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Classroom Quality in the Final Grades of Lower Secondary Education: Demographic Differences and Relationship with Target Learning Orientations

Marina Đuranović
University of Zagreb, Faculty of Teacher Education

Abstract

The goal of the research was to examine the features of classroom quality concerning gender, grade and general academic record, and the connection with target orientations in learning among students in the final grades of primary school (lower secondary education, ISCED level 2). Seventh- and eighth-grade students (N=512) from Split-Dalmatia County and the City of Zagreb participated in the research. The questionnaire was used to collect demographic data (gender, grade and final academic record). For data regarding self-assessment of classroom quality, we used the Student Perception of Classroom Quality Questionnaire – SPOCQ. Data about target orientations was collected through the Components of Self-Regulated Learning Questionnaire – CRSL. The given results show that students, regardless of age, gender or general academic record, mostly perceive classes as average on all quality dimensions and are inclined to all three learning orientations somewhat above average. Furthermore, aspects of classroom quality were shown as the most significant predictors of all individual target orientations in learning, considering the fact that almost one third of the learning orientation is explained with classroom quality, but very little is directed to performance or avoiding effort.

***Key words**: classroom quality; primary school; students; target orientations.*

Introduction

The constructivist paradigm perceives school as a community with an optimal learning atmosphere. Therefore, this is a community where teachers, students and

parents look after one another and make important joint decisions. Shared goals, norms and values of care, justice, responsibility and learning as well as an accessible, meaningful and interesting curriculum exist in such a community (Battistich, Schaps, & Wilson, 2004). Teachers' competence and quality of their work is of utmost importance in the process of making schools such communities. According to the results of previous research, there is a significant positive correlation between the quality of teachers' work and their competence and the quality of students' achievement (Hattie, 2003; Rivkin, Hanushek, & Kain, 2005; Sanders & Rivers, 1996).

The quality of teachers and classes they organise explain up to 30% of students' school achievements variance (Hattie, 2009). With their incentives or lessening the values of some learning goals, teachers can significantly provoke change in students' motives for learning (Covington, 2000). With the emergence of the "new learning culture" discourse (Rodek, 2011; Simons, van der Linden, & Duffy, 2002) emphasis is placed on student directed teaching, recently defined as constructivist teaching (Topolovčan, Rajić, & Matijević, 2017), along with the understanding that such is quality teaching. Namely, student directed teaching (constructivist teaching) that also implies individualized teaching is recognised as an element that, alongside the number and duration of levels of education, programme quality, and time of internal and external differentiation, significantly contributes to the quality of the educational system (Pastuović, 2012). Respecting students' cognitive and psychomotor abilities, their motivation for learning, and the level of previous knowledge, constructivist teaching provides students with optimal achievements taking students' developmental phases into consideration, especially from the aspect of primary and lower secondary education (Pastuović, 2012). It neutralises the importance of students' (lower) socio-economic background, i.e. their parents' status as a factor that can explain up to 40% variance in students' school achievement (Pastuović, 2012).

On the other hand, alongside the development of knowledge, skills, abilities and values, i.e. competences incorporated in the national school curriculum, upon leaving primary school (lower secondary education, ISCED level 2; UNESCO, 2012), it is necessary for students to develop the ability of personal growth and lifelong learning as well. Namely, this refers to the competence of *learning how to learn.* In other words, with the desirable core of factual, conceptual and procedural knowledge based on teaching curricular contents of cultural, historical and technological achievements of a certain society, accent is placed on metacognitive knowledge as a determiner of value and knowledge of high transformative value. The immanent element of these knowledge dimensions, especially of metacognitive knowledge, is the ability of *knowing how to learn.* One of the manifest mechanisms of the *knowing how to learn and develop* concept is the target orientation in learning, firstly in the area of learning orientation (Niemivirta, 1996, 1998). It is possible to develop the ability of *knowing how to learn* with constructivist teaching. Analyses of significance of constructivist teaching based on theoretical-comparative and empirical research (Tobias & Duffy,

2009), show that such teaching is directed towards the development of future learning ability (Schwartz, Lindgren, & Lewis, 2009) and handling future unknown situations such as making crucial decisions (e.g. medical diagnoses) (Spiro & DeSchryver, 2009). In that regard, the outcome and development of certain target orientations in learning is important, alongside precise knowledge, skills and values entailed in the primary education curriculum.

