

The State Matura exam in Croatia: How argumentative essay as an integral part of the Matura Higher English exam improved students' foreign language literacy

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Abstract-The purpose of this article is to enrich the EFL teacher's understanding of the development of educational standards in Croatia with the special focus on Secondary School Leaving Examination the so called State Matura. The external examinations are a widespread phenomenon which has also influenced Croatian educational system. This new type of assessment, which has been used for over a decade now has positively influenced the language competence of the students especially in reading and writing. Henceforth the argumentative essay, which is a crucial part of the English Matura exam at the higher level, has in great part contributed to such positive changes which were also documentd in the Reports issued by the Croatian Center for External Evaluation of Education, whose role is to govern the whole examination process and in the end to subject the tests and its items to psychometric analyses. Statistical data, rating scales and a sample essay included in this article are of great help in other to demonstrate the positive role the argumentative essay plays at the Matura exam and later at a university level .A study which also speaks in favour of this fact is the study conducted by R.M.Helms, in the USA (2008) which stresses the importance of the writing component of the SAT tests as predictors of college grades. Bearing in mind everything mentioned so far a lot of challenges still lie ahed, but the Croatian educational system will for sure yield even more promising results in the future.

Keywords- Argumentative Essay; State Matura Exam in Croatia; Croatian National Center for External Evaluation of Education; Foreign Language Literacy

1. INTRODUCTION

When mentioning the State Matura or in other words the National Secondary School Leaving Exam in Croatia and together with it the argumentative essay the students write when being tested in their English language skills, one should first explain the current educational system in Croatia. According to UCAS-The Universities and Colleges Admission Service (2016)[12] the graduation exam (državna matura) consists of the compulsory and optional part: Compulsory exams are taken in the following core subjects: Croatian language, mathematics and a foreign language. Students attending classes in a language and script of national minorities must, in addition to the Croatian language exam, take an exam in the national minority language in which they are educated, whilst the third exam they choose is either mathematics or a foreign language. Optional exams can be taken in a maximum of six subjects .Exams in the compulsory part can be taken at two levels: A-higher and B-basic level. Exams in foreign languages in the optional part are taken exclusively at the higher level. Exam results are evaluated for admission to higher education institutions. As regards foreign languages again, the exams themselves contain three integral parts i.e. reading, listening and writing. Over the years students' skills in these three core areas have significantly improved, particularly in writing. The purpose of this article is to explain how argumentative essay as a part of the English language school leaving exam improved students' writing skills over the period of the last 10 years. The process which led to this was not easy to accomplish at all.

2. SECONDARY SCHOOL LEAVING EXAMINATIONS

The external examinations are a widespread phenomenon but there has been little serious international comparative research on the development and operations of these systems.In the volume on Secondary External Examination Systems, Barend Vlaadingerbrock and Neil Taylor (2009) [11] have brought together the current developments and future directions of such examinations in 19 national and state contexts. On the other hand, Robin Matros Helms (July 2008) [2], published a paper called "University Admission Worldwide" in Education Working Paper Series. According to Helms (July 2008) [2] it "intends to provide a framework for policy makers and institutional leaders to think critically about admission procedures in their countries, as well as to serve as a springboard for future research" (p.2). In his work Helms published a typology of Admission Systems Worldwide (July 2008, p. 19)[2] to be seen on the second page of this paper. Croatia was unfortunately not included in this typology, but it



would fit into the category of multiple exams – National Entrance Exam Scores, Institutionally administered entrance exam scores and secondary school academic performance. In order to explain the Croatian system, this means that some colleges, for example Medical College requires the students to sit for three additional exams in physics, chemistry and biology and they serve as an

entrance exam, together with secondary school academic performance and National Entrance exam scores. Some universities though require the students to be tested as well in an aptitude test. This is often the case when students want to apply for the Academy of Dramatic Arts where they are also being tested in an Acting aptitude test.

