

Regional conference: Introduction and implementation of standards based education – models and challenges

EXTERNAL MATURA EXAMS IN GRAMMAR SCHOOLS OF THE TUZLA CANTON

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Grammar schools before the introduction of external matura

Strenghts

- Long-standing tradition
- Human resources
- Corps of change agents
- Educated teachers
- Ministry's support
- Support of NGOs

Grammar schools before the introduction of external graduation

Weaknesses

- Overloaded programs
- Outdated curricula and methods
- Lack of electives
- Factography
- Poor mobility to universities**

The existing curriculum in Bosnia and Herzegovina

- ❑ Curriculum for grammar schools of the Tuzla Canton, 1999
- ❑ Curriculum for the Sarajevo Canton
- ❑ Curriculum for the Republic of Srpska
- ❑ White paper curriculum (EC TAER), 2003

Curriculum development

- Domestic resources (grammar school and university teachers)
- Subject committees
- Curricular approach
- Focus on electives

Example of a Curriculum

R/B	NASTAVNI PREDMET	RAZRED				SVEGA	
		I	II	III	IV	Broj	%
	I. JEZIČKO PODRUČJE	8	8	9	7	32	26,66
1.	Maternji jezik i književnost	3	3	3	3		
2.	Prvi strani jezik	3	3	2	2		
3.	Drugi strani jezik	2	2	2	2		
4.	Latinski jezik			2			
	II. PRIRODNO-MATEMATIČKO PODRUČJE	13	13	7	7	40	33,33
5.	Matematika	3	3	3	3		
6.	Fizika*	2	2	1	1		
7.	Hemija-Kemija*	2	2	1	1		
8.	Biologija	2	2	1	1		
9.	Geografija-Zemljopis*	2	2	1	1		
10.	Informatika	2	2				
	III. DRUŠTVENO PODRUČJE	2	2	3	5	12	10,00
11.	Historija-Povijest	2	2	1	1		
12.	Filozofija				2		
13.	Psihologija-Logika				2		
14.	Sociologija			2			
	IV. UMJETNOST I TJELESNI I ZDRAVSTVENI ODGOJ	4	4	2	2	12	10,00
15.	Umjetnost	2	2				
16.	Tjelesni i zdravstveni odgoj	2	2	2	2		
	V. IZBORNO-OBAVEZNO PODRUČJE	2	2			4	3,33
17.	Vjeronauka-Historija Religija	2					
18.	Demokratija i ljudska prava		2				
19.	Izborna nastava			6	6	12	10,00
	a) Maternji jezik i Strani jezik (3 + 3)						
	b) Matematika i Fizika (3 + 3)						
	c) Biologija i Hemija (3 + 3)			6	6		
	d) Historija i Geografija (3 + 3)						
	e) Filozofija i Sociologija (3 + 3)						
20.	TREĆI IZBORNI PREDMET u III i IV razredu (lični izbor učenika)**			2	2	4	3,33
	a) Drugi strani jezik						
	b) Informatika						
	c) Ekonomija, poduzetništvo i menadžment			2	2		
	d) Psihologija i komunikologija						
	e) Umjetnost						
	f) Latinski jezik ...						
21.	Čas odjeljenskog starješine	1	1	1	1	4	3,33
	UKUPAN BROJ SATI.....:	30	30	30	30	120	

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Students

- ❑ Matura exam Regulation available at www.ematura.pztz.ba
- ❑ Choosing of Matura exams in April of the second grade
- ❑ Final selection of Matura exams at the end of the same school year (in June of second grade)
- ❑ Groups can be of no less than 15 students
- ❑ The right to choose teachers for electives
- ❑ Constant communication with teachers regarding the electives
- ❑ Students have an interest in cooperating with teachers (better results in the Matura exams)

Teachers

- ❑ At first resistance to change
- ❑ Ability to measure quality of their work
- ❑ Less burdened with final exams
- ❑ No administration, all is carried out at the Examination Center (Pedagogical Institute of the Tuzla Canton)
- ❑ The ability to constantly influence change in teaching curricula and even teaching objectives

Objectives

- ❑ To introduce external assessment as a European standard and then adjust and prepare for the future state Matura exams
- ❑ To help students with timely guidance in choosing the right field of study at university
- ❑ To link enrollment at universities with Matura exam results
- ❑ To have university students that are better educated and to increase pass rate at the beginning of the studies
- ❑ to provide greater satisfaction of high school graduates with a less stressful Matura exam

