



**Association Alumni of the Centre for
Interdisciplinary Postgraduate Studies**

Bad schools or bad education policies – For whom the bell tolls?

Introduction of modern, innovative and interactive teaching methods in secondary schools in

BIH

Lidija Pisker

Nedim Sinanović

ACIPS/NDI

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TABLE OF CONTENTS

SUMMARY	3
1. STUDENTS DO NOT LEARN TO <i>LEARN</i>.....	5
1.1. OUTDATED TEACHING METHODS	5
1.2. CONSEQUENCES OF THE OUTDATED EDUCATION PROCESS.....	7
1.3. WHAT WE GAIN THROUGH MODERN TEACHING METHODS.....	9
2. WHY INNOVATIVE AND INTERACTIVE TEACHING STILL NOT ALIVE IN BIH SCHOOLS	10
2.1. INITIAL TRAINING OF TEACHERS („PRE-SERVICE“)	10
2.2. PROFESSIONAL DEVELOPMENT OF TEACHERS (IN-SERVICE)	12
3. IS THERE INSTITUTIONAL SUPPORT FOR PROFESSIONAL TRAINING OF TEACHERS?13	
3.1. COORDINATION ISSUES AMONG RESPONSIBLE INSTITUTIONS	15
3.2. PROBLEMS WITH INSTITUTIONAL CAPACITY	16
3.3. FINANCIAL CONCERNS	19
3.4. RESEARCH AND DEVELOPMENT ISSUES	22
3.5. ISSUES WITH EVALUATING TEACHING QUALITY	22
4. SOCIAL DIALOGUE	24
4.1. YOUTH ENGAGEMENT	25
CONCLUSIONS	26
RECOMMENDATIONS	28

Summary

Modern European teaching trends students at the center of the learning process and use interactive teaching methods that make learning attractive, allowing students to learn how to *learn*. In contrast, secondary education in Bosnia and Herzegovina is characterized by outdated methods of transferring (ex-cathedra lectures) and mastering knowledge (rote learning).

There are many established reasons for this situation. One is that initial teacher training (pre-service training) is not sufficiently oriented towards providing practical pedagogical or didactic knowledge. Another is the inadequate system of professional training for teachers already employed in the field (in-service training). Thus most teaching staff in secondary (vocational, technical, and general) schools have not developed the ability to teach students how to learn or provide them interactive work in everyday activities. In addition, the education system is characterised as allocating only enough funding for schools to barely cover operating costs and as having large differences in the quality of teaching throughout BiH.

In order to implement measures that would encourage the systematic use of innovative and interactive teaching methods in secondary education, more must be invested in teaching tools, materials, and classroom equipment. In addition, it is necessary to harmonize teaching standards and professional development (in-service training) through accreditation of in-service training providers. Special importance in this process should be placed on the need for social dialogue, primarily at the local community level, between student councils and parents on one side and regional and cantonal institutions and relevant ministries on the other, in order find a resolution to this social problem.

Abbreviations

- ACIPS *Alumni Association* of the Center for Interdisciplinary Postgraduate Studies of the University of Sarajevo
- BiH Bosnia and Herzegovina
- CCI Centers for Civil Initiatives
- EU European Union
- FBIH Federation of Bosnia and Herzegovina
- GTZ Deutsche Gesellschaft für Technische Zusammenarbeit (German Technical Cooperation)
- IB International Baccalaureate
- NPP Teaching curriculum
- NVO Non-governmental organization
- PZ Pedagogical Institute
- RS Republic of Srpska
- TIMSS Trends in International Mathematics and Science Study
- UWC-IB Initiatives in BIH - United World Colleges and International Baccalaureate Initiative
- UWCiM United World College in Mostar
- VET Vocational Education and Training

Introduction and Methodology

Although reforming the education system is a continuous process, in general efforts to improve the quality of secondary education have not yielded satisfying results. Eight years ago education ministers in BiH made a promise to provide quality education based on modern curricula, *"focusing on relevant and contemporary skills that students need to face the challenges of the 21st century."*¹

Nevertheless, teaching methods remain outdated in schools throughout the country. Instructors and students rely on dictation, transcription, and textbooks with technically obsolete knowledge. For some classrooms even chalk is a luxury. Dissatisfied with the situation, students from ten secondary schools across the country met in Mostar in February 2010 at a student education conference. They formulated a declaration with recommendations on how to improve the education system. This declaration was sent to all ministries of education and pedagogical agencies in BiH. Outdated teaching methods were listed as the greatest obstacle to successfully reforming secondary education.²

Current teaching methods in BiH do not focus on students' need for social development, teach them how to study, or prepare young people for active participation in society. Instead they are based merely on memorization and reproduction of lecture content. The Open Society Fund of BiH and the EU ICBE identified this as a significant issue in their earlier analyses of the educational sector³. This has been further confirmed by focus group participants, including parents and students from Dobož and Zenica, that were organized by the public opinion research agency "Puls" from Sarajevo in April 2010 for the purpose of this study.

This study attempts to identify basic obstacles to the systematic introduction of innovative and interactive teaching methods and improvement of teaching quality in secondary schools. In doing so, it seeks to offer solutions to educational institutions.

The research carried out in this work is intended to provide basic recommendations in the field of creation of more effective and efficient system of professional training for teaching staff, both during the initial training at universities and through in-service training of employed personnel.

For the purposes of this study, four focus groups were organized with students from secondary schools and parents of students in Dobož and Zenica. The aim of the focus groups was for participants to choose one of the two identified topics (professional orientation of students or new teaching methods) as a priority to be solved. The prevailing opinion was that the secondary education reform in BiH required modernization of the teaching process, which would in turn modernize professional orientation and professional support in selecting a suitable occupation.

In addition, existing policies for introducing modern teaching methods in secondary schools in BiH were partially analyzed. Loosely structured interviews were also conducted with representatives of governmental institutions, universities, directors, and secondary school professors, as well as

¹ Education Reform – Message to citizens of BiH, Sarajevo, 2002, 11.

² Students conference „Educational Reform“ in UWCI, February, 2010 http://www.uwc-ibo.org/index.php?option=com_content&view=article&catid=1:latest-news&id=297:students-conference-education-reform-in-bihin-uwcim&Itemid=74&lang=bs

³ Model for systemic changes in secondary education: Crafting the new educational system in BiH. Open Society Fund BiH, 2002 and development of institutions and capacities in the educational system of Bosnia and Herzegovina, EU- ICBE, 2008.

civil society representatives. Secondary research of existing findings on this subject was carried out. This data was compiled from April to May 2010.

Limitations of the study include the short timeframe in which it was conducted, as well as the lack of timely responses from relevant institutions.

1. Students do not learn to *learn*

Considering that the teaching process in secondary schools in BiH is still based on the traditional approach of class lectures, this chapter will deal with the current situation regarding the modernization of teaching. Outdated teaching methods are based on the frontal work and lack of stimulation in terms of group interaction among students. Consequentially, there is a notable lack of motivation on behalf of students to attend classes and learn and a general passivity of youth in society. This chapter will therefore examine the necessity of introducing interactive teaching methods in secondary schools so that they become sources of contemporary knowledge and also strengthen students' social skills and self-confidence.

1.1. Outdated teaching methods

Despite the pressures on the education system to modernize, **secondary education still has not adopted the practice of teaching with innovative and interactive methods. These methods of didactics emphasize (1) *learning to learn* and (2) *the student as the most important teaching objective*.** On the contrary, the way didactics is carried out in most secondary schools in BiH is through the “frontal teaching”, where the focus in the classes is on the subject matter of curricula and teachers, and not on the students and their results in gaining the knowledge.

“Frontal-teaching approach, as well as memory reproductive learning, dominates in schools. The main reasons for this are the lack of adequate teaching tools and inadequate teacher training for to use modern classroom technologies.”⁴

Classes with interactive teaching methods that involve group work and innovative assignments (and thereby encourage discussions between students and teachers) are very rare. In BiH schools oral lectures are still prevalent. These lectures do not engage students in debate, nor do they use visuals or other tools to clarify certain areas. These are also the most common remarks by BiH secondary school students about their education system⁵ (see Table 1).

Professor Dr. Nenad Suzić from the Faculty of Philosophy in Banja Luka confirms that “*it is clear that our schools lack teaching methods through which we would develop and encourage social competences of children in an adequate way*”⁶. Also, the curricula themselves are outdated and inadequate. “*There is a lot of extensive learning about anything and everything, with very little practice,*”⁷ says Adnan Vehabović, the representative of the Association of high school students of BiH.

⁴ Strategic directions of education development in BiH with the agenda of implementation 2008 – 2015. *The Council of Ministers of BiH.*

⁵ Adnan Vehabović, president of the Association of high school students of BiH, interview, 18.5.2010

⁶ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006

⁷ Adnan Vehabović, president of the Association of high school students of BiH, interview, 18.5.2010

Table 1. Dissatisfaction of students and pupils with certain areas of their education (percentage of pupils and students between 15 and 29 years of age; includes replies of "Very dissatisfied" and "Dissatisfied")

	BIH	Small cities in BIH	Large cities in BIH
Quality of education	25%	27%	20%
Competence of teachers	23%	25%	21%
Technical equipment	38%	39%	37%
Practical teaching	37%	38%	33%

Source: The young need a youth policy - Analysis of the position of youth and youth sector in Bosnia and Herzegovina. GTZ, Commissions for the coordination of youth issues in BIH, 2008.

