

## Improvement of School Quality Through Key Objectives

BILJANA VRANKOVIĆ, MAJA REBERŠAK, JASMINA MURAJA

National Centre for External Evaluation in Education

Marulićev trg 18, 10000 Zagreb

CROATIA

[biljana.vrankovic@ncvvo.hr](mailto:biljana.vrankovic@ncvvo.hr), [maja.rebersak@ufzg.hr](mailto:maja.rebersak@ufzg.hr), [jasmina.muraja@ncvvo.hr](mailto:jasmina.muraja@ncvvo.hr)

*Abstract:* The goal of this paper is to demonstrate the analysis of key objectives of secondary schools in Croatia, specified within School development plans during the self-evaluation process. School self-evaluation was implemented in Croatian educational system for the first time after first National assessments were conducted in May 2006 – and at that time only gymnasium program schools were included. Results of National assessment represented first comparable data on student achievement due to objective evaluation criteria – so they were an excellent starting point for discussion on school quality and efficiency. Each school started the self-evaluation process (based on the National assessment results and on the results of background questionnaires for students) by writing a Self-evaluation Report that contained School development plan. Within School development plans these schools specified key objectives and specific targets for school development and quality improvement. In the following year (2007) National assessment was conducted in VET program secondary schools and these schools were also encouraged to start school self-evaluation process using the same instruments.

For the purpose of this paper analysis of School development plans set by schools in both secondary school programs was conducted – to determine the nature of key objectives defined and how frequently these were referred to by different schools. The goal was to establish the similarities and the differences in key objectives specified by gymnasium program and VET program schools. Qualitative analysis of 147 School development plans from gymnasium and 138 School developmental plans from VET schools resulted in classification of 22 key objectives for the school quality assurance. Results had shown that the majority of the schools acknowledge the following key objectives as their main priority: quality of educational process, material conditions and school equipping, school climate, continuous education of teachers and cooperation with all stakeholders.

*Keywords:* self-evaluation, school development plan, quality categories, priority areas, specific targets

## 1 Introduction

Self-evaluation is a process of systematic monitoring, analyzing and evaluation of the efficiency of overall performance in order to continuously improve quality while creating stimulating work environment.

“Self-evaluation is a systematic and transparent process reflected in practice, with a goal of improving student performance and professional development of school staff and organization. “ (MacBeath, MacGlynn (2002)). To permanently improve quality of school functioning, schools in Croatia are obligated to use the results of National assessments and all other educational efficiency indicators for analysis and self-evaluation<sup>1</sup>. “Self-evaluation is a fundamental condition for improvement of education quality and is implemented in all educational systems.” (*Proposal of National curriculum for pre-school education, general compulsory and secondary school education, 2008*).

After first National assessments were conducted in May 2006, first systematic implementation of self-evaluation started in all gymnasium program secondary schools in Croatia<sup>2</sup>. National assessment results represented first comparable data on student achievement acquired through test based on objective evaluation criteria and therefore these were a good starting point for a discussion on school efficiency and quality. Self-evaluation process was implemented in VET program schools in school year 2007/2008 after National assessments conducted in May 2007 and in all primary schools in Croatia during 2008.

Focus of this paper is self-evaluation of secondary schools in Croatia and analysis of the Self-evaluation Report segments that shed a light on what schools

<sup>1</sup> *Act on Primary and Secondary Education* (Official Gazette, 87/08), Article 88.

<sup>2</sup> Petar Bezinović, Ph.D. was the originator of the design of self-evaluation in secondary schools. He prepared, in cooperation with *National centre for external evaluation of education*, a manual for exam coordinators and school principals - *Using the results of National assessments for school self-evaluation – contribution to enhancement of education quality in Croatia*, (June 2006). Project manager of self-evaluation project in gymnasium program secondary schools was Jasmina Muraja, Ph.D. (*National centre for external evaluation of education*).

want to change and improve through their future efforts, in other words – the key objectives<sup>3</sup> specified with a goal of quality and efficiency enhancement.