In the last two decades, the theory of target orientations has taken the lead role within motivational theories. It was developed with the aim of studying the learning process and its outcomes in the school environment (Vizek Vidović, Rijavec, Vlahović-Štetić, & Miljković, 2014). The fundamental construct of *target orientations* is determined as a group of beliefs that lead to different approaches, engagements and responses to situational demands. Such orientation states the criteria upon which individuals assesses their success and performance level, and which influence other motivational beliefs such as attribution or emotion and their further performance and behaviour (Pintrich & Schunk, 1996, as cited in Stanišak Pilatuš, Jurčec, & Rijavec, 2013).

Two kinds of target orientations are most frequently mentioned in the literature: *learning orientation and performance orientation* (Dweck & Leggett, 1988). As a separate, third kind of orientation, the *avoidance orientation is* identified (Nicholls, Patashnick, & Nolen, 1985).

The target *learning (knowledge) orientation* has a goal of personal growth and development. Students who accept it are directed to learning, mastering activities and tasks (Ames, 1992). They are inclined to solving tasks, developing new skills and overcoming challenges (Dweck, 1986). Such students are prone to investing certain efforts in order to achieve success (Buluş, 2011); they notice the connection between the invested effort and the outcome and find that more engagement means greater competence. This orientation includes greater intrinsic interest, positive attitudes towards learning (Eccles & Wigfield, 2002; Gagne & Deci, 2005; Stanišak Pilatuš, Jurčec, & Rijavec, 2013), positive emotions in classes and exam situations (Burić & Sorić, 2011; Pekrun, Elliot, & Maier, 2006) and in-depth learning strategies (Biggs, 1987; Miškulin & Vrdoljak, 2017; Rončević Zubković & Kolić-Vehovec, 2014). Students with a developed target orientation to learning are not inclined to comparison with others but try to outdo themselves in regard to outcomes. They are characterised by internal place of control, which means they attribute credits for success to their own work and effort. Even in case of failure, they manage to maintain the sense of self-efficacy by enlarging their engagement in order to perform better and more efficient next time (Sorić, 2014).

Target *performance orientation* is characterised by the demonstration of one's own competence (Ames & Archer, 1988). Students directed to performance are inclined to compare themselves to others, and their primary goal is to achieve better results and success in relation to others (Koludrović & Ercegovac, 2013). Considering they rely on the evaluation from others, they often avoid tasks for which they are not

competent and, in that way, avoid negative feedback (Sorić, 2014). They feel that success depends exclusively on their abilities and that the invested effort does not have significant influence. Failure often leads to the loss of self-esteem and motivation (Grant & Dweck, 2003).

The hird target *avoidance orientation* is characterised by the tendency to invest the least possible effort in performing tasks (Nicholls, Patashnick, & Nolen, 1985). Due to minimal investment, students are prone to attribute their success/failure to the factor of chance or other external causes (Sorić, 2014). This target orientation is most commonly connected with poorer educational outcomes (Brdar, Rijavec, & Lončarić, 2006; Elliot & Church, 1997) and lower level of students' self-efficacy (Pajares, Brittner, & Valiante, 2000).

It is possible to define constructivist teaching as providing students with the opportunity to construct their own knowledge based on previous experience, meaning and emotional states, but through active interaction with social and physical learning environment (Topolovčan, Rajić, & Matijević, 2017). In this respect, the dominant teaching strategies are project, experiential, cooperative learning, learning through discovery and learning directed to action (Topolovčan, 2016; Topolovčan, Rajić, & Matijević, 2017). Amongst other things, such classes have a common feature of giving students the satisfaction, challenge, meaningful learning content, possibility to choose what and how to work in classes and practical mastery of the teaching content. Precisely these are the elements that Gentry and Owen (2004) consider as aspects of classroom quality.