In addition, student assessment methods do not motivate students to achieve better results. 'The assessment system for students in secondary schools is subjective and flawed, which means that the criteria for assessment are not systemically established, nor do they meet educational needs'.⁸ Advisor for standards in education of the Agency for Preschool, Primary and Secondary Education, Jasminka Nalo, indicated that this issue is particularly highlighted in secondary vocational education: "It is a frontal-oral examination of students that is psychologically most difficult"⁹. She gave an example where within a given school year a teacher gave the lowest possible grade to most students in a single class.¹⁰ Professor Abdulah Kadić from Bihać said: "It is always done according to system: lecture – question. There is little conversation. - You know how professors behave: "Only God knows for an A, I know for a B and you know for a C."¹¹

Mladen Pandurević, a representative of the Association of employers of the Federation of BiH, particularly emphasized the knowledge deficit of students who attend vocational schools. This deficit is due to their theoretical knowledge of specific subjects and poor understanding of practical knowledge that should have been adopted during cabinet/classroom teaching. One evident obstacle to quality classroom teaching is poor equipment. An additional obstacle is the lack of knowledge and skills of teachers related to contemporary industry and labor market needs.

There are noticeable deficits in the practical training of students outside of school. However, even when good cooperation is established with the private sector to provide practical training, private firms are still unable to compensate for poor teaching results in schools. Therefore it is most important to increase the quality of teaching in schools.¹²

Ms. Nalo highlighted the poor results of recent *pilot* research conducted in several grammar schools in BiH. Students in their first year of secondary school, although presented with very

⁸ Jasminka Nalo, expert advisor of the Agency for preschool, primary and secondary education in BIH, interview, 17.5.2010

⁹ Jasminka Nalo, expert advisor of the Agency for preschool, primary and secondary education in BIH, interview, 17.5.2010

¹⁰ Sanja Lulo, expert advisor of the Agency for preschool, primary and secondary education in BIH, interview, 17.5.2010

¹¹ Abdulah Kadić, profesor MSŠ Bihać, intervju, 17.5.2010.

¹² Mladen Pandurević, representative of the Association of employers of the Federation of BiH, interview, 11. 05. 2010.

simple problems, had very poor results in terms of so-called functional literacy - the functional use of mother tongue, a foreign language, or basic computer programs (such as Microsoft Word).¹³ These findings were further confirmed by the focus groups organized for the purpose of this research. Students in the focus groups were asked in what areas they felt they were lacking knowledge and what skills are actually required for young people in the labor market? The students' answers from both focus groups were foreign languages, computer science, and the development of communication skills.¹⁴

The aforementioned shortcomings of the teaching process in secondary schools were also noted by focus groups for the 'Analysis of the position of young people and youth sector in Bosnia and Herzegovina for 2008' report. In addition to dissatisfaction with schools' technical equipment and practical training, the majority of young people consider that the curricula are overloaded and should be changed. Quoting the young people - *what is the benefit of poor education?*¹⁵

The current situation in secondary schools mirrors outdated teaching methods based on the "frontal" approach, ineffective evaluation and assessment practices, and inadequate school equipment, the consequences of which will be addressed in the next chapter.

1.2. Consequences of the outdated education process

The consequences of such defects in the secondary education system are reflected in the high drop-out rate of youth, their low motivation to learn, and their lack of willingness to actively participate in society, whether in local communities, the labor market, or further education.

*"The net enrollment rate in secondary education is 76.2 percent, and only 54 percent of students complete secondary school in the expected time period. Another problematic trend is the more than 20 percent difference between the enrollment and graduate rate of secondary school students."*¹⁶

"If a significant number of those who start school, never finish it, that suggests that something is significantly wrong in the functioning of that education system."¹⁷ This statement matches comes from one of the participants in the focus groups organized for the purpose of this study. A mother of a girl from secondary school in Dobož stated that the secondary education system in BiH is established in such a way that it encourages poor results of its performances).¹⁸

Additionally, the consequences are apparent in the low motivation of students to attend classes. The Ministry of Education of Republika Srpska registered over two million absences of secondary education students in that Entity during the 2008 to 2009 academic year.¹⁹

¹³ Jasminka Nalo, expert advisor of the Agency for preschool, primary and secondary education in BiH, interview, 17.5.2010

¹⁴ Focus groups for the needs of this research held in Zenica and Dobož, 14-15. 04. 2010

¹⁵ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, Commissions for youth issue coordination in BiH, 2008.

¹⁶ Compulsory secondary education in BiH: Ambience and prospects, CCI, Tuzla, 2010.

¹⁷ Pasi Sahliberg, director general of CIMO (National Centre for International Mobility and Cooperation), interview for Jutranji list, 24. 04. 2010 <http://www.jutarnji.hr/evo-zasto-mi-finci-imamo-nokiju--a-vas-nema-niqdje/736490/>

¹⁸ Focus groups for the needs of this research held in Dobož, 14-15. 04. 2010.

¹⁹ Ministry of education of RS, notice for public, Banja Luka, 1. 02. 2010

Young peoples' lack of motivation to attend school is due to the poor focus of education on labor market needs and low prospects for further education.²⁰ The following figures demonstrate that education is not linked to the labor market: 70.3 percent of the unemployed population is in possession of a secondary education degree,²¹ while 95 percent of the unemployed possess secondary vocational school qualifications and lower.²²

Furthermore, these negative implications extend to the willingness of youth to actively participate in society, whether in local communities, the labor market, or further education.²³ This is primarily related to the manner in which students are treated in secondary schools.

*"A student taught in the 'traditional' way for eight or nine years in elementary school, then an additional four years in secondary school, clearly could not have adopted the creativity and independence necessary for living a modern life - the student instead adopted submissiveness and obedience to authority."*²⁴

The cumulative activities of the secondary education system do not help create a productive workforce, development capacities or human resources, nor does it contribute to the transition of BIH to a modern democratic society. The consequences are demonstrated by the general passivity of youth, their extremely low participation in their local community's public life, the small number of youth who participate in the work of non-governmental associations or political parties, their poor motivation for volunteering or entrepreneurial activities, and the overall lack of trust by young people in the BIH political system.²⁵

*"High and long-term unemployment of those who have completed secondary education puts in question the applicability and adaptability of acquired knowledge for the labor market."*²⁶ The current curricula in secondary vocational education are not connected with contemporary working methodologies and techniques, such as those used in the automotive industry. The representative of the Association of Employers of the Federation of BIH explained that very poor results of theoretical and practical cabinet teaching are a consequence of poorly equipped schools, outdated curricula, as well as the incompetence of teachers. This is confirmed by the findings from the "Strategic directions for development of education in Bosnia and Herzegovina".²⁷

Even those students who wish to enter the labor market as soon as possible, and are trained for occupations that do not require large educational expenses (such as hairdressing or medical therapy), are unable to acquire practical training from vocational education.²⁸

Additionally, the low enrollment rate of young people in higher education (approximately 24 percent)²⁹ shows that secondary school students are poorly prepared for further education.

²⁰ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, Commissions for youth issue coordination in BIH, 2008.

²¹ Strategy of social integration of BIH. Directorate for European planning of BIH, 2009

²² Authors group, Education policy in BIH, Sarajevo, 2009

²³ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, Commissions for youth issue coordination in BIH, 2008.

²⁴ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006

²⁵ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, Commissions for youth issue coordination in BIH, 2008.

²⁶ Strategic directions of education development in BIH with the agenda of implementation 2008 – 2015. *The Council of Ministers of BIH*.

²⁷ Strategic directions of education development in BIH with the agenda of implementation 2008 – 2015. *The Council of Ministers of BIH*.

²⁸ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, Commissions for youth issue coordination in BIH, 2008

A public campaign on the introduction of compulsory secondary education is currently underway in BiH. The campaign promotes the need for children to continue their education as long as possible.³⁰ However **what is still missing is a public campaign addressing the need to improve the quality of secondary education**, which would make this matter a more prominent social issue, and would thereby affect youth to pursue education longer.

Surrounding countries are striving to achieve the European development goals, which includes creating a knowledge-based society, lowering the unemployment rate by raising education quality. BiH, on the other hand, is not doing much to catch up with its neighbors. The modernization of education is the solution to these problems, as will be illustrated in the next section.

1.3. What do we gain through modern teaching methods

Modern and interactive teaching methods enable students to think critically, analyze the work materials, and also draw conclusions while engaged in group work and discussions. These methods enable them to acquire knowledge easier and to better remember the learnt matter. Contrary to rote learning, knowledge gained by more active learning experience outlasts the grades received.

*"The syntagma learning to learn reflects the essence of the learning pedagogy, which differs from the pedagogy of teaching by the fact that it sets as a basic objective the development of students skills to easily and continuously learn, while the aim of the pedagogy of teaching had was primarily that student to master the content of the courses provided by the curriculum."*³¹

Professor of physics from the Faculty of Science and Mathematics in Sarajevo, Lamia Tanović, has recently witnessed a good practice and in reference to a classroom activity, she states that the students understood the Archimede's principles much easier by exercising an experiment performed with plasticine and containers of water, than by simply copying the formula from the board. She believes this to be true in all classes that are designed to make students *think*, same goes other subjects too: *"What does it mean to learn Hegel, if you don't know what Hegel wanted to say?"*³²

The advantages of this teaching method are obvious, as it encourages thinking while making learning fun, attractive and enlightening. ***"Learning in school will not be a bogey if children promoted it, and talked about it in a positive manner."***³³ According to the findings from Professor Dr. Suzić's work on this topic, students who learn interactively and cooperatively achieve better results than those who work individually. ***"Students that learn in small groups perform better academically and are more motivated to learn than those who work alone."***³⁴

²⁹ Strategic directions of education development in BiH with the agenda of implementation 2008 – 2015. *The Council of Ministers of BiH.*

³⁰ Compulsory secondary education in BiH: Ambience and prospects, CCI, Tuzla, 2010.

³¹ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006.

³² Lamija Tanović, professor at the University of Science and Mathematics in Sarajevo, interview 05/18/2010.

³³ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006.

³⁴ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006.