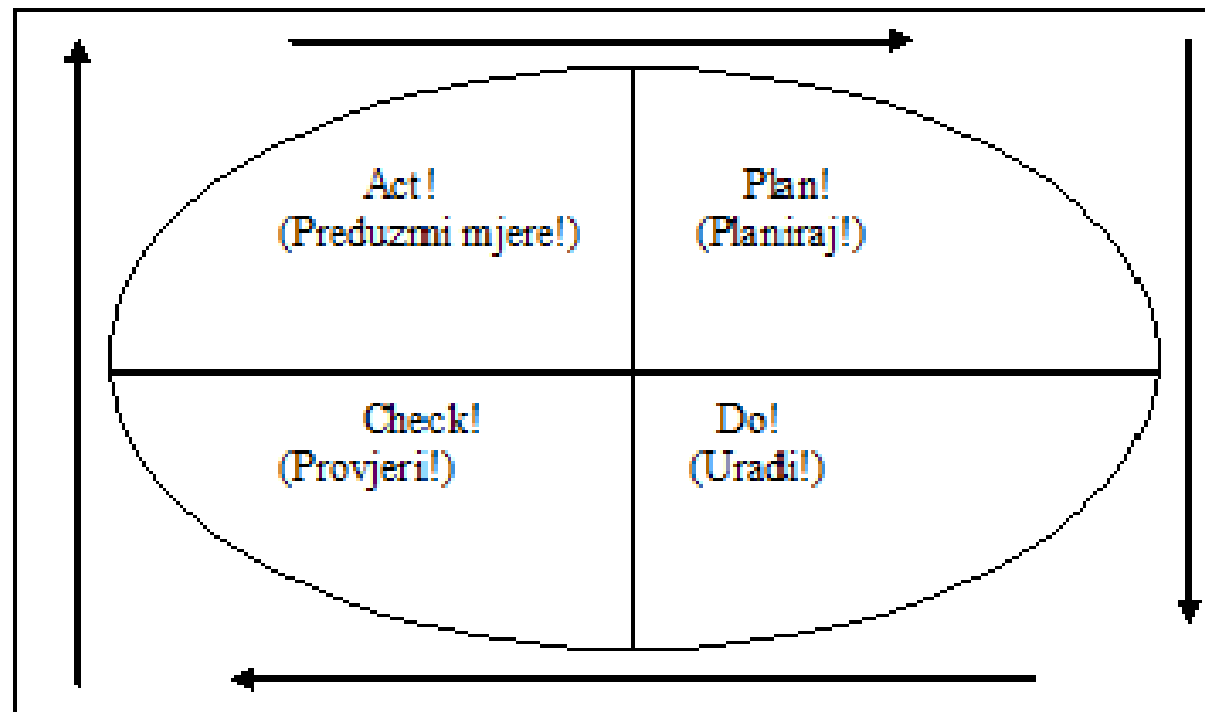
Expected Results

- ❑ Student workload reduced (in number of courses and weekly number of classes)
- ❑ Modernized teaching curricula
- ❑ Using new teaching methods (working on projects, research papers, etc.)
- ❑ Reaching university with greater knowledge and skills
- ❑ Less stressful Matura exams that are not susceptible to influences from schools and outside of schools
- ❑ The model advocated in the EU implemented at the level of Bosnia and Herzegovina

External Matura exams in grammar schools

- ❑ Matura exams regulation in grammar schools of the Tuzla Canton, 2004
- ❑ Cantonal Matura exam authorities (cantonal Matura committee and cantonal subject committees)
- ❑ Knowledge catalogues for the general knowledge test and for all electives
- ❑ Trial Matura was held in April of 2006
- ❑ External Matura held in 2006, 2007, 2008, 2009, 2010, 2011 and 2012
- ❑ Online System for External Matura – OLSEM

The Deming cycle(PDCA)



Slika 1. PDCA krug (u Možina, 1999)

OLSEM – The beginnings

- ❑ In April of 2006– trial Matura exam
- ❑ In June of 2006– Matura exam
- ❑ Server UTIC Sarajevo
- ❑ PHP i MySQL
- ❑ Development of initial applications
- ❑ Testing with live data
- ❑ Website for Pedagogical Institute (PZ)
pztz.ba

OLSEM – Development

- ❑ Development of external Matura – development of OLSEM
- ❑ Changes in Matura- changes in OLSEM
- ❑ System beneficiaries:
 - Grammar schools (OLSEM, web)
 - Pedagogical Institutes (OLSEM, web)
 - Ministry (OLSEM, web)
 - Students (web information www.pztz.ba)