## 2 Research Goals, Sample, and Methodology

### 2.1 Research Goals and Sample

The two goals of this research paper are: (1) categorization and specification of key objectives stated in school development plans of both gymnasium and VET program schools, (2) comparison of the key objectives specified in school development plans in gymnasium program schools with those specified in school development plans of VET schools – to establish similarities and differences in development priorities in schools of these two programs in Croatia.

Analysis was conducted on a sample of 147 gymnasium program schools and 138 VET program schools whose Teams for quality assurance sent the filled out Self-evaluation Report to NCEEE.

### 2.2 Methodology

For the purpose of this paper we used results gathered through *Self-evaluation report – analysis of the National assessment results* which both gymnasium program and VET program schools used during the self-evaluation process. In this self-evaluation report form a school needed to interpret the results of National assessments and analyze efficiency of its functioning (for this a series of different content-related questions were provided as guidelines). Additionally a school needed to specify a School development plan - a development document that represents short-term, mostly one-year strategy for improvement of school quality and efficiency. „In a self-evaluation process it serves as a guidebook for realization of aspired goals, as means in development planning and as a measure of development dynamic.“<sup>4</sup>. Self development plan provides the school with clear and comprehensible

<sup>3</sup>What a school wants to enhance in its functioning can be referred to as – key objectives, priority areas, quality indicators, quality areas.

<sup>4</sup> Bezinović, 2006

overview of the goals set and activities that need to be undertaken to enhance school quality.

The first step in defining a School development plan is specifying key objectives (priority areas). Key objectives represent segments in school functioning that a school wants to enhance. Defining of the key objectives is a starting point for strategic planning of school's future development. After conducting a detail SWOT analysis, schools defined what they regarded to be their priority areas, bearing in mind their specific qualities – each school independently specified several key objectives. After defining key objectives, each school set specific development targets. The specific development targets clearly state what needs to be realized within a priority area (a set key objective) and within what time-frame this needs to be done. School cannot be made better if specific development targets are not clearly defined as well as the path one needs to take to realize them<sup>5</sup>. Specific development targets are comprehensible referent points in measuring the improvement in the quality of school's functioning. Schools were advised to specify them bearing in mind the SMART characteristics<sup>6</sup>.

Analysis of 285 School development plans was conducted for the purpose of this paper with a special focus on the defined key objectives which we subsequently categorized into four quality categories. Through qualitative content analysis we were able to specify 22 key objectives schools defined, and frequency analysis was used to identify the number of schools which defined each of these. After conducting such analysis we were able to proceed with a comparative analysis of key objectives set in two different programs of secondary schools in Croatia – and try to establish similarities and statistically significant differences in specified key

objectives and specific targets. In this final analysis, test statistic was applied (comparison of proportions).

### 3 Discussion and Results

Through analysis of the School development plans we identified a number of different key objectives. Some schools emphasized those objectives concerning the quality of teaching and classes, some emphasized the acquisition of different instruments and tools or (re)construction of their premises, while others emphasized staff development through continuous education and training as well as improvement of overall school environment. Through self-evaluation process conducted in gymnasium program schools during school year 2006/2007, overall 910 key objectives were specified, in average 6.2 objectives per school. VET schools, during the school year 2007/2008, specified 802 key objectives in their School development plans, and, since there are more schools in this program, in average approximately the same number of objectives were set (6.1) per school. During the analysis, all of the key objectives specified were classified in 22 different sets of key objectives, and four quality categories.

---

<sup>5</sup> Hopkins, Harris, 1997

<sup>6</sup> SMART acronym represents an easy way in remembering the characteristics of a well defined objective (in our case – a well defined specific target). These should be: (i) Specific – concrete, detailed, well defined; (ii) Measurable – through progress indicators and results of our actions as we progress to the realization of a set goals; (iii) Achievable – within a specific time frame and with available resources; (iv) Relevant – for the overall plan realization; (v) Time bound – with set dead-lines for their realization.