In addition, it was demonstrated that "*learning that takes place in organized and structured small groups serves to prevent peer conflict and many other social problems faced by adolescents.*"³⁵ Professor Kadić agrees that by encouraging interaction, the students are free to voice their opinions and have it acknowledged, which boosts their self-esteem. "*This reduces the possibility of students using drugs, drinking, or fighting after school hours.*"³⁶

One of the positive novelties in secondary vocational education was the modular teaching introduced in a large number of vocational schools in BIH. This allowed students to learn the material easier and therefore have better results. When a modular method of teaching is utilized bad results among students practically disappear.³⁷ This practice highlights the need for modernization of the overall education system in order to positively impact educational results.

These learning methods provide for a higher quality labor force. In addition, they encourage youth activism and positively affect students' motivation to learn and develop social skills.

2. Why BIH schools still lack innovative and interactive teaching methods

The modernization of curricula and introduction of innovative and interactive teaching methods positively influences students' social development by making learning easier.

Nevertheless, **there are no good schools without good teachers.** The central figures in the education system charged with implementing innovative and interactive teaching methods are teachers and professors. It is evident that in BIH secondary education there is a lack of professional knowledge about the performance of these teaching methods.

The causes of this situation are the lack adequate college education for teachers and professors (pre-service education) and additionally in the professional training for current secondary school teachers (in-service education). The remainder of this document will therefore address and analyze the causes of these issues: (1) university education of teachers and their professional development during their career; (2) inadequate institutional support (which causes the lack of coordination between relevant institutions), financial and staff capacities necessary to meet the educational needs of teachers, as well as evaluation of education quality.

2.1. Initial training of teachers („Pre-service“)

³⁵ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006.

³⁶ Abdullah Kadić, a professor of electrical secondary school and wood processing school in Bihać, interview, 5.17.2010.

³⁷ Sanja Lulo, professional advisor of the Agency for Preschool, Elementary and Secondary Education in BIH, interview, 17/5/2010.

Despite the aforementioned advantages of modern teaching methods over traditional ones, the professors in BiH secondary schools rarely used them. **One reason is that pedagogical education in BiH universities does not reflect modern pedagogical methods, meaning it poorly instructs teachers.** *"For years, teachers were taught this model with only symbolic knowledge about group work, interactive teaching methods, and its effects."*³⁸

The young staff in BiH universities studying to work as educators do not receive sufficient practical pedagogical knowledge. Mirela Bajramović, senior student of the Pedagogical Faculty in Zenica, will receive her diploma to be a professor of the English language in a few months. She asserts that students enter classrooms methodically unprepared. They are facing great difficulty coping with basic methodology regarding class preparation and teaching, which consequently frustrates them, the students, and the parents.³⁹ *"It is a closed circle. We produce defective teaching staff that educates students in secondary education and then those students when they graduate from those schools arrive at university unprepared. This circle must be intercepted somewhere."*⁴⁰

Besides the quality of theoretical teaching at BiH's faculties, an additional problem is the insufficient use of practical work, in which all the students trained to work in education should participate. This includes visiting schools and performing test classes. **Practical work in faculties is generally very poor – at some places it does not even exist.** Instead of universities being sources of good teachers, it is the incompetence of new professors that often presents problems to school management.⁴¹

According to Edina Suljić, assistant at the University of Tuzla, the system of coordination between the ministry, pedagogical institutes, faculties, and schools regarding the practice of future teachers is a complete failure. She said she infrequently comes across students **from pedagogical faculties that face problems executing the required hours of practical teaching with students. They thus depend on the ability of university assistants to organize these classes with schools.**⁴² This approach prevents future teachers from effectively learning the basic elements of the organization of teaching and working in schools. "During my four year study period, only three times did I have the opportunity to visit a teaching-staff room and see an attendance book," says Suljić about her recent faculty days.⁴³

Poorly equipped faculties make it difficult to prepare teaching staff to use interactive teaching methods. *"Faculties do not motivate future teachers to use modern methods in teaching. Our schools are usually not equipped for these methods and the point is; that if there are no computers in schools, we do not need them at the faculty either."*⁴⁴ This shows the fact that **"in terms of overall equipment, higher education institutions are in the worst condition (lacking modern material and literature, computer equipment, laboratories, etc.). The situation is even worse for teachers' faculties."**⁴⁵

³⁸ Suzić, Nenad. Didactics at the crossroads of centuries. *Didaktički putokazi (Didactic directions)*, 39, 7 -17. Zenica, 2006.

³⁹ Mirela Bajramović, a student at the Pedagogical Faculty in Zenica, 21.05.2010.

⁴⁰ Lamiya Tanović, professor at the University of Science and Mathematics in Sarajevo, interview, 05/18/2010.

⁴¹ Jasminka Nalo, professional advisor of the Agency for Preschool, Elementary and Secondary Education in BiH, interview, 17/5/2010.

⁴² Edina Suljić, an assistant at the University of Tuzla, interview, 10.5.2010.

⁴³ Pisker, Lidija. Professional development of teachers in BiH: From promises to ensuring quality teaching in classrooms. *Open Society Fund* in BiH, 2010.

⁴⁴ Nenad Veličković, assistant at the University of Sarajevo, 18.05.2010.

⁴⁵ Strategic directions of education development in BiH with the agenda of implementation 2008 – 2015. *The Council of Ministers* of BiH.

An additional problem faced by secondary schools regarding teacher employment is that their teachers come from non-teaching faculties, such as a technical or specific discipline faculty, who are going into service in secondary vocational schools, and as such they lack adequate preparation to teach professionally.⁴⁶ If graduates of non-teaching departments (e.g., biology) want to receive the title of professor in the field they studied after graduating, they are required to pass a group of educational courses. Taking these exams is usually a formality and they rarely manage to train future teachers to conduct quality teaching.⁴⁷

Therefore, new teachers arrive unprepared to face their future students and use modern teaching techniques, because university education for future professors provides inadequate theoretical knowledge and insufficient pedagogical practice.

2.2. Professional development of teachers (In-service)

In addition to the observed issues with university education for future teachers, part of the problem also lies in inadequate professional development of current teachers. The information from a series of strategies and documents developed in BIH in the last decade suggests an alarming situation. The analysis of Strategic directions of education development 2008 to 2015 shows that teacher training is not standardized. *"They are not systemically licensed as professionals in their field, nor are there financial and other instruments to stimulate improvement of their quality of work based on competition."*⁴⁸

However, although RS has attempted to introduce licensing of teachers as a condition for progress in the profession, the professional development situation in the rest of the country has not changed much.

Pedagogical institutes and ministries of education, as institutions responsible for the professional development of teachers in BIH, **organize professional training programs that are not often based on the actual needs of secondary school professors, who therefore fail to develop new skills.**⁴⁹ The reasons behind the situation are the lack of skilled staff in relevant institutions as well as overlapping jurisdiction (which will be analyzed further in the section addressing the lack of capacity in institutions in charge of education).

The nine pedagogical institutes (one in the Republic of Srpska, one in the Brčko District and seven in the Federation) do not cover the entire territory of BIH.⁵⁰ Teachers in the cantons where pedagogical institutes are not active often do not have the opportunity to attend skill-developing seminars. Due to the insufficient number of professional consultants, not even all teachers active

⁴⁶ Strategy of professional development and training in BIH, 2007-2013. The *Council of Ministers in BIH*, 2007. Edina Čubela, VET Coordinator of GTZ Project in BIH, 29/4/2010, Mladen Pandurević, a representative of the Association of Employers of FBiH, 05/11/2010, Edina Suljić, an assistant at the University of Tuzla, 10.5.2010.

⁴⁷ Pisker, Lidija. Professional improvement of secondary school professors in BIH: From the promise to implementation of quality teaching in classes. *Open Society Fund* in BIH, 2010.

⁴⁸ The Council of Ministers in BIH, 2008.

⁴⁹ Pisker, Lidija. Professional improvement of secondary school professors in BIH: From the promise to implementation of quality teaching in classes. *Open Society Fund* in BIH, 2010.

⁵⁰ Srednjobosanski, Zapadnohercegovački, Posavski kanton i Knaton 10 neamju vlastite pedagoške zavode. Central Bosnia, Western Herzegovina, Posavina Canton and Caton 10 do not have their own pedagogical institutes.

in cantons where ministries or pedagogical institutes organize training programs are covered by this service.

When it comes to teachers' motivation for further professional development, they are eager to learn. ***"If teachers are offered a good training method, there is great motivation for teaching staff to participate in those workshops and subsequently apply experience gained in practice,"*** says Edina Čubela from GTZ.⁵¹ Edina Suljić, an assistant at the University of Tuzla, gave the same assessment, indicating that teachers are interested in further professional development, but pedagogical institutes simply can not provide adequate service to cover the needs of primary and secondary school staff.⁵²

Alongside these programs, other institutions, such as certain non-governmental associations in BiH, organize professional trainings for high school teachers. Their experience speaks to the interest of teachers in further education, because teachers gladly attend and recognize these trainings as useful and compatible with their professional needs.

Experiences of the Center for Professional Development on the Initiative of the UWC and the Organization for International Baccalaureate (UWC-IB initiative) indicate that secondary school teachers are very interested in participating in interactive educational programs.⁵³ Through the training offered throughout the academic year for teachers of all subjects, the Center actively works to improve the competency of secondary education teachers in using modern technologies, and teaching in accordance with the IB programme. Furthermore, another example of good practice is Civitas BiH. Civitas introduced a program that certifies secondary schools on the subject of Democracy and Human Rights. This program has trained over 350 teachers across the country. Teachers that participated in these trainings evaluated them very positively, because they improved their teaching ability, especially because there is no specialized field at BiH universities devoted to this specific topic.⁵⁴

3. Is there institutional support for professional training of teachers?

The key cause of the lack of adequate pre-service education for teaching staff, as well as further professional development, rests in the deficit of institutional responsibilities of ministries and

⁵¹ Edina Čubela, VET Coordinator of GTZ Project in BiH, interview, 29/4/2010

⁵² Edina Suljić, an assistant at the University of Tuzla, interview, 10.5.2010.