According to the abovementioned authors, *appeal* includes interest and pleasure that requires an enjoyable, safe and motivational learning environment that is created and stimulated with teacher's positive reactions: smiles, interest in students and maintenance of their interest in teaching topics and activities. *Challenge* encompasses depth and complexity. Optimal challenge is based on individuals and includes them in active learning. This concept is possibly best described by Vygotsky (1962) stating that a child is most efficient when faced with tasks just above his/her abilities, i.e. such that can be done with a so-called healthy effort. When the teaching contents in school are linked, and relevant for their everyday lives, then we can say they are *meaningful.* To give students the possibility of *choice* means to capacitate them for choosing directions and making decisions important for their learning. It strengthens their motivation in learning so their inclusion in the educational process is greater and more personal. Likewise, it is of utmost importance that students do not gain knowledge only at the theoretical level but also *master what they are learning practically.*

It should be pointed out that the didactic value of constructivist teaching and aspects of teaching that Gentry and Owen (2004) stress as holistic child's development have recently been confirmed by brain research insights, i.e. educational neuroscience (e.g. Geake, 2009; Herrmann, 2009). Alongside strategies of learning through play, project, discovery and problem teaching, inherent features of constructivist classes are also

pleasant atmosphere, intrinsic motivation and social interaction. In that respect, constructivist teaching motivates the formation of new synaptic connections between neurons, and strengthens the existing ones (plasticity of the brain is stimulated), which is manifested in social, emotional, cognitive and psychomotor (holistic) child's development (Gazzaniga, 2009; Geake, 2009; Herrmann, 2009; Kolb & Whishaw, 2009; OECD, 2002, 2007).

With that in mind, the matter of didactic and exploratory interest is to determine the features of student's perception of classroom quality (based on the constructivist teaching paradigm) and target orientations in learning, i.e. whether there is a correlation between these two concepts among samples of students in Croatia. In other words, we aimed to determine if class activities, as described by Gentry and Owen (2004), can motivate students for the target orientation directed precisely to learning, described by Niemivirta (1996, 1998), as one of the segments of *know how to learn* competence.

Method

The goal of the research was to determine the features of classroom quality with respect to gender, grade level and general school success, and the correlation with target learning orientations with students in the final grades of primary school (lower secondary education, ISCED level 2; UNESCO, 2012).

Sample

The research was conducted among students in the seventh and eighth grades of primary school in the Split-Dalmatia County and the City of Zagreb (N=512). The sample included 244 students from the Split-Dalmatia County (47.7%) and 268 students from the City of Zagreb (52.3%). There were 209 students from the seventh grade (40.8%) and 303 (43.9%) from the eighth grade. Regarding gender, 243 (47.5%) were male and 269 (52.5%) female subjects. With respect to the school's position, there were 479 students from urban schools (93.6%) and 33 (6.4%) subjects from suburban schools. With regard to their academic achievement from previous grades, there were 112 "good" students (21.9%), 175 "very good" students (34.2%) and 225 (43.9%) "excellent" students.[1]

Instrument

In addition to gathering demographic data (gender, grade level and general academic record), we used the Student Perception of Classroom Quality questionnaire - SPOCQ, with the authors' permission, to assess classroom quality (Gentry & Owen, 2004). The data about target learning orientations were gathered with the Components of Self-Regulated Learning – CSRL questionnaire, also with permission of the authors.

[1] Students' school success in the Republic of Croatia is expressed with five marks as follows: fail (1), sufficient (2), good (3), very good (4), excellent (5).

Student Perception of Classroom Quality - SPOCQ questionnaire was translated and comprises of thirty-four manifest statements rated on a five-degree Likert scale (1= I completely disagree, 2 = I don't agree, 3=indecisive, 4=I agree, 5=I completely agree). Classroom quality consists of the following five dimensions: appeal, challenge, choice, meaning and academic self-efficacy.