Table 1: A typology of Admission Systems Worldwide by Robin Matros Helms (July 2008, p.19) [2]

Type 1: Secondary leaving exams			
National exam score only	Austria, France, Ireland, Egypt		
National exam score plus secondary school academic performance National exam score,plus application dossier	Tanzania United Kingdom		
Regional/state exam score plus secondary school academic performance	Australia		
Type 2: Entrance exams			
National exam score only National exam score plus secondary school academic performance	China, Iran, Georgia Turkey, Spain		
Institutionally administered exam scores only	Argentina, Paraguay		
Institutionally administered exam scores plus secondary school academic performance	Bulgaria, Serbia		
Typ <mark>e 3: Standardized aptitude tests</mark>			
Standardized aptitude test scores or secondary school academic performance	Sweden		
Standardized aptitude test scores, plus application dossier	United States		
Type 4: Multiple exams			
National entrance exam scores, plus institutionally administered entrance exam scores	Japan, Russia, France (Grand Ecoles)		
National entrance exam scores,institutionally administered entrance exam scores, and/or secondary school academic performance	Brazil		
National secondary leaving exam scores, plus institutionally administered entrance exam scores	Finnland		
National secondary leaving exam scores, plus standardized aptitude test scores	Israel		
Multiple exams administered by multiple entities	India		
Type 5: No exam			
Secondary school academic performance Application dossier does not require exam scores	Norway, Canada Certain U.S. institutions		

3. EXPERIMENTAL AND PROBE EXAM MATURA PROCESS 2004-2009 IN CROATIA

The experimental Matura 2004, was the object of scrutiny especially in the paper State Matura from the perspective of Higher Education by Mr. Petar Bezinovic (2004)[1],

President of the Governing Board of the National Center for External Evaluation of Education; Senior Research Associate at the Institute for Social Research in Zagreb, Croatia. According to Bezinović (2004)[1] back then there was no established system for evaluating the quality of education in Croatia, the general level of education of the citizens was low, education and knowledge were



undervalued. On the other hand the primary development goal of the European Union (Lisbon, 2000) consisted in improving the quality of education because of the technological advancemet, open borders, wider markets and greater competitiveness. The goals of the State Matura in Croatia were ensuring valid and fair selection of candidates for enrolment into Higher education as well as Making Croatian High School diploma clear and comparable on the local and European labour markets as well as in European education. But on the other hand, there were many sources of dissatisfacion when the process of implementation of the Matura exam began. The level of knowledge in the subjects important for the field of study was inadequate, students from different schools demonstrated unequal readiness for the exam as well as unequal prior knowledge. Students from many schools demonstrated a lack of motivation for studies, lack of curiosity, interest and a lack of motivation for high academic achievements. Many of them had undeveloped work habits, did not know how to learn, had a negative attitude towards learning, were unsystematic. What is more, a lot of students acquired knowledge by mechanical memorizing and had little practical knowledge and skills. The level of oral and written expressioin was low, as well

as the language competence. In conclusion, all of the before mentioned factors led to insufficient creativity as well as to low level of responsibility and maturity. Taking into account many of these negative factors it also needs to be stated that at the time there existed a minority of the students (mainly from gymnasiums) who were highly motivatied for studies, showed readiness to acquire new knowledge, who exhibited opennes and good communication skills, and who had good general education.(Bezinović, 2004 [1]). This process of ups and downs lasted for 4 years, exactly up to 2008/09 when the students sat for the first probe Matura exam which was a good incentive for the first Matura official exam to be held in Croatia in 2010.

4. ARGUMENTATIVE ESSAY AT THE OFFICIAL MATURA EXAM 2010-2014

In order to understand what was expected from the students to demonstrate, when writing their argumentative essay, at the English language Matura exam, one should begin with the criteria that are being evaluated and can be precisely shown in the Assessment manual from 2011 especially in the Rating Scale.

Table 2. Rating Scale (Addition to the English language catalogue Higher Level, 2011) [3]