⁵³ UWC Initiative and the Organization for International Baccalaureate (UWC-IB initiative) in BiH founded the Center for professional development of teachers in BiH in 2006. Through the training for teachers provided during the school year from all subjects, the Centre is actively working to increase the competence of BiH secondary school teachers to use modern technology in teaching and practice in accordance with the International Baccalaureate program. Evaluations of participants at the seminars of this organization show that professors are very interested in participating in such interactive educational programs. Pisker, Lidija. Professional training of secondary school teachers in Bosnia: From promise to implementation of the quality teaching in classrooms. Open Society Fund BiH, 2010.

⁵⁴ Pisker, Lidija. Professional training of secondary school teachers in Bosnia: From promise to implementation of the quality teaching in classrooms. Open Society Fund BiH, 2010

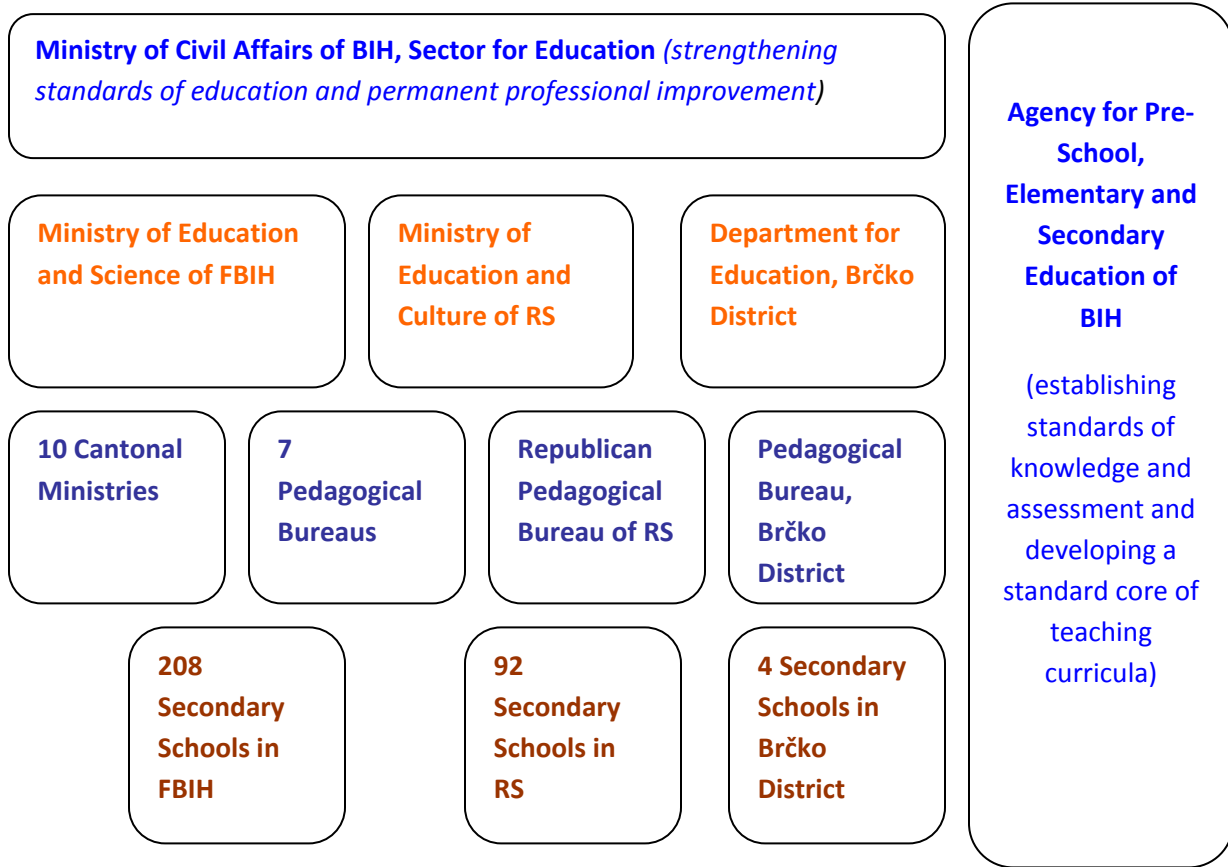
pedagogical institutes in BIH. These institutions have the obligation to strengthen the quality of the teaching process within the secondary education system (see Figure 1. for competence).

However, the overall operation of the system consisting of ministries, agencies, pedagogical institutes, universities, and secondary schools in BIH shows that adequate professional training for teaching staff still does not exist. Despite the presence of a large number of institutions, **a schema for further teaching staff education has still not been developed. Furthermore, the needs of teaching staff have not been analyzed, the catalogue defining necessary skills and knowledge (which should be available to employees in the secondary education system) has not been developed, nor is there adequate in-service training.**

There are numerous reasons for the lack of appropriate service. The education system suffers from a lack of capacity, inadequate use of non-institutional capacities,⁵⁵ lack of financial resources, poor planning, and a lack of cooperation and coordination between existing institutions. In this regard the governments, at the cantonal level in FBIH and entity level in RS, are responsible for defining priorities for necessary resources, as ministries at these levels have the greatest budgets and the main jurisdiction over the educational system. In addition, the lack of both evaluation of the secondary education system and social dialogue, primarily at the local level, further reduces the possibility for improvement of the quality in secondary school education. The next section will examine each of these points separately.

⁵⁵ This refers to all other organizations that are not ministries and institutes, such as nongovernmental associations, vocational associations, universities, international organizations and private firms, that offer certain programs of professional improvement for secondary school teaching staff.

Figure 1.: The institutions responsible for improving standards of education, developing curricula, and professional training in Bosnia and Herzegovina



Source: Website of institutions and Agency for Statistics of BIH⁵⁶

3.1. Issue of coordination among responsible institutions

⁵⁶ Ministry of Civil Affairs: http://www.mcp.gov.ba/Default.aspx?template_id=35&pageIndex=1, Ministry of Education and Science in BIH: <http://www.fmon.gov.ba/index.php>, Ministry of education and culture of RS: <http://www.vladars.net/>, Ministry of Education and Science of the Canton of Sarajevo: <http://www.monks.ba/>, Ministry of Education, Science, Culture and Sport of Tuzla Canton: <http://www.vladatk.kim.ba/Ministarstva/MONKS.htm>, Ministry of Education, Science, Culture and Sport of Zenica-Doboj Canton: <http://www.zdk.ba/>, Ministry of Education, Science, Culture and Sport of Bosna-Podrinje Canton: <http://www.bpkgo.ba/>, Ministry of Education, Science, Culture and Sport of Una-Sana Canton: <http://www.vladausk.gov.ba/>, Ministry of Education, Science, Culture and Sport of Central Bosna Canton: <http://www.sbk.ksb.gov.ba/>, Ministry of Education, Science, Culture and Sport of Posavina Canton: <http://www.zupanijaposavska.ba/>, Ministry of Education, Science, Culture and Sport of Western Herzegovina Canton: <http://www.minpro-zzh.gov.ba/>, Ministry of Education, Science, Culture and Sport of Herzegovina-Neretva Canton: <http://www.mpzks-hnz.gov.ba/>, Government of Brčko Distrikt: <http://www.bdcentral.net/> and Statistics of BIH 2009. Agency for statistics of BIH, 2009.

One of the system's weaker links is the institutional relationship between the responsible ministries and the scientific research community at universities that can help with these reform procedures, furthermore between the nine pedagogical institutes, both between themselves, the ministries, the universities and the schools. The majority of communication and cooperation with the scientific research community occurs on an ad hoc basis, even though the education system is under great pressure to improve the quality of teaching.⁵⁷

During this research, the cooperation between existing pedagogical institutes in BIH was found to be weak. This deficit is reflected in the poor information flow and cooperation between these institutes, particularly in terms of exchanging experiences and best practices. Although the practice of exchange between expert advisers exists, cooperation and networking between pedagogical institutes are limited and depend on the needs of individual institutes. **Cooperation would help to utilize the expertise of various institutes and also reduce the costs of the activities carried out by the institutes themselves,** as stated by Alisa Ibrakovic, Deputy Director of the Agency for Pre-School, Elementary and Secondary Education.⁵⁸

The same opinion was expressed on a conference in February 2008 as part of the UWC-IB initiative in Bosnia and Herzegovina. Representatives of participating pedagogical institutes concluded that it is necessary to establish a better system of information, especially in the field of teacher training. Following the example of the "conference of ministers," the formation of a „conference of pedagogical institute directors" was proposed. However, following this meeting there was no further initiative to realize this idea.

Additionally, there is a weak connection between pedagogical institutes and the academic science and research community. Strengthening such cooperation would improve professional training, both for existing secondary school staff and for those still at university preparing to become teachers. The cause of the lack of cooperation is in part due to financial concerns; a significant increase in the funds allocation for scientific research activities and to the institutions themselves is necessary.

Coordination between the ministry, pedagogical institutes, faculties, and school regarding everyday matters, such as professional and practical training of future secondary school teachers, has been largely unsuccessful. Due to the lack of cooperation between these institutions, no institutional information sharing has been developed, nor has there been an exchange of best practices and other materials necessary for professional development. As a result of weak interaction with the scientific community at universities, most pedagogical institutes have no record or analysis of the needs of their teaching staff or the major problems with teacher education. The schema for further education of teaching staff has yet not been developed. Another consequence is that proper guidelines have not been created by pedagogical institutes for faculties in order to improve the initial training of future teachers.

3.2. The issue of institutional capacity

The responsibility for reform policy implementation falls primarily on the thirteen ministries of education in BIH. Noteworthy is that during this research phase no documents related to the introduction of innovative and interactive teaching methods in secondary education were found in the ministries. This indicates that no great importance is given to this issue. The development of

⁵⁷ Nenad Suzić, a professor at the University of Banja Luka, interview, 05.13.2010.