### 3.1 Categorising And Defining Key Objectives

Analysis of the school development plans has shown that all specified key objectives can be categorized in

four different quality categories (Table 1.): (1) school functioning quality, (2) quality of educational process, (3) quality of teacher performance and (4) student achievement.

Table 1. Quality categories and key objectives in VET schools and gymnasium program schools

Quality category	Key objectives (set)	Vocational and training program schools		Gymnasium program schools	
		Number of schools	% of schools	Number of schools	% of schools
SCHOOL FUNCTIONING QUALITY	MATERIAL RESOURCES, WORK CONDITIONS AND SCHOOL EQUIPPING	95	71,97	95	64,63
	ORGANIZATION OF CLASSES AND SCHOOL FUNCTIONING	40	30,30	55	37,41
	COOPERATION WITH DIFFERENT STAKE-HOLDERS IN THE EDUCATIONAL PROCESS	31	23,48	55*	37,41
	SCHOOL PROMOTION (PR)	18	13,64	17	11,56
	EXPERT ASSISTANTS	10	7,58	7	4,76
	NEW JOB POSITIONS	9	6,82	8	5,44
	SELF-EVALUATION	4	3,03	7	4,76
QUALITY OF EDUCATIONAL PROCESS	QUALITY OF TEACHING PROCEDURES	95	71,97	126*	85,71
	MODERNIZATION OF SCHOOL (INSTRUCTION) PROGRAMS	19*	14,39	7	4,76
	CURRICULUM (PROGRAMS OF INSTRUCTION)	16	12,12	19	12,93
	PROJECTS	24*	18,18	16	10,88
	EXTRACURRICULAR AND OUT-OF-SCHOOL ACTIVITIES	14	10,61	36*	24,49
	STUDENT TRAINING (APRENTICESHIP PROGRAMS)	7	5,30		
QUALITY OF TEACHER PERFORMANCE	TRAINING FIRMS (PROGRAM)	7	5,30		
	TEACHING STAFF CONTINUOUS EDUCATION AND TRAINING	59	44,70	67	45,58
	EVALUATION OF TEACHER PERFORMANCE			4	2,72
STUDENT ACHIEVEMENT	SCHOOL (WORK) ENVIRONMENT	23	17,42	67*	45,58
	EVALUATION OF STUDENT PERFORMANCE	8	6,06	20*	13,61
	STUDENT ATTENDANCE	21	15,91	16	10,88
	COMPETITIONS	6	4,55	7	4,76
	EXTERNAL EVALUATION	7	5,30	17*	11,56
	STUDENT ARTWORKS AND PAPERS			5	3,40

Statistically significant differences are marked with a star (\*).

#### 3.1.1 School functioning quality

The first listed category – **school functioning quality** includes all those key objectives concerning specific characteristics of the school (35 % /N=7/ of the overall number of key objectives are within this category) – such as school exterior and material resources or organizational structure within it and processes which involve cooperation and communication with other stake-holders in the educational process and self-evaluation process.

These are: *material resources, work conditions and equipping, organization of classes and school functioning, cooperation with different stake-holders in the education process, school promotion (PR), expert assistants, new job positions and self-evaluation.*

### 3.1.2 Quality of education process

**Quality of education process** as a quality category (25 % /N=5/ of the overall number of key objectives specified by gymnasium program schools, and 35 % /N=7/ of the overall number of key objectives specified by VET program schools are within this category) includes all key objectives which involve specific targets closely connected to teaching and instructing – such as teaching procedures and different teaching methods, extracurricular and out-of-school student activities, projects and other type of class activities that can contribute to quality enhancement. Key objectives included in this category are listed in Table 2. plans of secondary commercial schools. This is a program conducted within a classroom equipped as an office: functioning of a business organization is simulated as different job positions within different departments are acted out.