OLSEM – Grammar schools

- Students – update
- Application – update
- Results – review
- Minutes
- Reports

OLSEM - Pedagogical Institute and the Ministry

- System Administration
- Universal Codebook – Update
- EMIS – OLSEM
- Control – Analysis
- Results update
- Reports

OLSEM - Students - Web

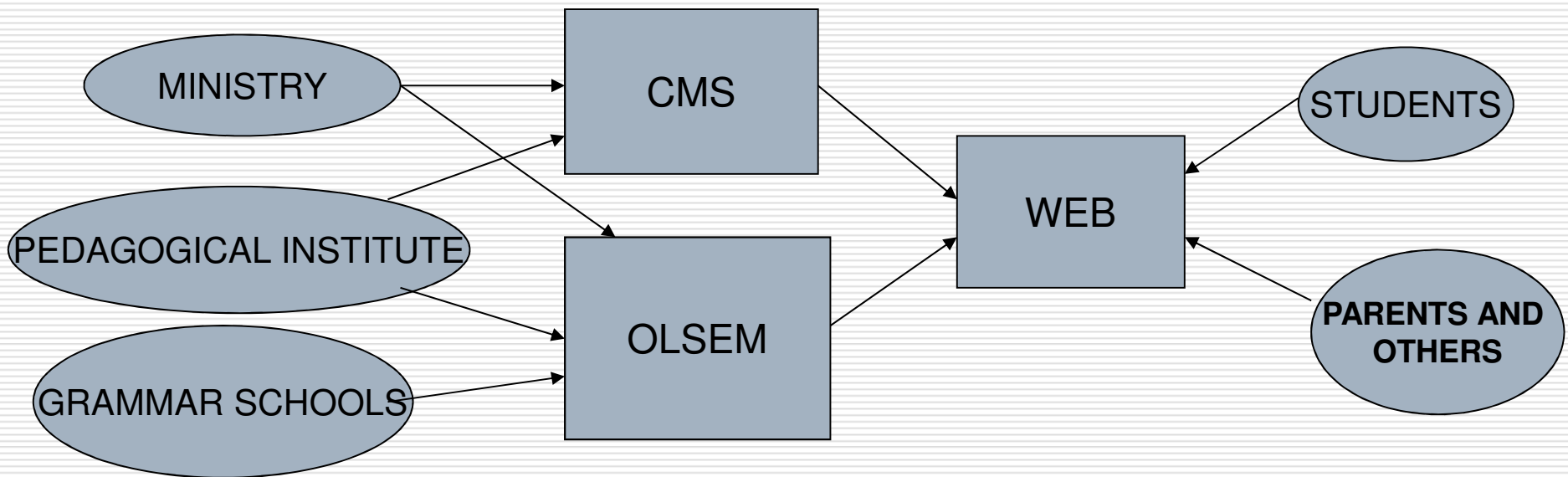
- www.ematura.pztz.ba
- Regulations and Forms
- Knowledge catalogues
- Test assignments from previous Matura exams
- Announcements
- Contacts
- Results

OLSEM – in 2011

- ❑ The new platform
- ❑ Server at the Ministry
- ❑ . NET and MS SQL
- ❑ Development of a new application for external Matura
- ❑ Development of a new CMS application
- ❑ Set up of a special web site for external Matura www.ematura.pztz.ba

OLSEM – Structure

- ❑ CMS – www.cms.monkstk.ba
- ❑ OLSEM – www.ematura.pztz.ba/olsem.aspx
- ❑ WEB – www.ematura.pztz.ba



OLSEM - Features

- System administration
- Updating of the universal codebook
- Updating of school data
- Reporting and Analytics
- Updating results
- Sending results to students via email

Last school year (2011/2012)

- ❑ Computer scanning and reviewing of test results of the general exam
- ❑ Importing results into OLSEM from the previous general knowledge tests
- ❑ Sending the scanned test results from the general knowledge test to students by email
- ❑ ...