	Task completion	Coherence and cohesion	Vocabulary	Grammar
5	 All parts of the prompt fairly equally developed. Main ideas well supported 	 Clear flow of ideas. Effective use of paragraphing and cohesive devices. 	 Wide range for the task. Inaccuracies in usage/form do not impede easy understanding. 	 Wide range for the task. Inaccuracies in usage/form do not impede easy understanding.
4	 All parts of the prompt developed but unequally. Main ideas generally well supported. 	 Generally clear flow of ideas. Good use of paragraphing and cohesive devices. 	 Good range for the task. Inaccuracies in usage/form/spelling sometimes impede easy understanding. 	Good range for the task. Inaccuracies in usage/form sometimes impede easy understanding.
3	 One part of the prompt not developed. Main ideas sufficiently supported/Not all main ideas relevant. 	 Flow of ideas sometimes unclear. Limited use of paragraphing and cohesive devices. 	Sufficient range for the task. Inaccuracies in usage/form/spelling sometimes cause difficulty in understanding.	Generally uses simple structures. Inaccuracies in usage/form sometimes cause difficulty in understanding.
2	 Two parts of the prompt not developed./The essay is largely irrelevant. Main ideas insufficiently supported. Insufficient language control./ Inappropriate layout. 	 Flow of ideas frequently unclear. Inadequate use of paragraphing or cohesive devices. 	 Range is inadequate for the task. Inaccuracies in usage/form/spelling frequently cause difficulty in understanding. 	Relies on simple structures. Inaccuracies in usage/form frequently cause difficulty in understanding.



1	 Insufficient prompt development./The essay is irrelevant. No clear main idea. Generally unintelligible. 	Flow of ideas cannot be followed.Generally unintelligible.	Range is severely restricted. Inaccuracies in usage/form/spelling generally prevent understanding.	 Range is severely restricted. Inaccuracies in usage/form generally prevent understanding.
0	The script is unintelligible or has less than 50 words.			

Note: If the descriptors within a criterion (TC;CC, V and G) are at different levels, the lower level applies. For example, if vocabulary range is assessed at Band 5 and vocabulary accouracy at Band 4 the essay receives 4 for Vocabulary.

A script which scores 2 on Task Completion cannot score more than 4 on other criteria.

A script which scores 1 on Task Completion because it is underlength cannot score more than 3 on other criteria.

A script which scores 1 on Task Completion because it is irrelevant cannot score more than 1 on the other criteria.

A script which scores 0 on Task Completion because it is underlength cannot score more than 1 on the other criteria. Underlength scripts are penalised on Task Completion as follows: 160-190 words, 1 point, 130-159 words 2 points, 100-129 3 points, 50-99 4 points. The minimum score for

Short forms (e.g. I'm, isn't) are counted as one word.

this criterion is 0.

When taking into consideration the Rating Scale from Table.2 the assessors analysed the essays according to the four criteria i.e task completion, coherence and cohesion, vocabulary and grammar. Besides, many students had not been well prepared by their teachers to sit for such exams which means many of them did not know how to cope with the problems when writing an argumentative essay. Since they have not practiced how to write such an essay they faced several crucial problems i.e. they could not come up with approppriate ideas, later on they had problems organising their ideas, they could not supprot their arguments with enough evidence, their answers lacked cohesion and coherence. In order to demonstrate what problems students faced can be most clearly represented when analysing students'essays. One of the first topics students had to write about was to discuss whether international sports events bring countries closer together or not. Very often the assessors had to grapple with an essay which did not have an appropriate format, and lacked coherence and cohesive devices. This can be seen in the following essay included in this article, which was published on the web by the National Center for External Evaluation of Education. A few of these graded essays together with their comments were included as an Addition to the English language catalogue (National Centre for the External Evaluation of Education, 2011) [3] so that the students could learn from other students' mistakes. The Sample Essay included on the following page (National Center for External Evaluation of Education, 2011) [3] was being graded according to the four criteria: task completion, coherence and cohesion, vocabulary and grammar. It is important to state that the majority of the essays exhibited the same problems as the sample essay regarding the appropriate introduction and/or conclusion, logical progression to the argument and the flow of ideas which was sometimes unclear. As regards vocabulary and grammar both criteria received three points due to the sufficient range but frequent spelling mistakes and unsuccessful attempts at more complex grammar structures. All in all the essay received 12 points, which means there were still many parameters to work on in the future.

Sample essay [3]

Engleski jezik

Script 1

List za čistopis

There is a lot of talk these days about international sports. Everywhere we have

sport players who play in more other countries. This is very normal today and every

players go on other countries for long.

First of all, international sports are very good for all the world. We can make new

friends and learn to speak foreign language. Secondly, we can play some sports in

some country for the bigger salary, if we are professional player. It is very popular

today, because many players go on rich countries with perfect economy situation.

On the other hand, we have many problems in (with) some countries. Somewhere they

they don't like players and people from some countries. Another reason is that in some

place on the world, we have rasists. This people don't like different people from other country.