### 3.1.3 Quality of teacher performance

Functioning of a school additionally depends on the human recourses. In the process of learning and teaching, though, the most important roles are those of students and teachers, and the quality of the teaching process greatly depends on their interaction—so it's quite important to monitor teaching staff professional development to ensure success in student achievement. This includes insuring high-quality expert training and a pleasant work environment. These are covered in the third quality category – **quality of teacher performance** (15 % /N=3/ of the overall number of key objectives specified by gymnasium program schools, and 10 % /N=2/ of the overall number of key objectives specified by VET program schools are within this category). Within this category three key objectives were specified: *teaching-staff continuous education and training, school (work) environment and evaluation of teacher performance*.

### 3.1.4 Student achievement

Each student has a right to a high-quality education, and this can be accomplished by putting the student in the focus of the educational process, through taking into account his/hers potential and objective monitoring of his/hers competencies. In accordance with this fact, the fourth quality category is specified as **student achievement** (25 % /N=5/ of the overall

number of key objectives specified by gymnasium program schools, and 20 % /N=4/ of the overall number of key objectives specified by VET program schools are within this category). This category includes the following key objectives: *evaluation of student performance, class attendance, competitions, external evaluation and student artworks and papers*.

## 3.2 Comparison between Key Objectives Set By Gymnasium Program Schools and Vet Program Schools

A statistical frequency analysis was applied to obtain the number of schools in both programs which aspire to enhance their functioning within specified priority areas (key objectives). The results are presented in Tab. 1. and Fig.1. Data gathered from both VET schools and gymnasium program schools is presented in Table 1., and on the basis of that sample statistical analysis was conducted for each key objective – to establish the similarities and the differences in each parameter, and investigate the hypothesis that some key objectives are equally important for schools in both of the programs and that others are more important for a specific program. For this purpose test-statistics was applied, viz. comparison of proportions with significance level  $\alpha=0.05$ .

Key objectives within the first category **quality of school functioning** are important to a similar number of schools in both programs – except for the key objective concerning **cooperation with different stake-holders in the educational process** within which gymnasium program schools set a significantly higher number of specific targets. More than 1/3 of schools in gymnasium program emphasize the necessity of improvements in the cooperation of all stake-holders, whereas only 1/4 of VET program schools aspire to enhance functioning in this area.

Much more significant difference is detected within the **quality of educational process** category. Through comparison of proportions it was established that a much more significant number of gymnasium program schools wish to enhance the **quality of teaching procedures** by stating specific targets concerning the need for motivating the students (encouraging their participation in classes, and studying on their own) through applying different teaching methods and procedures, including

