia

Norms and standard in primary education

According the census data 2002 the population ages 7 to 18 (children of primary - and secondary-school age) represented nearly 19 percent of the total population in the Republic of Macedonia. Namely, from the total number of population 2022547 in the Republic of Macedonia, 381 610 belong to the age 7 to 18 years old. According to the population density, and in accordance with Articles 16, 20 and 36 of the Law on Primary Education – elementary school can be formed even with a lower number of students, but not less than ten students (Article 36).

In accordance with the building norms and standards, reconstruction and adaptation of the school buildings: the minimal surface of the building should be 7 m² per student; the surface of the school complex should be 22 m² per student; the minimal wideness of the corridors should be 1.80 m, and for every 100 students it is extended per coefficient of 0.70m up to 500 students; The number of lavatories should be two lavatories per classroom, one women's and one men's toilet. (The norms are brought by the Assembly of the Republic Self-Management Interest Community for the Elementary Education, at the session of 10.04.1986, with the Decision No. 18-156/8, and these norms apply for the school buildings of the secondary education as well).

In accordance with the same norms, the school building is defined as a basis of the spatial and the material working conditions of the school. The building should be functional, economic, with its spatial form it should enable contemporary educative work and should create a comfortable feeling among the students. The classrooms should be provided with sufficient natural light and air; they should protect the health

and improve the working ability of the students. Particular attention should be paid to: the location of the school building, which is established with the development plan of the school network, as a consistent part of the urban planning; site of the location (not to be in an industrial zone, to give spatial opportunities for possible extension, and to be optimally far from the streets and the other sources of noise and pollution); number of floors in the building (ground floor plus two floors utmost); orientation towards providing appropriate insulation and suitable conditions for accomplishment of the teaching activity and The needed rooms with dimensions correspondent to the needs and the capacity.

On preparing the investment and technical documentation, and on building schools in seismic areas, seismic structural safety of the building should be provided. The seismic intensity for a certain location is taken according to the map of seismic zoning of the Republic of Macedonia.

Promotion Rate, Repletion Rate, Crude Enrollment In The Primary And Secondary Level Of Education

Internal Efficiency in Primary Education (Current Two Year Period) 2002-2003 and 2003-2004 (at the end of school year)

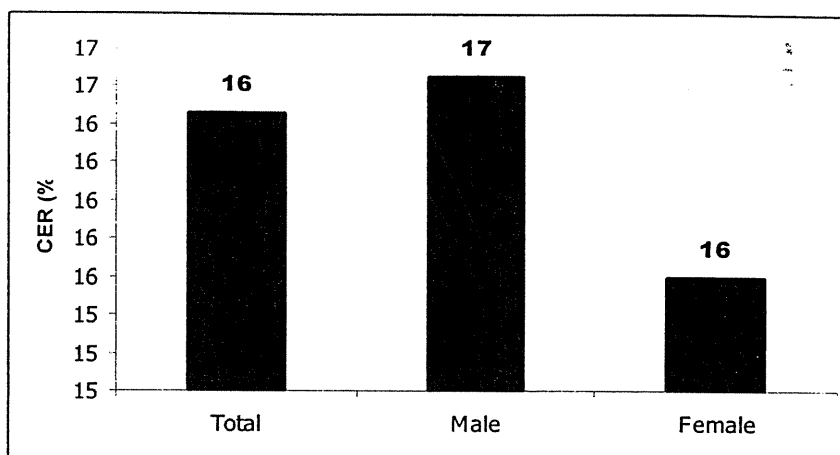
Rate	Year	Grades								
		1	2	3	4	5	6	7	8	9
Promotion		99.24	99.58	99.65	99.68	97.99	98.96	99.09	99.50	99.20
	2002/2003	99.21	99.53	99.62	99.58	97.81	99.15	99.08	99.49	99.18
Repletion Rate	2003/2004	0.06	0.04	0.02	0.07	0.91	0.61	0.50	0.21	0.31
	2002/2003	0.09	0.09	0.06	0.06	0.90	0.42	0.50	0.17	0.29
Students without marks	2003/2004	0.71	0.38	0.32	0.25	1.11	0.43	0.41	0.29	0.49
	2002/2003	0.69	0.38	0.32	0.36	1.29	0.43	0.42	0.34	0.53
Drop out Rate	2003/2004									
	2002/2003									
	2003/2004	100%	100%	100%	100%	100%	100%	100%	100%	100%
	2002/2003	100%	100%	100%	100%	100%	100%	100%	100%	100%

Rate	Grades	Grades									total
		1	2	3	4	5	6	7	8		
	Grades	27642	28764	28948	29469	29875	29425	29425	30095	233643	
Promotion	Year	26566	27522	28568	28737	28656	29503	29085	29039	227676	
	2002-2003	16	12	7	20	276	180	147	63	721	
Repletion Rate	2003-2004	25	25	17	17	264	125	148	51	672	
	2002-2003	197	109	94	74	337	129	123	89	1152	
Students without marks	2003-2004	186	106	92	104	378	129	122	99	1216	
	2002-2003				181 ²⁾	182	95	92	57	607	
Drop out Rate ¹⁾	2003-2004				207 ²⁾	165	86	105	60	623	
	2002-2003	27855	28885	29049	29563	30488	29734	29695	30247	235516	
Total number	2003-2004	26777	27653	28677	28858	29298	29757	29355	29189	229564	
	2002-2003										
	2003-2004	100%	100%	100%	100%	100%	100%	100%	100%	100%	

1) Drop outrates are not calculate in the total number of the students

Figure 1, 2, and 3 show the different types of enrollment rates such as: Crude Enrolment Rate, Gross Enrollment Rate, Age-specific Enrollment Rate by sex.