When we are on some sport invent, they say ugly sentences for this people.

All in all, both sides of the argument have advantages and disadvantages. More or less

there will be discussions about this topic. I think that is very good for all the world but they

should choose where want they go play some sport. I don't know where they play some sports.

ENG A IK-2 D-S002

Script 1 - Comments



Task completion: 3

The essay has neither an adequate introduction nor conclusion: both are irrelevant. In addition, much of the first paragraph is irrelevant.

Coherence and cohesion: 3

Although there is a logical progression to the overall argument (introduction, advantages, problems, conclusion), The flow of ideas is sometimes unclear (for example no clear connection between the introduction and the first paragraph, no topic sentence for the first paragraph so we don't know what first of all and secondly refer to, no connection between the sentences in the conclusion, unclear sentence I don't where they want play some sports).

Vocabulary: 3

The range is sufficient for the task. The type and density of inaccuracies causes rereading, but the message can be understood with some effort. (on countries, for economy situation, on the world, rasists, say ugly sentences).

Grammar: 3

Some complex structures are used, but not successfully. Although the type and density of inaccuracies causes rereading (international sports, every players go, this people, where want they go play). The message can be understood with some effort. According to the reports regarding the psychometric tests of the matura exams specifically the English higher level, reading and writing items offer the highest reliability index in comparison to the listening items. (Reports by the Croatian National Center for External Evaluation of Education -2008-2011)[5][6][7]. Due to this fact the overall matura exam results can reliably portray the situation regarding the foreign language competence in reading and writing. The results in 2010/11 for the English language higher level amounted to 27,69% score for the grade 2, 49,23% for the grade, 3, 66,15% for the grade 4 and 83,08% for the grade 5. (Croatian National Center for External Evaluation of Education, July 27, 2011)[8] At the matura exam the year before, 24% score was sufficient for the grade 2, 41% for the grade 3, 60% for the grade 4, and 75% for the grade 5 (Croatian National Center for External Evaluation of Education, June14,2010)[7]

The median value for the Matura exam 2009/10 was 77.39 due to the overall low difficulty of some tasks and in the year 2010/11 it amounted to 67.6 which means that overall the tasks were more reliable in order to discriminate between the students according to the Croatian National

Center for the External Evaluation of Education (2010, 2011) [5][6].

On the other hand the median value for the experimental matura exam for the Higher English level according to the Croatian National Center for External Evaluation of Education (2007/2008)[7] amounted to the median value of just 53,83 which means there was a dramatic improvement in students' literacy in the subsequent matura cycles.

5. ARGUMENTATIVE ESSAY AT THE MATURA EXAM 2015-2017 IN CROATIA

As regards the period between 2015 and 2017 it needs to be stated that the grading criteria were changed i.e. they became more demanding in comparison to the grading criteria from the year 2009/10 as demonstrated in Table 2.[3] The changes affected the parameters coherence and cohesion, vocabulary and grammar. If a student wrote the body of the essay as a single paragraph at the matura exam in the year 2009/10 the essay would receive 3 points for coherence and cohesion but in the year 2015/16 it could receive just 2 points. Regarding vocabulary, good vocabulary range received 4 points in 2009/10 but in 2015/16 just 3 points. As regards grammar the essay would receive just one point if it could not frequently be understood in places in the year 2015/16, whereas in the year 2009/10 the essay would receive one point if it were unintelligible. This can be demonstrated by the means of a new rating scale published by the Croatian National Center for external Evaluation of Education which is being shown on this page. When taking into consideration the fact that the grading criteria became more demanding the results that students achieved were much better than 5 years before. In order not to fail, the students needed to have 35% of the test correctly solved, for the good grade 56%, for very good grade 73%, and for an excellent grade 86%. This means that the students whose knowledge war rather poor in English improved their results for 7-8%. The median value for the year 2015/16 was 73.16 compared to the median value in 2010/11 of 67.6. (National Center for External Evaluation of Education, 2016) [9]

Table 3. Rating Scale 2015/16(Croatian National Center for External Evaluation of Education)[10]

POIN	TASK COMPLETION	COHERENCE AND COHESION	VOCABULARY	GRAMMAR
5	 All parts of the prompt fairly equally developed. Main ideas consistently well supported. 	 Clear flow of ideas. Effective use of paragraphing and cohesive devices. 	Wide range for the task. Minor errors.	Wide range for the task. Minor errors.
4	 All parts of the promt developed but unequally. Main ideas generally well supported. 	 Generally clear flow of ideas. Good use of paragraphing and cohesive devices. 	Very good range for the task.Errors do not impede easy understanding.	Good range for the task. Errors do not impede easy understanding.