⁵⁸ Alisa Ibraković, deputy director of the Agency for Preschool, Elementary and Secondary Education in BIH, interview, 17/5/2010.

documents related to professional teacher training contributes to a better understanding of the situation and provides guidance on how to improve it. It appears as though the relevant ministries at the RS and canton levels systemically fail to operate in this field. The Ministry of Education of Tuzla Canton has come to offer professional training for educational staff in pre-, primary and secondary schools. This is the beginning of good practices in BiH.⁵⁹

"If the ministry does not hold the view that certain reforms are needed, then they will not be implemented. In this sense, the influence of ministries is perhaps too present in education, but is decisive."⁶⁰

According to the existing legal framework, pedagogical institutes are responsible for training teaching staff. However, this places the institutes in a difficult position. Through a series of interviews **it was determined that institutes are overwhelmed by their current responsibilities, which include (1) providing support and consulting for schools to develop teacher competence and (2) playing the role of a supervising authority over the work of teachers.** Faced with a small, albeit knowledgeable, staff these institutions simply have too much work.

This suggests that regardless of their employees' expertise, pedagogical institutes cannot provide adequate service for the needs of their staff.⁶¹ No educational institution has professional advisers for every subject. Due to the lack of consultants, seminars and workshops are organized only for teachers of certain fields, while others rarely get this opportunity.

This is also confirmed in the 'Development strategy of education in BiH':

*"Existing pedagogical institutes perform various tasks: developing of curricula, introducing new approaches and methods in the educational process, conducting teacher training, inspecting and evaluating teachers and schools, etc. Professional supervision dominates the work of most institutes, while support for improvement of quality in education is pushed aside. Since the functions of the institutes are not precisely defined, their functions often overlap with those of ministries of education."*⁶²

Also, the 'Strategy of vocational education and training in BiH' asserts the following:

*"Pedagogical institutes usually perform supervisory function in the schools of professional education and training, and very little or almost never work on the development of curriculum, setting and developing standards, external evaluation and assessment, professional improvement of teachers."*⁶³

All nine institutes struggle with shortages of skilled staff able to conduct training programs. A pedagogical institute in Canton Bosansko-Podrinjski has had only one employee for twelve years - the director. Although teachers in this canton formally have a Pedagogical institute, they do not have the opportunity to attend seminars and trainings that would encourage them to adopt interactive teaching methods.

It is a challenge for advisers and consultants of pedagogical institutes to be responsible for both training and supervision of teachers. **Advisors should specialize in one of the two areas in**

⁵⁹ Edina Suljić, an assistant at the University of Tuzla, interview, 10.5.2010. Izet Numanović, professional advisor of the Pedagogical Institute Tuzla, interview, 13.5.2010.

⁶⁰ Nenad Suzić, a professor at the University of Banja Luka, interview, 05.13.2010.

⁶¹ Edina Suljić, an assistant at the University of Tuzla, interview, 10.5.2010

⁶² Strategic directions of education development in BiH with the plan of implementation 2008-2015. The Council of Ministers of BiH, 2008.

⁶³ Strategy of development of professional improvement and training for BiH 2007-2013. The Council of Ministers of BiH, 2007.

order to see the greatest improvement.⁶⁴ There is also a need for advisors to specialize in more than one subject, though they should be closely related. This would allow for more training courses to be held.⁶⁵

According to the interview,⁶⁶ these institutions should be sources of knowledge and skills related to teacher improvement and secondary school quality, yet this is not the case. **In order to advance their role and become the true bearers of change, given the overlapping functions within a single institution, an organizational transformation of these institutions is necessary.**

The institutions have also failed to take advantage of numerous non-governmental and international organizations that can provide professional development services for teachers in BiH. This potential NGO capacity could be used by ministries of education through the process of accreditation of the programmes that they offer. This should be implemented by way of creating catalogues of professional training programs. This would institutionalize efforts of the non-governmental sector to improve teacher competency. However, above all there is a lack of effort on behalf of the responsible ministries to initiate these processes.

Following the Slovenian example, the Ministry of Education of Tuzla Canton should publish a **catalogue offering professional training** for educational workers in pre-school, primary, and secondary education. It would be **a source of information about the programs offered by not only pedagogical bureaus, but also non-governmental organizations, professional associations, and universities.**

On the other hand, the pedagogical institute in Tuzla believes that this would be a premature step, as no thorough preparation has been carried out. Senior advisor at the pedagogical institute in Tuzla, Izet Numanović, states **that professional development topics should be based on clearly established educational standards.**⁶⁷ These standards should define the conditions under which the realization of the aforementioned topics is to be carried out.

Nevertheless, Numanović believes that this project would mark significant progress in the field of professional development of teaching staff and innovation in the teaching process.

An best practice example is the professional development of teachers in the Republic of Slovenia. The State Ministry of Education is responsible for professional training, while the national Bureau of Education organizes and coordinates the trainings. All professors are obligated to attend these training programs for a period of five days.

The State Ministry of Education annually publishes a public tender with the announced topics of the trainings. A public tender is organized in order to find the best training programs from different providers. The Ministry

⁶⁴ Pisker, Lidija.

⁶⁵ Jasminka Nalo, professional advisor of the Agency for Preschool, Elementary and Secondary Education in BiH, interview, 17/5/2010.

⁶⁶ Jasminka Nalo, professional advisor of the Agency for Preschool, Elementary and Secondary Education in BiH, interview, 17/5/2010.

⁶⁷ Izet Numanović, professional advisor of the Pedagogical Institute Tuzla, interview, 13.5.2010.

determines and selects the appropriate training program based on certain criteria. Compliance with education standards requires the following: applicable training content in the classroom, content quality, recommendations for training programs provider, etc. Once these training programs are selected and approved by the Ministry of Education, they are published in catalogue form. The catalogue lists the training programs offered by the Bureau of Education and university, and also those offered by international organizations and private firms. Based on the expert council assessment, select training and professional development programs are partially or fully funded by the Ministry of Education. Information on these programs is published in a special electronic catalogue at the beginning of each school year so that teachers may choose which programs to attend.

Certain types of training programs are required for all teaching staff, while teachers are also free to choose additional training they want to complete. Training programs provide teachers with new career opportunities.

68

3.3. The financial issue

Noted during this research was the need for increased financial investment in professional training for teaching staff, as was as **the need for better activity planning so that these funds are used efficiently**. In the given environment of a fragmented education system, where resources allocated for the system as a whole are insufficient, and therefore the *"funds for education and training of teachers and school management are insufficient."*⁶⁹

*"Every reform has its price, so there is a need for increased financial allocations for certain segments and purposes in education, such as secondary vocational education and training or improvement of the quality of education and, where possible, investments in non-formal education."*⁷⁰

Bosnia and Herzegovina allocates significant funds compared to total budget expenditures -- four percent in RS, six percent in FBiH, and 11.2 percent in the District Brčko.⁷¹ Of the total money set aside for education, eighty-eight percent is spent on teacher salaries and other education employees, eight percent on material costs, and only four percent on capital investment.⁷² This leaves little leftover for capacity-building in secondary schools. The following information speaking to the inefficiency of the education system should also be considered:

"Funds for salaries and benefits are planned according to the number of employees, taking into account pedagogical standards and the number of departments and classes. This is contrary to the basic European trend which depends on the number of students."

Practices should be adjusted as soon as possible to accommodate falling birth rates and the declining number of school children and youth. For instance, a new network of primary and secondary schools should be developed, and the savings achieved on this basis should be used for other purposes. Compared to the European average, BIH already has too many

⁶⁸ Pisker, Lidija. Professional improvement of secondary school professors in BIH: From the promise to implementation of quality teaching in classes. *Open Society Fund* in BIH, 2010.

⁶⁹ Strategic directions of education development in BIH with the agenda of implementation 2008 – 2015. *The Council of Ministers* of BIH.

⁷⁰ The Youth Needs a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, *Commissions for youth issue coordination in BIH*, 2008.

⁷¹ Strategy of social integration of BIH. Directorate for European planning in BIH, 2009.

⁷² Strategy of social integration of BIH. Directorate for European planning in BIH, 2009.

classes and teachers relative to the number of students (in EU 1:20, 1:14 in Bosnia in primary school), which means a large and unjustified spending per pupil. "⁷³

The last fact explains the inefficiency of the education system in BiH, because the ratio of staff to students is very high compared to EU standards. According to several interviews conducted for this research, it seems that the secondary education system in BiH is perceived more as an unemployment social security which secures job positions for superfluous teaching staff, rather than an efficient and effective system that provides a socially useful service. This is demonstrated by the following information from the FBiH Government:

"For the period between from 2003 to 2008, the total number of secondary school students declined by 8.26 percent. The number of teaching staff in secondary schools for the period 2003 to 2008 increased by 4.95 percent , despite the declining number of students and classes." ⁷⁴

This structure of education spending leaves little room to further invest in the professional improvement of teachers, educational material, and other measures, such as additional scientific research.

Lack of funding for capacity building of teaching staff and improvement of the quality of secondary education, such as bureaus, agencies and ministries is a the problem faced by all institutions.

For example, the representative of the Agency for Pre-School, Elementary and Secondary Education, Mrs. Ibraković, said that the Agency has good human resources and knowledge, but its main obstacle is a lack of funds to strengthen their activities. The Agency has initiated activities for the Programme for International Student Assessment (PISA) survey⁷⁵, but is still facing a basic issue – securing financial resources. The cost for participation of BiH in this activity is 160,000 Euros over four years. While the Agency was able secure fifty percent of this amount from donor funding, the remainder remains to be secured, and thus activities in this direction have been initiated.

In addition, the Agency does not have sufficient financial resources to improve cooperation between the scientific research community in BiH and the institutions. The Agency cannot even afford to cover the travel expenses and per diems of external experts, who would significantly contribute to its work.