OLSEM - Practical Presentation



Eksterna matura - Pedagoški zavod Tuzla - Mozilla Firefox

File Edit View History Bookmarks Tools Help

Eksterna matura - Pedagoški zavod Tuzla

ematura.pztz.ba

BOSNA I HERCEGOVINA
FEDERACIJA BOSNE I HERCEGOVINE
TUZLANSKI KANTON

OPĆA MATURA

PEDAGOŠKI ZAVOD TUZLANSKOG KANTONA

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Početna

- Komisije
 - Matura 2012
 - Pravilnici
 - Obrasci
 - Katalozi
- Rezultati
 - Matura 2012
 - Matura 2011
- Ispitni zadaci
 - Juni 2012
 - Juni 2011
 - Juni 2010
 - Juni 2009
 - Juni 2008
 - Juni 2007
 - Juni 2006
 - Probna

Dobro došli!

Dragi učenici,

Vjerujemo da ste u dosadašnjem školovanju stekli ogromno i bogato iskustvo u ovladavanju novim znanjima i vještinama, što vam može dati dobar osnov za uspješan nastavak školovanja na nekoj od visokoškolskih ustanova. Smatramo da ste, zahvaljujući vašim kreativnim sposobnostima, inventivnim odnosom prema učenju, snagom vlastite upornosti i želje, ovladali modelima razmišljanja o općeprihvaćenim i univerzalnim vrijednostima demokratskog i civilnog društva.

Imate priliku da na kraju svog srednjoškolskog obrazovanja, kroz eksternu maturu, proverite stepen i dosegnuti nivo stečenog znanja u toku školovanja, što će Vam stvoriti jasnu viziju u kojem pravcu može nastaviti svoje školovanje na nekoj od visokoobrazovnih ustanova.

Zahvaljujući svom mladalastvu, poletarstvu i ljudskom dostojanstvu, uspjeli ste izgraditi vlastiti sistem vrijednosti, koji je utemeljen na vašim kulturno-historijskim odlikama i uspješnim završetkom srednjeg obrazovanja, zasigurno koračate ponosni u susret svjetlijoj budućnosti koja Vas čeka. Nemojte da vas čeka! Idite joj u susret! Mijenjajte je! Ona je puna izazova, sreće, straha, strepnje i nadanja! Koliko će svega u vašem životu biti, uveliko će zavistiti od VAS.

Usmjeravanje nastavnog procesa na definisanje i dostizanje standarda znanja, društvo dobiva zaokret u smislu usklađivanja općeg obrazovanja sa evropskim standardima kvaliteta u obrazovamnju.

Obavještenja

- Eksterna matura - Avgustovski rok 2012, termin održavanja
- Test iz Filozofije - Rezultati testa održanog 08.06.2012.godine
- Test iz Hemije - Rezultati testa održanog 08.06.2012.godine
- Test iz Engleskog jezika - Rezultati testa održanog 08.06.2012.godine
- Test iz Geografije - Rezultati testa održanog 08.06.2012.godine

Više...

Tuzlanski kanton
Pedagoški zavod Tuzlanskog kantona

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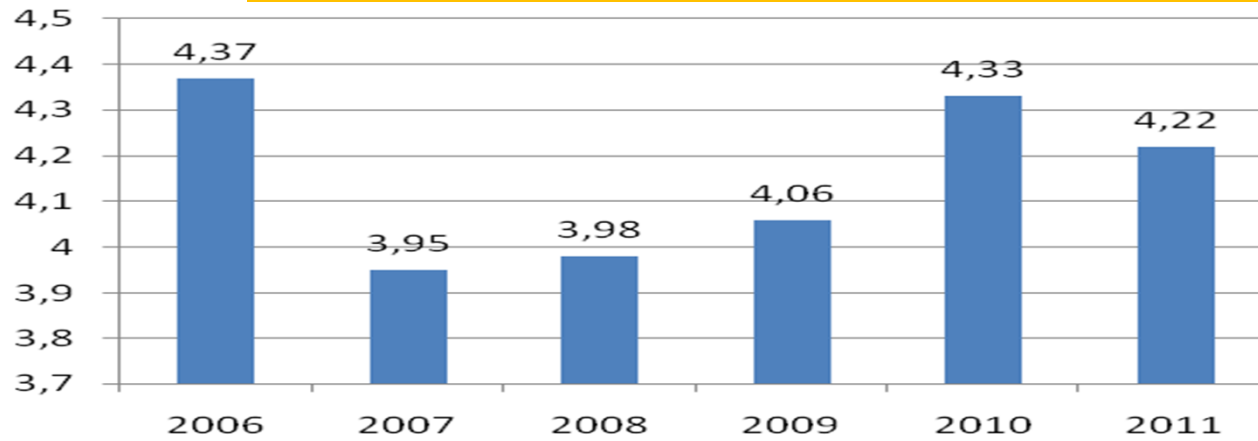
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Data from the previous Matura exams