Figure (1)
Crude Enrollment in the Primary and Secondary Level of Education by Sex in the Republic of Macedonia, 2002-03



	enrolled (primary and secondary school)	total population	CER
Total	332933*	2022547	16,46
Male	169111**	1015377	16,65
Female	158385***	1015377	15,60

Source: Statistical Office of the Republic of Macedonia, Statistical Review 411, and Census data 2002. Calculated by the research

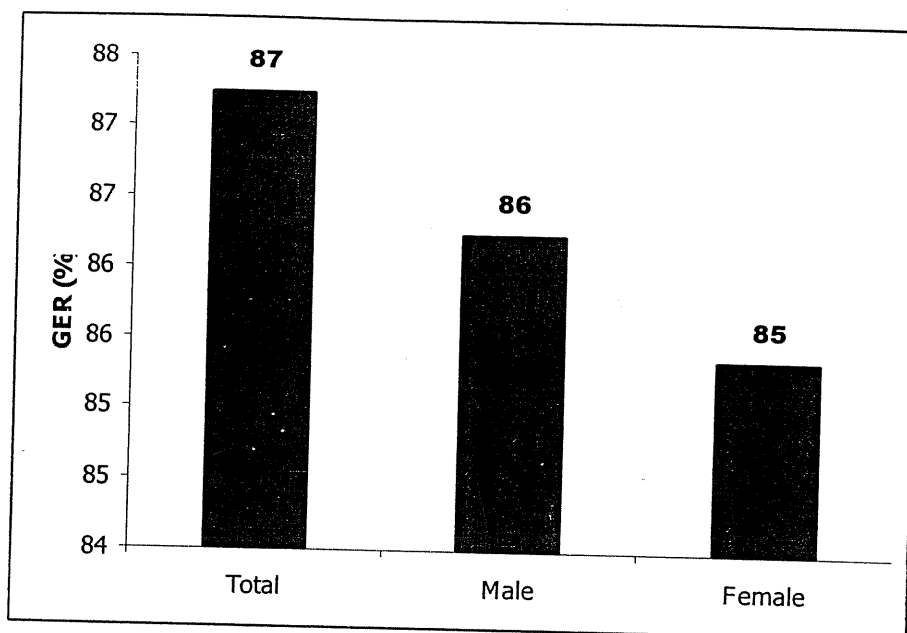
*from the total number 332933, 823 are enrolled in private secondary school;

**from the total number of male students 169111, 506 are enrolled in private secondary school;

*** from the total number of female students 158385, 317 are enrolled in private secondary school.

As is shown on the figure 1 the first measure, crude enrollment rate, shows the number of enrolled person at primary and secondary schools where the total population is employed in the denominator. According the estimation Crude Enrollment Rate (CER) or total enrollment at all levels and ages covered in regular primary and regular secondary school in the Republic of Macedonia were 16.46% (16.65% for male and 15.60% for female) out of the total population in the country in year 2002. This number indicate that in comparison to the proportion of the population at ages 7 to 18 is nearly 19%, that indicate that almost 4% are not involve in the primary either secondary level of education(see Figure 1).

Figure (2)
General Enrolment in the Primary and Secondary Level of Education, by Sex in the Republic of Macedonia, 2002/03



	enrolled (primary and secondary school)	total population	GER
Total	332933*	381610	87,24
Male	169111**	196087	86,24
Female	158385***	185523	85,37

Source: Statistical Office of the Republic of Macedonia, Statistical Review 411, and Census data 2002. Calculated by the research