Pedagogical institutes are in a similar situation. There are not enough funds to **compensate external experts, which may present the biggest stumbling block to encourage cooperation between institutions and universities.**

The weak level of activity in terms of systemic training of teaching staff is also caused by **poor planning for the use of financial resources.** In the so-called treasury system operations at the level of two entities and cantonal level of government in BiH, there is a need for better activity planning. It is because if the activity is not announced to the treasury in a timely manner no funds will be made available for it. Although the treasury system for these government levels was introduced few years ago, activity planning remains a weak spot in the administration. This

⁷³ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina.* GTZ, Commissions for youth issue coordination in BiH, 2008.

⁷⁴ The Government of FBiH accepted the information on the state of secondary school education in FBiH 21.01.2009, Internet presentation of the Government of FBiH, http://www.fmon.gov.ba/index.php?option=com_content&task=view&id=192&Itemid=1

⁷⁵ The Programme for International Student Assessment (PISA) is an internationally standardised assessment.

also relates to the improvement of education quality, due to the existing practices transferred from the administration of the socialist period. Relevant ministries, at the level of entity in RS and the Cantons in FBiH, have the greatest responsibility over budget planning, as they have constitutional authority over most of the budget allocated for education in BiH. Planning the use of resources could be improved through cooperation with the Ministry of Education from an EU member state through the 'Twinning'⁷⁶ program. The Ministry of Civil Affairs of BiH and its Department of Education could be the focal institutions. Presentations, training, and transfer of instruments can be done through cooperation with ministries at the entity and cantonal level, including the department of education of District Brčko.

There are also exceptions that demonstrate the efficient use of the education budget. One such example is the government of the RS. Despite the great pressures on budgetary resources, the Ministry of Education and Culture of RS managed to save over nine million BAM last year. These funds will be spent on computer literacy training for teaching staff.⁷⁷

Planning and programming presents the opportunity for the overall public administration in BiH to become more efficient in its use of financial resources, including numerous educational institutions. However, weak administrative capacity, in this case, directly affects the training system for teaching staff, which in turn negatively affects the quality of secondary school education and its results. The following statement should be emphasized: **"Good education systems are effective and efficient. This means that the financial and human resources are wisely used and can therefore produce good results."**⁷⁸ Therefore, the logical recommendation for the overall education system is to continuously reform to achieve better results. Part of the necessary steps in achieving better results relates to the establishment of greater financial efficiency in regards to professional development of secondary school teaching staff. However, while this is not the focus of this work, it should be emphasized that financial saving should not come from cutting salaries for necessary teaching staff.

Recommendations for ways to improve the efficiency and effectiveness of the professional development system includes the creation and implementation of an action plan at certain administrative levels for training of secondary school teaching staff (such as at the level of Cantonal nine). 'Plan of action in the field of training the teaching staff in secondary schools' must: meet the so-called 'SMART' goals (those that are specific, measurable, attainable, realistic, and timely); include ways to implement the program; have an institution responsible for implementation; meet general, financial, material, spatial, and other requirements for implementation; address the needs and problems of the program identified by professional research; include methods for motivating the teaching staff; and provide for supervision and monitoring of program implementation. Such activities should result in a public document that precisely defines the roles, responsibilities, and deadlines for implementation of relevant stakeholders in the process. This would improve institutional accountability and financial efficiency of institutions responsible for this field.

⁷⁶ The Twinning program is one of the principal tools of Institution Building accession assistance. Twinning aims to help beneficiary countries in the development of modern and efficient administrations, with the structures, human resources and management skills needed to implement the *acquis communautaire* to the same standards as Member States.

⁷⁷ The Government of RS, information for media, May 6th 2010. <http://www.vesti.rs/Ekonomija/Proslogodisnje-ustede-vece-od-devet-miliona-maraka.html>

⁷⁸ Pasi Sahlberg, director general of CIMO (National Centre for International Mobility and Cooperation, interview for *Jutarnji glasnik*, 24.4.2010. <http://www.jutarnji.hr/evo-zasto-mi-finci-imamo-nokiju--a-vas-nema-nigdje/736490/>

3.4. Issues of research and development

Involving the scientific research community is necessary for: investigating the needs of the teaching staff; creating new teaching methods; developing innovative workshops and assessment of students; developing exercises that involve group work and interactive learning; promoting teaching methods emphasizing the “**learning to learn**” process; as well as creating good teaching practices.

However, BiH is the South-Eastern European country with the lowest rate of spending on research and development. Overall, less than 0.1 percent of GDP is allocated for this purpose. BiH is also the South-Eastern European nation with the lowest number of published scientific articles.⁷⁹

On the other hand, cooperation with the research community in the regions as well as EU is weak, despite numerous opportunities for university scientist and academics. **When compared to other countries in South-Eastern Europe, BiH scientific staff currently uses the lowest amount of scientific funds at the EU level.**⁸⁰

Aside from the occasional scientific journal issued in BiH, such as “Didactic direction” published by the pedagogical institute in Zenica, the overall activity of the scientific and research community in the field of strengthening teaching capacity is rather weak. Edina Čubela assesses the current situation in the field of scientific research to be poor and recommends *the establishment of a separate “scientific-research institute for the professional development of teaching staff,” whose activities should cover entire territory of BiH.*⁸¹

In regards to introducing innovative and interactive teaching methods in secondary education, **there is a need for increased efforts in the field of scientific research that would contribute to developing competencies of both current teaching staff and those preparing to be teachers.**

3.5. Issues of teaching quality evaluation

A well-established statistical system and external school evaluation system is necessary to adequately evaluate teaching quality. **A statistical system to assess the state of secondary schools still does not exist in BiH.**

“Modern methods and the appropriate institutions for the development of standards have, evaluation and assessment of skills and abilities of students on the basis of competence during and at the end of education need to be developed in order to secure quality in the entire education system in Bosnia and Herzegovina, especially so in the field of vocational education and training. None of this has been developed. Also, the system of issuing certificates and diplomas is not based on external evaluation of student achievements.”⁸²

⁷⁹ Bajrović, Reuf. Education policy in BiH, SDP BiH. Unpublished, Sarajevo, 2009.

⁸⁰ Čosić, Emina. Learning through Action – Review of the process of accession of BiH to the Community Programs: Lifetime learning and Young in Action. ACIPS, 2010.

⁸¹ Edina Čubela, VET Coordinator of GTZ Project in BiH, 29/4/2010.

⁸² Strategy of development of professional improvement and training for BiH 2007-2013. The Council of Ministers of BiH, 2007.

*"Reporting and monitoring of the effectiveness of education expenditures in accordance with international standards at local, cantonal, and entity level is underdeveloped, and financing on the state level is almost nonexistent. One of the obstacles for this situation is the lack of statistical data and indicators about education. Educational authorities should, in collaboration with statistical agencies, at all levels work on developing statistics of education in accordance with procedures and requirements of the European Commission and EUROSTAT. This would secure useful input parameters for the development of the purposive program."*⁸³

One method of externally evaluating teaching is through international assessments. Through international research countries can compare results and evaluate achievements. The TIMSS⁸⁴ research, conducted in 2007, evaluated the competency in mathematics of students in their final year of primary education. The Agency conducted a secondary analysis based on TIMSS results and compared them with other countries in the region and EU Member States. The findings revealed that children in Bosnia and Herzegovina are far behind children from other South-East European countries. The agency has given recommendations for improving teacher competence in mathematics, and a series of seminars will be held during 2010.⁸⁵

Additionally, the Agency has attempted to establish standards for quality assessment of teachers in preschool education. It has also initiated several activities regarding standardized evaluation of students competency based on a cross-country examination in mathematics, mother tongue, and natural sciences. Representatives from the **Agency emphasize that the external evaluation of schools, monitoring, and comparison of trends is crucial for understanding teaching results.**⁸⁶

The current evaluation of teaching staff quality is inadequate. Currently the evaluation is carried out by counselors or teachers that visit classrooms once or twice a year. The evaluation should therefore be conducted through questionnaires and analysis. This would provide concrete recommendations on how to improve the current situation and help monitor trends.⁸⁷

Mrs. Ibraković stated that the Agency will cooperate with agencies of countries in the region with the aim of establishing regional external evaluation and assessment of schools. This would utilize existing expertise and thereby reduce costs for all countries involved.

Although certain steps have been taken towards evaluating the educational system in BIH, these activities should be improved as soon as possible.

If there is no high-quality statistical data or status indicators in secondary education, trends cannot be monitored, nor can high-quality public policies be developed. As a result, policy implementation cannot be monitored, nor can necessary changes be made based on the evaluation a particular program.

⁸³ The young need a youth policy - *Analysis of the position of young people and youth sector in Bosnia and Herzegovina*. GTZ, Commissions for youth issue coordination in BIH, 2008.

⁸⁴ TIMSS is the international comparative analysis of the knowledge of students from Mathematics and Sciences. BIH was the last places European country in 2007.

⁸⁵ Alisa Ibraković, deputy director of the Agency for Preschool, Elementary and Secondary Education in BIH, interview, 17/5/2010.

⁸⁶ Alisa Ibraković, deputy director of the Agency for Preschool, Elementary and Secondary Education in BIH, interview, 17/5/2010.

⁸⁷ Alisa Ibraković, deputy director of the Agency for Preschool, Elementary and Secondary Education in BIH, interview, 17/5/2010.

4. Social Dialogue

Strategic documents on education in BIH highlight the lack of appropriate social dialogue, especially between employers, ministries, and educational institutions.⁸⁸ Dialogue is necessary in order to improve the quality of the education system.

The link between the secondary educational system, unemployment, poverty, and overall social status of the population influences first and foremost the local communities. Once young people complete education, their impact on society is multiplied. However, **local communities lack the appropriate social dialogue** needed to resolve secondary education issues, **especially between student councils, parents, local governments and relevant institutions.**

Bihać is a positive example of social dialogue at the local level. One high school's student council launched a campaign initiative at the beginning of 2010. In this campaign, they wanted to alert the relevant ministry about the poor condition of their school building and inventory and have them improve working conditions. The campaign was titled, 'We are second-class students'.⁸⁹

"Since 1956, financial resources have been invested in this school,"⁹⁰ says Aida Kartal, the school director. Representatives of the student council provided the mayor with everything they recorded, and their intention was to boycott classes and demonstrate through calm protests the harsh circumstances under which they attend school. As a result, the mayor organized a meeting with the directors of elementary and secondary schools from the municipality to discuss the status and need for normal working conditions and express complaints and concerns about the equipment in schools. This has led to the allocation of more funds from the Una Sana cantonal government level.