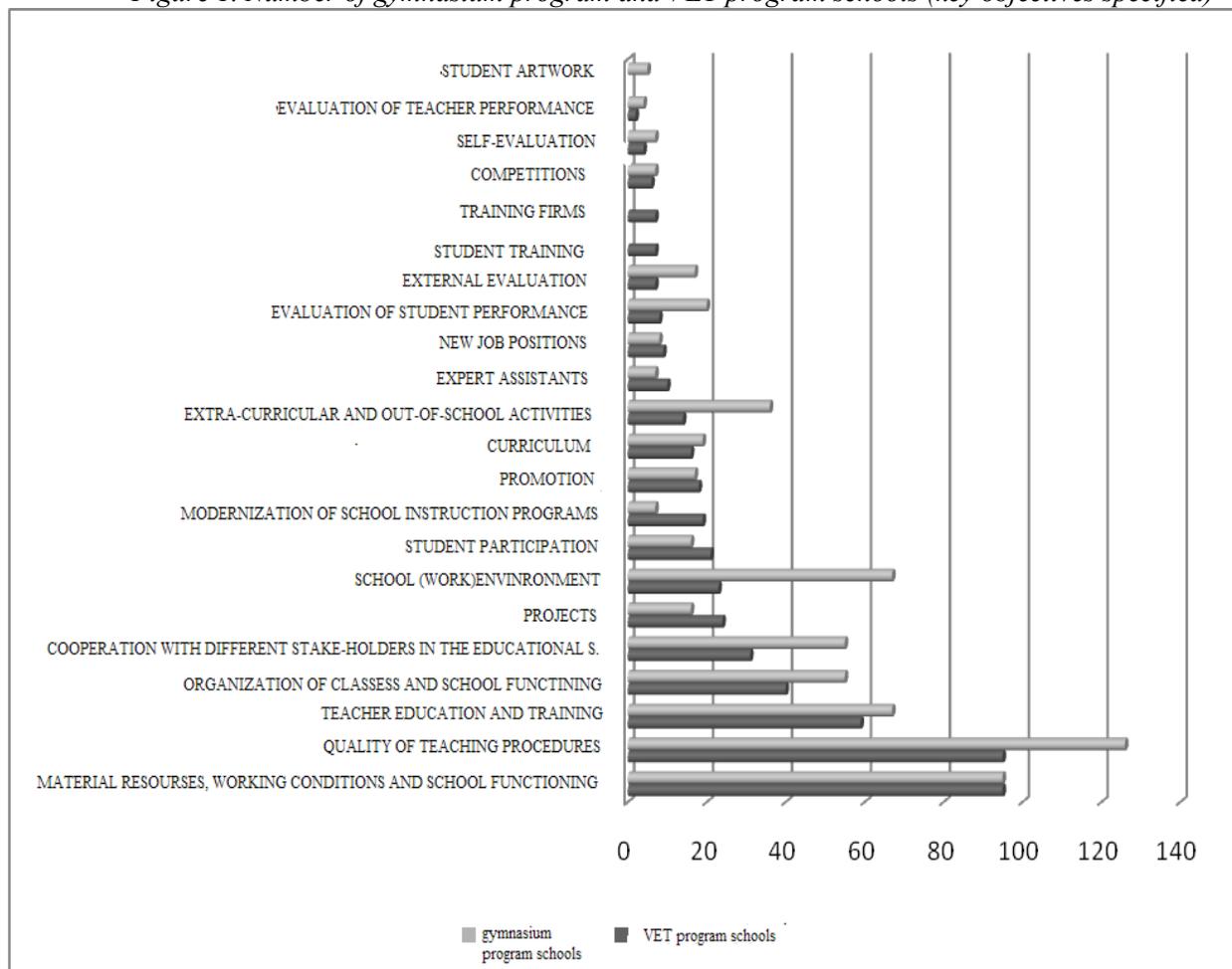
activities directed toward a greater level of correlation and integration between different subject areas etc. 85.7 % of gymnasium program schools specified this as a key objective in their School development plans. Most VET program schools also specified this key objective (N=95, i.e. 72% of the schools that participated), viz. the same number of schools as the ones who aspire to realize the key objective concerning material recourses, work conditions and equipping. Statistically significant difference is detected through comparative analysis of the key objective concerning **modernization of school (instruction) programs**. This can be viewed as a result of specific qualities and problems of VET school programs – as a greater number of these schools (N= 19) stated the need for improvement in this area than the schools with gymnasium program (N=7). Mostly these schools emphasize the need for implementation of new programs (sectors). **Projects and Extra-curricular and out-of-school activities** are considered important by schools in both programs. Greater number of VET schools aspires to enhance their work on Projects, whereas every fourth gymnasium program school emphasizes the importance of Extra-curricular and out-of-school activities.

Analysis of the key objectives specified within the third category – quality of teacher performance also indicated a number of similarities between the key

objectives set by schools of different programs, but several differences were also detected. **Teaching staff education and training** is considered important for almost half of the schools (45%) in both programs. 45% of gymnasium program schools find the **School (work) environment** important for quality enhancement, whereas only 17% of VET schools specified this key objective within their School development plans.