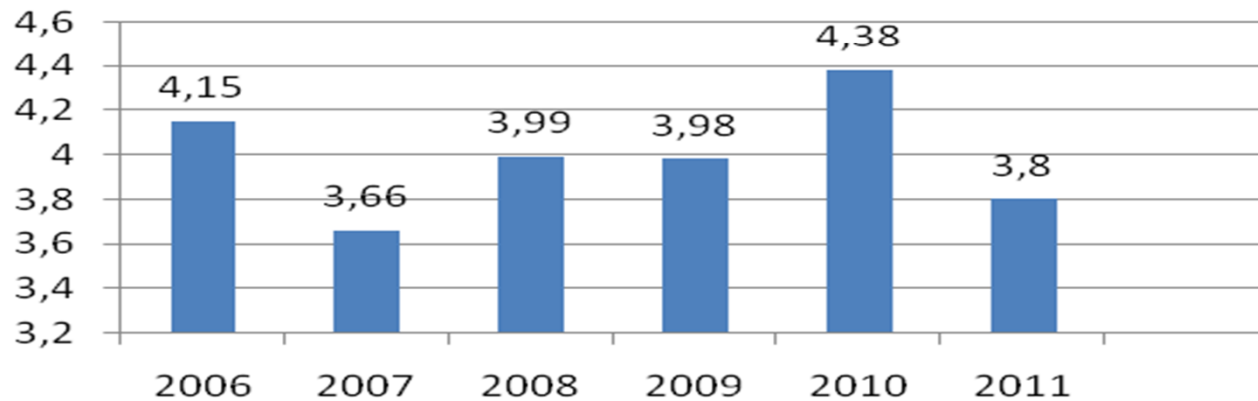
2006 – 2012

External graduation Tuzla Canton	2006	2007	2008	2009	2010	2011
Total number of students	921	959	1029	951	989	966
Number of students taking the test	897	941	1023	944	988	956
Average grade on the Matura exam	4,37	3,95	3,98	4,06	4,33	4,22
% of those who passed the exam	99,52	99,72	99,02	99,15	99,90	99,96
Number of appeals	34	52	69	40	15	66
Average grade by subject						
General knowledge test	4,15	3,66	3,99	3,98	4,38	3,80
Biology	4,61	4,16	4,14	3,40	4,37	4,48
Mother tongue	4,89	3,95	4,14	4,49	4,45	3,70
English	4,14	4,19	3,71	3,85	4,11	3,56
Philosophy	4,50	4,77	3,57	4,66	3,53	3,45
Physics	4,65	4,49	3,62	3,76	4,33	4,51
Geography	4,49	4,51	4,56	4,58	4,26	4,47
Chemistry	4,48	4,34	4,28	4,23	4,03	3,77
History	4,56	3,64	3,26	3,61	4,59	4,45
Computers	4,28	3,64	-	-	-	-
Mathematics	4,52	4,27	4,40	4,18	4,37	4,14
German	4,65	3,62	3,79	2,45	4,64	3,10
Psychology	4,10	3,91	-	-	-	-