Unfortunately this practice is not widespread throughout BIH. In addition, **local governments do not recognize the importance of defining investment priorities in secondary schools that correspond with the needs of human resources development and local development plans**, although they have discretionary power to do so. For example, more effective investments would enable secondary schools to offer quality services to the community and therefore create human resources necessary for the development of those communities, to obtain a portable computer or projector with the municipal budget. Current practices ignore this potential for assistance.

Also, **high schools have the discretion of twenty-five percent to decide on forming the curriculum on their own.** Local governments do not provide guidelines for schools to meet the needs of local communities, because of the low participation of both parents and students in decision-making.

Finally, students and their parents use the service provided in secondary schools. Focus groups organized for this study showed that parents become involved in school activities only when it comes to additional funding needed to exercise certain school activities. In addition, during parent-teacher conferences, parents usually receive negative feedback about their children, even those with high-achieving students. In these focus groups, **parents expressed their concern about results of their children's education.**⁹¹ However, **this voice is weak and is not**

⁸⁸ Strategy of development of professional improvement and training for BIH 2007-2013. The Council of Ministers of BIH, 2007.

⁸⁹ The Council of Students: School building does not have normal conditions. 20.1.2010.
<http://www.biscani.net/vijest.php?ID=15900>

⁹⁰ Aida Kartal, director of secondary school in Bihać, interview, 17.5.2010.

⁹¹ Focus groups for the needs of this research held in Zenica and Doboj, 14-15. 04. 2010.

heard by the relevant institutions. Research has shown that the motivation of students to pressure relevant institutions to improve the quality of education is poor.

4.1. Youth Engagement

Studies have shown that young people who develop social skills and abilities through work with youth domain, usually non-formal and informal education, had significantly greater opportunities to improve their lives and to be included in decision-making processes.⁹² The low motivation of youth to become involved in decision-making is partly due to a **lack of widespread non-formal education for young people (*work with youth*) in local communities in BIH.** In this regard, **local administrations should invest significantly more in the work of non-governmental and youth organizations that offer programs working with youth.**

As practice has shown, **the process of developing local strategies for youth in forty municipalities and cities in BIH significantly improved the inclusion of young people.** In addition, it increased knowledge of local authorities about youth needs and opened the possibility for the local community to start dealing with important social issues.⁹³

When it comes to youth, it is necessary to highlight the conditions under which they are raised:

*Young people in BIH are interested in positively changing their situation. However, they have not managed to draw sufficient attention to the issues and problems they face for those in charge to take notice. There are many reasons for this. One is that teenagers grow up in a society dominated by social segregation and disempowerment. Another is the ongoing socio-economic crisis and the lack of long-term prospects for social and economic development. Ethnic and administrative segregation is also an issue, as segregation persists between urban centres and other parts of the country. The administrative coordination system is complicated and ineffective. Poor conditions for private sector development exist, with extremely poor working conditions in the private sector. This problem is further exacerbated by the poor political situation and growing instability caused by decision-makers attempting to hold on to resources. These are just some of the issues that dictate youth's position and actively discourage their and their parents participation.*⁹⁴

However, the example from Bihać shows that young people must be active if they want to improve the conditions of their education. Youth should be more involved in decision-making at the local level. The noted deficits of skills gained by students through education in foreign language, computer, and social skills need to be addressed through young people requesting for improvement at the local level. As noted, schools do have the power to change curricula.

Young people should be active in youth organizations and informal groups in the local community or wider region to represent their interests. Additionally, they should be involved in student councils and student associations. Young people can take advantage of public institutions by writing petitions and through other actions as part of their democratic rights, with the aim of increasing secondary school education quality.⁹⁵ All these activities can make their voices heard,

92 It is crisis, increase investments in the young. GTZ, Project for youth, 2010.

93 Strategy analysis for youth at the local level. GTZ, Project for youth, 2010.

94 It is crisis, increase investments in the young. GTZ, Project for youth, 2010.

95 Primorac: Students have a democratic right to demonstrate, <http://dnevnik.hr/vijesti/hrvatska/primorac-sutrasnjimars-studenata-njihovo-demokratsko-pravo.html>, Zagreb, 15.05.2009

which will ultimately make the issue of poor secondary education quality a more significant social concern.

To achieve their goals, young people should use educated arguments when speaking with those holding social responsibility. One way is to use existing research documents, such as this one, as support. Also, young people have adopted policy documents at their disposal, such as the Youth Policy of RS⁹⁶, and legislation, such as the Law on Youth in BiH.⁹⁷ Furthermore, young people should participate in elections and vote for candidates based on their policies and programs, in particular favoring those offering solutions for youth-related issues. Voting on purely ethnic or otherwise biased grounds will not help solve social problems.

Undertaking some of the aforementioned activities significantly increases the chances for the situation to change for the better. Passivity of youth, on the other hand, does not help solve the growing issues they face, especially the poor quality of secondary education.

Conclusions

This study shows that it is necessary to institutionally address issues that cause a lack of adequate services in the field of teacher education and their further professional development. These issues include: insufficient capacity, inadequate use of non-institutional capacity, lack of financial resources, poor activity planning quality, and lack of cooperation and coordination among existing institutions. In addition, weak quality improvement in secondary education is also caused by a lack of adequate evaluation.

The delayed reform in BiH education, especially secondary education, has serious consequences. Apart from high drop-out rates, the lack of motivation of young people to participate in formal education is presenting a serious problem. The fact that there were more than two million absences registered in secondary schools during a single academic year in RS is definitely disturbing, and this is directly tied to the quality of secondary education.

Current activities to modernize secondary education and introduce innovative and interactive teaching methods also indicate the need for these changes, as they influence the quality of teaching and increase positive results from secondary education.

However, the current (pre-service) education of future professors in BiH actually reduces the potential for quality secondary education.

Research shows that teaching staff is motivated to further educate themselves when offered a good method of training. The key deficit of the current system is precisely in this area - lack of adequate training services (in-service education).

This deficit exists in spite of the large number of institutions responsible for addressing this issue, including thirteen ministries of education in BiH, the Agency for Preschool, Elementary and Secondary Education, nine pedagogical institutes, and the Education Department of District Brčko. Thus far the state level of BiH adopted several strategies that directly or indirectly address this issue, but they do not provide an adequate solution. In addition, the non-governmental sector and public research institutions have published several documents and given recommendations

96 On youth in RS. <http://www.mladirs.ba/index.php/home-topmenu-17.html>

97 Cult of BiH. <http://www.kultbih.org/>



Association Alumni of the Centre for
Interdisciplinary Postgraduate Studies

partially related to this topic. Currently in BiH there is also a media campaign that aims to increase the rate that youth pursue further education.

All of the above has not particularly contributed to the implementation of innovative and interactive teaching methods in secondary education. Responsible institutions are apparently failing to meet their obligations in this field. This research therefore attempts to provide recommendations to the relevant institutions to help them implement public policies on the quality of secondary education and introduce innovative and interactive teaching methods. In this regard, some of the recommendations refer to beneficiaries of the education system.

Recommendations

1. Establish a more effective system of professional development for secondary school teachers:

- It is necessary to **develop a joint strategy to improve the quality of education in secondary schools** to ensure equal access to and fairness of opportunities for professional development. The current system of training secondary school teaching staff in BIH does not provide adequate support for teachers, as it does not include institutional measures to maintain the effectiveness of the system. Current activities of the Ministry of Education and pedagogical institutes do not take into account the needs of the teaching staff in this field. The *strategy* must take into account **the needs of teachers and schools. Therefore research and analysis must first be conducted to figure out the actual needs of the teaching staff for professional development. School equipment** must then be made available in accordance with education standards. This activity should unite the efforts of ministries of education, pedagogical institutes, and the Agency for Preschool, Elementary and Secondary Education of BIH.
- It is important to **strengthen the capacity of relevant institutions (ministries of education and pedagogical institutes)**⁹⁸ to better plan and use financial resources, because there are obvious funding deficits for necessary activities.
- **Create a teacher professional development program at the ministry of education level**, because the ministries are the bodies that ensure the efficient and effective use of funds. This program, accompanied by the document entailing its execution, should respond to questions on how much funding will be set aside for this purpose and in what timeframe, while also clearly defining institutional responsibilities and providing realistic goals that can be monitored.

The Ministry of Education, in collaboration with pedagogical institutes, **should accredit all providers of quality training programs (institutes, universities, private corporations, trade associations, and non-governmental organizations)**. This action should be in accordance with educational standards and criteria. The educational standards and criteria should include the applicability of training content, content quality, and recommendations for the training program provider, number of participants, etc.

The program documents of the ministries of education and pedagogical institutes should also include a catalogue with offers of professional development courses

⁹⁸ According to different responsibilities in this field in various administrative units, in some, ministries fund education institutes while in some, educational institutes are independent administrative units. In areas where there are no educational institutes, ministries conduct training activities. This recommendation, therefore, relates to the institution which at its administrative level is responsible for these activities.

and trainings of all accredited organizers (institutes, universities, private corporations, trade associations, and non-governmental organizations). In this way, potential services offered by governmental and non-governmental institutions would be used. It would also ensure a greater supply of quality programs to build the capacity of secondary school teachers.

- As educational institutions are overwhelmed with their responsibilities, **reorganization is necessary** in order to increase effectiveness, efficiency and economic. This reorganization entails the establishment of the following functional units:
 - Technical and administrative support
 - Scientific research
 - Implementation of professional development programs and
 - Monitoring of education quality.