Key objectives concerning **Evaluation of student performance** and **External evaluation** within the fourth category – student achievement were specified in a greater number of gymnasium program schools than in VET schools (see Tab.1.). Some differences detected in School development plans of different program schools in this research paper can be explained by specific characteristics of different programs – viz. approximately 5 % of VET schools emphasize the key objectives concerning **Student training** and **Training firms** whereas there is no need for such objective in gymnasium program schools. Emphasis on **Student artwork** as encouragement of student creativity is placed by approximately 3 % of gymnasium program schools, whereas none of the VET schools stated this as their key objective in the School development plan.

Figure 1. Number of gymnasium program and VET program schools (key objectives specified)



## 4 Conclusion

Through qualitative (content) analysis of 146 School development plans of gymnasium program schools and 138 School development plans of VET schools specified key objectives were categorized into four different quality categories (*quality of school functioning, quality of educational process, quality of teacher performance and student achievement*). Within these categories 22 different key objectives were specified and described.

Both qualitative content analysis and test-statistic applied in comparison of key objectives, have shown that gymnasium program schools are oriented towards improvement of traditional elements of educational process which are at the same time of a topical interest – quality of teaching procedures and extracurricular or out-of-school activities. Additionally, analysis conducted established that these schools recognized the need to improve the evaluation of student performance and the importance of external evaluation (possibly in the context of implementation of external evaluation in Croatian educational system which started in 2006, and ongoing preparations for the implementation of the first standardized school-leaving high stakes

exam - State Matura – which will be implemented in 2010). These are the schools preparing the students for further education – so it's not surprising that the development plans defined by these schools emphasize enhancement of teaching procedures and student progress monitoring, and place student achievement at the top of their priorities.

VET schools primarily prepare students for entering the labor market – so the key objectives which are recognized as important within these schools are those corresponding to the demands of that market – thus the emphasis is placed on the modernization of programs, projects, student training and training firm programs. These schools, in accordance with the specific characteristics of occupations the students are educated and trained for, tried to devise new possibilities through enhancement of cooperation with firms and/or local community etc. Although material resources, working conditions and school equipping is at the top of their priorities these schools also recognize the importance and the value in quality of teaching procedures – as well as the ongoing need for enhancement of school functioning quality.

### References:

- (1) Bezinović, P. (2006): Korištenje rezultata nacionalnih ispita za samovrjednovanje škola; NCEEE-ISRZ
- (2) Cambridge Journal of Education, Vol. 35, No.2, 239-252
- (3) Domović, V. (2004): Školsko ozračje i učinkovitost škole; Naklada Slap
- (4) MacBeath, J. (1999): Schools must speak for themselves: The case for school self-evaluation. Routledge.
- (5) MacBeath, J. i MacGlynn, A. (2002): Self-evaluation: What's in it for schools? London: RoutledgeFalmer.
- (6) MacBeath, J., Schratz, M., Meuret, D., Jakobsen, L. (1999): Evaluating quality in school education: A European pilot project. Final Report. European Commission, June 1999., [www.europa.eu.int/comm/education/poledu/finalrep/rep.pdf](http://www.europa.eu.int/comm/education/poledu/finalrep/rep.pdf)
- (7) MacNemara, G. i O'Hara, J. (2008): Trusting schools and teachers: Developing educational professionalism through self-evaluation (Irish studies), Peter Lang Publishing.
- (8) Monitoring school Quality, an indicators report (2000.): National centre for education statistic, U.S. Department of education
- (9) School Leadership and Management, Vol 28, No. 2, Rutledge, 101-126
- (10) Vranković, B. i Reberšak, M. (2008): "School development plan" 2nd International Conference on Advanced and Systematic Research – Pedagogy and the Knowledge Society, Zadar
- (11) *Act on Primary and Secondary Education* (Official Gazette, 87/08), Ministry of science, education and sports of the Republic of Croatia