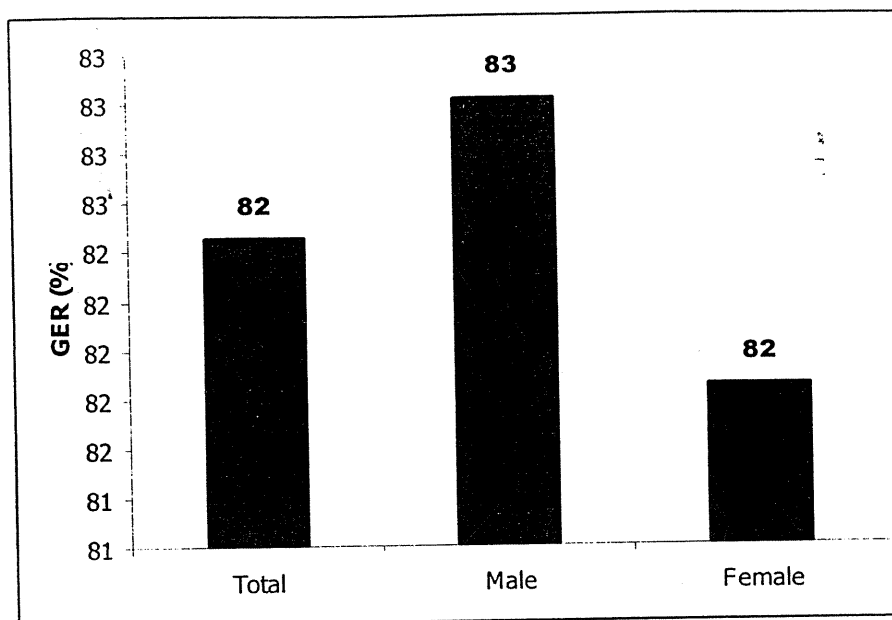
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When the total population was replaced by population in official ages for school at the primary and secondary level of education, that is measure by General Enrollment Rate (GER) it is shown that 87,24% (86,24% for male and 85,37% for female) out of the eligible population (aged 7 to 18 years) in the Republic of Macedonia in the same year were covered in regular primary and secondary schools. (see: Figure 2). More specific measure Age Specific Enrollment Rate (ASER) shows that enrollment at ages 7-18 years at all levels and ages covered in primary and secondary school at the national level in the Republic of Macedonia were 82,46% (83,03% for male and 81,85% for female) out of the total eligible population for that level of study.

Figure (3)
Age-specific Enrollment Rate by sex Primary and Secondary Level of Education by Sex in the Republic of Macedonia, 2002-03



	enrollment ages 7-18	population in ages 7 to 18	ASER
Total	314657	381610	82,46
Male	162805	196087	83,03
Female	151852	185523	81,85

Source: Statistical Office of the Republic of Macedonia, Statistical Review 411,a dn census data 2002. Calculated by the research
Note: No data for the students enrolled in a private schools by age.

Students participation at the primary level of education

In the school year of 2002/03, the lecturing in the sphere of primary education was carried out in 344 primary schools with total 1033 school objects. The lecturing process in the primary schools is realized in 4 languages: Macedonian, Albanian, Turkish and Serbian language. This governs the distribution of the total number of 9940 classes and 232 143 pupils.

Education is portrayed using measures for educational input Gross Enrollment Ratio, Net Enrollment Ratio (NER). The shape and age pattern of education schedule was determined using the Age-Grade-Specific Enrollment Rates, Grade-Specific Enrollment Rate.

The Republic of Macedonia had an gross enrollment ratio (GER)¹ of 93.14%, where is 95.09 for female and 95.55% are male. It means that that the total or gross level of enrollment at the primary school at the school year 2002/03 was 93.14% regardless their age. as a percentage of the population of official school age for that level

In comparison to the gross enrollment ratio, the net enrollment ratioⁱ as a more specific measure for the education participation is not differ to much. In the year 2002, overall the net enrollment ratio was 92.52%, where is 92.36% for female and 92.67% were male. This percent refer to the proportion of population between age 7-14 years are enrolled at the primary level of education.

For each *age-grade specific enrollment rates* are shown in the table 3. *This measure combines the specificity of the level-specific enrolment rate and the age-specific rate. This rate tells us the relative frequency for person aged a to be enrolled at level g at the same level of educationⁱⁱⁱ.*

Table 7 portrays that there is some inconsistency between grades and ages. Namely, the highest frequency to the official age to be enrolled at the official grade is among the children aged 9: 98.00% (97.73% for female and 98.25% for male), and the lower is among the children age 14, and is 72,14%, where 71.77% for female and 72.52% for male.

Conclusion

The Ministry of Education and Science within the frames of its activities has prepared a Draft – National Programme for Development of the Education in the Republic of Macedonia for the period of 2005 – 2015, according to which in the next ten years interventions in the following strategic/key areas are expected: Education for all/providing of educational equity. Improvement of the intellectual growth and studying. Extending the possibilities for participation. Extending the educational, the cultural and the economic competency of the Macedonian society. Reinforcement and improvement of the international cooperation. Reinforcement of the capacities of the Ministry of Education and Science. This program, together with the action plans on reforms in all educational sub-systems, will be realized in next year.

ⁱ *Gross enrollment ratio is the number of students enrolled in a level of education, regardless of age, as a percentage of the population of official school age for that level. Definition used from the Calculating the Human development Indices*

ⁱⁱ *Enrolment ratio, net is the number of students enrolled in a level of education, who are of official school age for that level as a percentage of the population of official school age for that level. Definition used from the Calculating the Human development Indices*

ⁱⁱⁱ Shryock S. Henry, Siegel S. Jacob "The Methods and Materials of Demography" (1976), Academic Press, Chapter 11 Educational Characteristics. p.177-189.