3	 One part of the prompt not developed. Main ideas sufficiently supported/ Not all main ideas relevant. 	 Flow of ideas sometimes unclear. Sufficient use of paragraphing and cohesive devices. 	Good range for the task. Errors sometimes impede easy understanding.	Generally uses simple structures. Errors sometimes impede easy understanding.
2	 Two parts of the prompt not developed./The essay is largely irrelevant. Main ideas insufficiently supported. Errors cause difficulty in understanding in places. Inappropriate layout. 	 Flow of ideas often unclear. Limited use of paragraphing or cohesive devices. Errors cause difficulty in understanding in places. 	Sufficient range for the task. Errors sometimes cause difficulty in understanding.	 Relies on simple structures. Errors sometimes cause difficulty in understanding.
1	Insufficient prompt development./The essay is irrelevant. No clear main idea. Errors frequently cause difficulty in understanding.	 Flow of ides generally difficult to follow. Inadequate use of paragraphing or cohesive devices. Errors frequently cause difficulty in understanding. 	Inadequate range for the task. Errors frequently cause difficulty in understanding.	 Range is severely restricted. Errors frequently cause difficulty in understanding.
0	• Generally unintelligible/less than 50 words.	• Errors generally prevent understanding.	Errors generally prevent understanding.	• Errors generally prevent understanding.

6. CONCLUSION

To sum it up, in today's lifelong learning society tertiary education plays a crucial role. The admission process varies from country to country but it needs to be stated that Croatia has also understood the huge importance of the knowledge-based labor market. The Croatian government and local institutions have made a huge effort to develop, manage and monitor the new examination systems over the past 10 years. Regarding the monitoring process itself, every exam instrumet was rigorously tested for its reliability and validity from the onset of the process by the Croatian National Centre for External Evaluation of Education which every year prepares a psychometric analysis of every exam. As regards the development of the State Matura exam itself it started with the Experimental Matura process from 2004 to 2007 and carried on with the official Matura examinations which are still being held. In the beginning of the processs the knowledge, attitude, language competence, written and oral expression and the motivation of the students were at a very low level. With time the situation started to improve thanks to the better preparation of the students by the means of the formal school setting and informal one i.e. coaching for entrance exams. One element of this improvement is well demonstrated by the scores achieved at the writing part of the English higher lever matura exam. The scores that the students achieved at the argumentative essay task improved for approximately 7-8 per cent when regarding the students whose level of English competence was graded as sufficient and good when the official Matura exams began.

The median value also increased from 67.6 in 2010/11 to 73,16 in 2015/16.[6,9] Therefore it can be concluded that the whole new system of admission to tertiary education resulted in a considerable improvement of students' literacy which plays a tremendous value in the students' success at the university level. A study which speaks in favour of this fact and portrays a similar situation abroad is a recent college Board study conducted in the United States by R.M. Helms [2] which confirmed that the scores on the writing component of the SAT test were better predictors of college grades than scores on the math and critical reading sections, which are composed of multiplechoice questions. In the end one must admit that the State Matura began as a long-term process which after a several cycles yielded good results especially when taking into consideration students' foreign language literacy. Bearing this in mind the Croatian educational system has gained a lot of credit to improve in the future even more.

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Author's Biography



My name is Mihaela Schmidt and I have been teaching English as a Second Language (ESL) as well as German language for over 20 years in 11th General Grammar School in Zagreb, Croatia. I enjoy working with my students, teachers as well as with other students from all over

the world so this year I am the school coordinator of the KA2 Erasmus project. I am as well a mentor teacher to other novice teachers. For more than a decade I have been the assessor at the Matura exams and 5 years the senior moderator and was always among the best assessors at Croatian matura exams. The exeperience I have gained in this field was an incentive for me to write this article.

I live in Zagreb, and I graduated from the University of Zagreb, Faculty of Humanities and Social Sciences.

I am married and have three children. I love to read in winter months but in summer I very often undertake breathtaking sailing cruises.