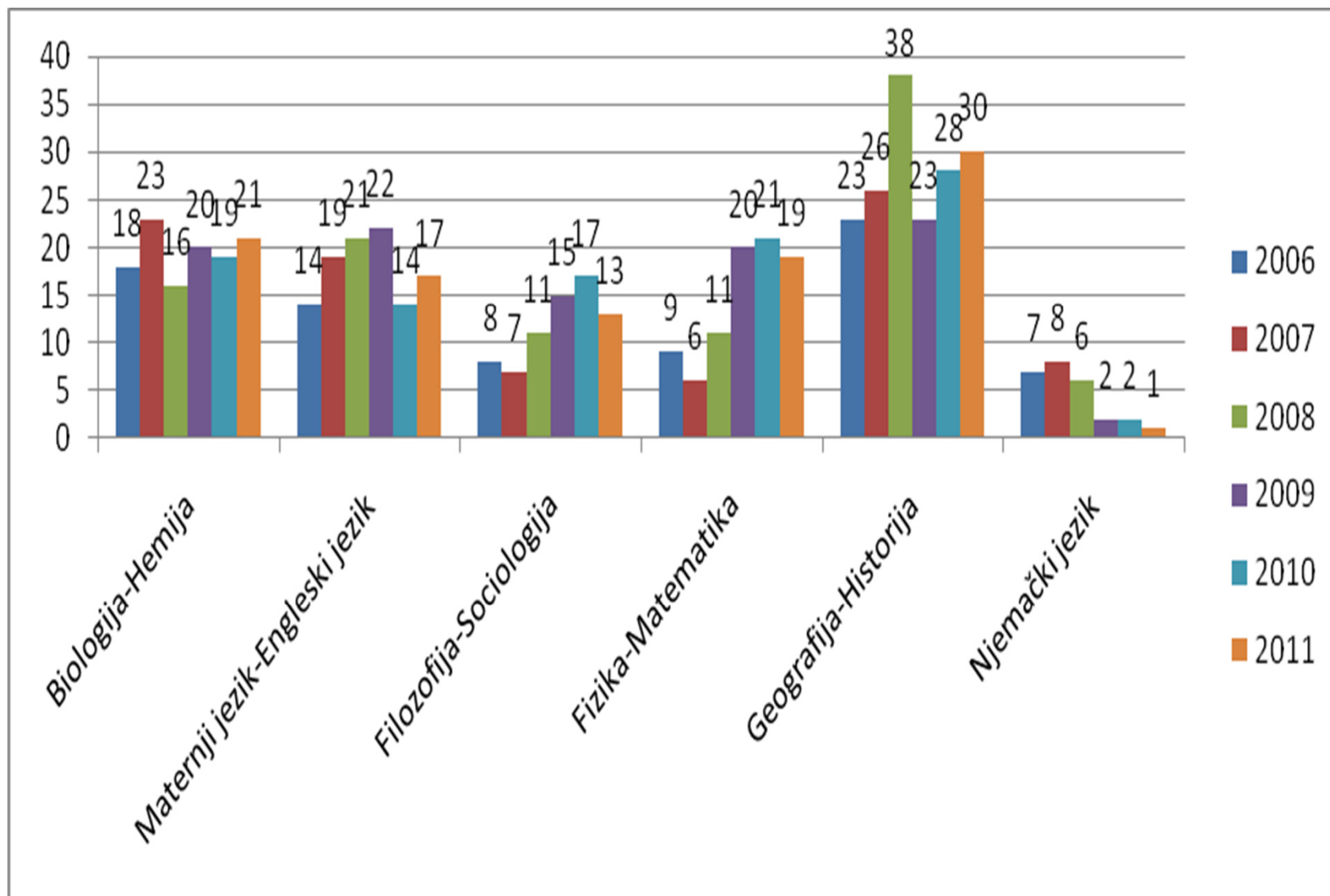
Average grade on the Matura exam



General knowledge test



Number of students per course expressed in percentages for the period 2006-2011



Belgrade, December 2012

Survey results

Those who found the test difficult

<i>Year</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>
<i>Students</i>	<i>27%</i>	<i>21%</i>	<i>30%</i>	<i>29%</i>	<i>30%</i>
<i>Teachers</i>	<i>3%</i>	<i>12%</i>	<i>19%</i>	<i>12%</i>	<i>9%</i>

Those who found the conditions for taking the test favorable

<i>Year</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>
<i>Students</i>	<i>90%</i>	<i>88%</i>	<i>88%</i>	<i>87%</i>	<i>74%</i>
<i>Teachers</i>	<i>97%</i>	<i>93%</i>	<i>93%</i>	<i>78%</i>	<i>97%</i>
<i>Advisors</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>	<i>100%</i>

Publishing the test results

Percentage of students who are informed about their results online

<i>Year</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>	<i>2006</i>
<i>Students</i>	<i>70%</i>	<i>62%</i>	<i>70%</i>	<i>80%</i>	<i>62%</i>	<i>63%</i>

Favorability of this form of publishing results

<i>Year</i>	<i>2011</i>	<i>2010</i>	<i>2009</i>	<i>2008</i>	<i>2007</i>	<i>2006</i>
<i>Students</i>	<i>90%</i>	<i>78%</i>	<i>70%</i>	<i>90%</i>	<i>77%</i>	<i>70%</i>

Suggestions

- ❑ Further improvement of the validity and credibility of the Matura exam results
- ❑ Results of Matura exams- admission policies at Universities (Matura exams are recognized in Slovenia, etc.)
- ❑ All grammar schools need to be included in Matura exams
- ❑ Matura exams in secondary VET
- ❑ Matura for the nine-year elementary education
- ❑ Matura exams at the state level
- ❑ Strengthening capacities at the Pedagogical Institute of the Tuzla Canton (PZTK)

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Further reading

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