It is necessary **for advisory staff to specialize in only one of two areas:**

- Monitoring or
- Professional development support for teaching staff.

This would prevent the duality (overlapping) of tasks faced by pedagogical institutes, and also allow for a greater availability of advisors to provide professional development services and trainings.

2. Prioritize financial resources in accordance with analyses, strategies, and action plans (as noted in recommendation 1):

- **It is necessary to increase funding for teaching staff trainings, because the lack of financial support presents an obstacle to** introducing innovative and interactive teaching methods, which would improve the overall quality of secondary education.
- **It is essential that the ministries of education provide significantly higher funding for modern equipment and teaching tools, both for education faculties and schools.** Education faculties are inadequately equipped, and cannot provide high-quality education to students studying to become future high school teachers. The same is true of most secondary schools in BiH.
- **Strengthen the role of the scientific research community in defining appropriate programs, both for teaching methods and further professional development of teachers:**
 - Allocate significantly more funds for scientific research in this field
 - Ensure funding for the specialization of scientists acting or related to the field of professional development for teachers.

- Initiate the establishment of Scientific Research Institute for Professional Development of Teachers.

3. Evaluate the quality of teaching and education:

- In order to improve education quality, these measures need to be accompanied by adequate assessment and monitoring activities. It is therefore necessary **to increase external evaluation and comparison of trends of secondary education quality**. This would provide room to determine specific criteria for achieving quality, in terms of both teaching and providing students with necessary knowledge and skills.
- **Establish a statistical system in accordance with European standards, since the current system does not have sufficient indicators to monitor teaching quality.**

4. Ensure cooperation, both between the BiH institutions as well as regional and international ones, to improve teaching quality:

- The education faculties that provide pedagogical and methodological instruction do not respond to the need for quality teachers. Their education insufficiently preparing future teachers to serve. Therefore it is important that **pedagogical institutes and ministries together with universities follow the trends of modern teaching, exchange information related to necessary knowledge and skills, and strategically create curricula and programs**. This collaboration would insure that future teachers are more competent and confident in their work.
- Since the practical training of professors is not standardized, it is necessary to **significantly improve formal collaboration between the ministries, universities, and high schools** to develop a curriculum for practice in education. These measures must be formalized between all relevant institutions, such that internships or practical parts of education finds recognition as the appropriate practice in preparing new teachers for the work in the profession
- Due to the lack of cooperation among various ministries of education and pedagogical institutes in organizing training programs for teaching personnel, **it is necessary to create effective mechanisms of mutual support, exchange of experiences, and mutual use of professional staff capacity** to improve effectiveness, efficiency, and better use of financial resources.
- In order for education quality to improve and near European standards, it is necessary to **improve activity planning and use of public revenues for professional development of teachers in BiH. This could be achieved through the 'twinning'**

program - cooperation with certain EU member states. This practice is already in use in BIH and is especially recommended to build the capacity for better planning and use of financial resources. Since the education system is fragmented, this measure can be implemented with the Ministry of Civil Affairs in BIH, under the condition that the benefits of this cooperation are transferred to the entity and cantonal ministries through training and planning documents.

5. Increase participation in forming teaching and learning policies at the local level:

- Local administrations should, through school board and secondary schools, **involve parents** in the decision-making processes in local communities. The aim of involving parents and having social dialogue should increase institutional responsibility to improve the quality of secondary school education.
- Given the poor equipment of secondary schools, schools and local communities need to **formalize requirements to ministries for increased funding for teaching tools and school equipment.** With adequate planning and program activities, the ministries have the opportunity to respond to these requests in line with education standards.
- Management of secondary schools should **formalize requirements towards their ministry to develop knowledge and skills of teaching staff, especially those that come from non-education faculties.** This is necessary because there are deficits in their knowledge and skills compared to those from education faculties. This suggests that the current method of acquiring the formal professor or teacher title should be changed. The result would be an increase in the quality of formal education at universities, as well as higher quality evaluation of future teaching staff knowledge.
- To enable youth to gain greater understanding of social issues and increase their engagement local administrations should **increase funding for programs in the field of youth work** offered by non-governmental and other organizations.
- A certain number of local administrations in BIH **created comprehensive development plans which also include education** in that municipality. Also, there are a significant number of municipalities that have **developed and adopted a local youth strategy.** Both processes have increased the involvement of citizens in the decision-making process and helped develop a social dialogue. For these reasons, practices such as creating a budget and **defining priorities for financial investments in secondary schools** should be encouraged. **Local administrations should therefore ensure the harmonization of curricula in**

secondary schools with local development plans, since secondary schools have the right to accommodate the curriculums up to twenty-five percent.

6. Increase youth engagement

- Young people need to request **greater involvement of youth associations and student councils** in decision related to education quality. Despite the fact that general public policy discourse somewhat impedes greater youth activism, young high school students should still care enough about their welfare to act.

One way to express their concerns is by engaging in **activism to strengthen student councils as representative bodies**. Young people have the right to create informal pressure groups, write public petitions, and engage in other types of actions with the aim of increasing secondary school education quality.

- Young people should be more **informed on existing local strategies for youth, entity and cantonal youth policies, and youth-related laws**.

The recommendation for Young people is **to use the findings from this document** to initiate at the local level:

- The creation and implementation of a local youth strategy
- Increase funds for programs and projects that engage and work with youth
- Increase funds for equipment in schools in accordance with local priorities
- Change the curriculum in secondary schools in accordance with local priorities.

Bearing in mind the overall results of public policy activities in BIH and the results of secondary education, young people not only have the **right, but also the obligation to take part in elections and vote for those that propose best solutions** -- an important characteristic of a developed political system. This kind of engagement leads to the increased accountability of elected political officials, as well as improvement in of the quality of education.

Sources

Bibliography

- Bajrović, Reuf. Education policy in BIH, SDP BIH. Unpublished, Sarajevo, 2009.
- Branković, Nina and Adis Arapović. Compulsory secondary school education in BIH: Ambience and perspectives. *Centers for Civil Initiatives*. Tuzla, 2010.
- Ćosić, Emina. Learning through Action – Review of the process of accession of BIH to the Community Programs: Lifetime learning and Young in Action. *ACIPS*, 2010.
- Dervišević, Emir and Nedim Sinanović. It is crisis, increase investments in the young. Unpublished. GTZ, Project for young, 2010.
- Esmail – Arndt, Rubeena. Editor. The young need the youth policy – Analysis of the situation of young and youth sector in BIH. GTZ, *Commission for coordination of issues of the young in BIH*, 2008.
- European Union. Functional review of the public administration in the sector of education in BIH – Final report. *IFB International consulting and British Council*, 2005.
- Building of institutions and capacities in education system of BIH. EU-ICBE, 2008.
- Model for systemic changes in secondary school education: Shaping of the new education system in BIH.
http://www.soros.org.ba/docs_obrazovanje/oblikovanje_novog_obrazovnog_sistema_u_bih.pdf, Open Society Fund in BIH, 2002.
- Outline law on elementary and secondary education in BIH. *Službeni glasnik* of BIH, number 18/03.
- Organisation for Economic Cooperation and Development. Teacher Matters – Attracting, Developing and Retaining Effective Teachers. *OECD*, 2005
- Pisker, Lidija. Professional improvement of secondary school professors in BIH: From the promise to implementation of quality teaching in classes. *Open Society Fund* in BIH, 2010.
- Starting debate: does BIH respect its international obligations regarding education – questions for the BIH citizens. *OSCE BIH*, 2005.
- Pucko, Cveta, Juhani Hytonen and Geri Smyth. The restructuring of Teacher Education – a Case Study from Slovenia. The work presented at the ATEE conference in Copenhagen, 1999.
- Education reform for better future of BIH. (Message to citizens of BIH – Five promises), Sarajevo, 2002.
- Strategy of professional improvement and training for BIH from 2007-2013. *The Council of Ministers of BIH*, 2007.
- Strategy of social integration of BIH. *Directorate for European planning of BIH*, 2009.

- Strategic direction of education development in BiH with the plan of implementation 2008-2015. *The Council of Ministers of BiH*, 2008.
- Suzić, Nenad. Didactics at the crossroads of centuries. *Didactic directions, journal for teaching theory and practice* no. 39, 7 -17. Zenica, 2006.
- The Establishment and Development of the System of Professional Training and Advancement of Teachers in BiH – Strategy Paper and Operational Guidelines on Professional Development of Teachers. *UNICEF BiH*, 2004.

Interviews

- Abdullah Kadić, a professor of electrical secondary school and wood processing school in Bihać, 5.17.2010.
- Adnan Vehabović, president of Association of high school students of BiH, 18/5/2010.
- Aida Kartal, director of the Economic High School in Bihać, 5.17.2010.
- Alisa Ibraković, deputy director of the Agency for Preschool, Elementary and Secondary Education in BiH, 17/5/2010.
- Edina Čubela, VET Coordinator of GTZ Project in BiH, 29/4/2010.
- Edina Suljić, an assistant at the University of Tuzla, 10.5.2010.
- Izet Numanović, professional advisor of the Pedagogical Institute Tuzla, 13.5.2010.
- Jasminka Nalo, professional advisor of the Agency for Preschool, Elementary and Secondary Education in BiH, 17/5/2010.
- Lamija Tanović, professor at the University of Science and Mathematics in Sarajevo, 05/18/2010.
- Mirela Bajramović, a student at the Pedagogical Faculty in Zenica, 21.05.2010.
- Mladen Pandurević, a representative of the Association of Employers of FBiH, 05/11/2010.
- Nenad Suzić, a professor at the University of Banja Luka 05.13.2010.
- Nenad Veličković, assistant at the University of Sarajevo, 18.05.2010.
- Sanja Lulo, professional advisor of the Agency for Preschool, Elementary and Secondary Education in BiH, 17/5/2010.