The appeal factor comprises seven statements and is directed to establishing the extent to which students are satisfied with classes ("I like attending classes every day."). The challenge factor also involves seven statements and is directed to finding how challenging the teaching is for students, i.e. to what extent class activities represent a personal challenge ("I like the challenges I'm faced with in class."). The choice factor also entails seven statements and is directed to the perception of the possibility to choose activities and ways of work in class ("I can choose how to work in class."). Furthermore, the meaning factor comprises five factors and is directed to the meaning students find in classes and the connection to real life ("I can connect the things we discuss in class to real life."). The academic self-efficacy factor is directed to students' self-assessment of the achieved learning outcomes ("I can explain the class content to other students well, so they can also understand it.").

Exploratory factor analysis and oblimin factors rotation (PCA) (*KMO* = .93; a Bartlett Spherical Test was significant, $\chi^2 = 9038.04$; $p = 0.00$), saturations greater than 0.40 and square roots greater than 1 have all pointed out to five factors that jointly explain 59.8% of the overall variance. The first factor has saturations with eight statements (the square root is 11.7 and explains 36.63% of the variance), out of which five are from the meaning factor, so it is justified to be interpreted as such. The second factor has saturations on eight statements (square root is 2.6 and explains 7.63% of the variance), out of which six are from the academic self-efficacy factor and, in that respect, it is justified to regard it as such. The third factor has saturations with seven statements (square root of 2.03 and explains 5.98% of the variance), out of which all seven are from the appeal factor. The fourth factor has saturations with five statements (the square root of 1.71 that explains 3.45% of the variance), out of which three are from the choice factor and it is possible to be interpreted as such. The fifth factor has saturations with four statements (the square root 1.17 explains 3.45% of the variance), out of which three are from the choice factor and it is possible to interpret it as such. One statement did not have the saturation greater than 0.40. Since the given factor structure in this sample replicates the original structure quite well, it is justified to compositely form the factors according to the original structure, i.e. use the original structure of the questionnaire for further analysis. This is also confirmed with significant internal reliability of all factors and the correlations between them (Table 1, Table 6). Descriptive features of the factors are displayed in Table 1.

The *Target orientations questionnaire* consists of fifteen manifest statements rated on a five-point Likert scale (1= I completely disagree, 2= I don't agree, 3=indecisive, 4=I agree, 5=I completely agree), and which make three dimensions (five statements each).

The learning orientation factor is directed to the desire to learn new content, solve a problem and alike. It is based on intrinsic motivation and success as a value within itself ("I like tasks that teach me something new."). The Performance orientation factor is directed to proving oneself in front of others ("It is important for me that teachers and other students see I'm a good student."), while the avoidance orientation ("I usually do what I have to in school, no more than that.") is directed to avoiding work on an activity and/or achieving minimal satisfactory success. The questionnaire has already been applied in the Republic of Croatia, so the research used the existing translations (Stanislav Pilatuš, Jurčec, & Rijavec, 2013). Exploratory factor analysis (PCA) with oblimin rotation (*KMO* = .79; Bartlett Spherical Test was significant, $\chi^2 = 3476.123$; $p = 0.00$), saturations greater than 0.40, and square root of 1 have fully confirmed the identical factor structure of the questionnaire with joint overall variance of 60.29%. The learning orientation factor (the square root of 4.46) explains 29.71% of the variance, success orientation 11.26% (the square root of 2.90) and avoidance orientation 19.3% of the variance (the square root is 2.90). Descriptive features of the factors are displayed in Table 1 while their mutual correlations are presented in Table 6.

Table 1

Descriptive parameters of the subscales

Factors	*M*	*SD*	*Min*	*Max*	*K-S*	α	Number of claims	Skewness		Kurtosis	
								stat.	SE	stat.	SE
SPOCQ-Appeal	3.0	.87	1	5	.61**	.87	7	-.060	.108	-.109	.215
SPOCQ-Challenge	3.1	.78	1	5	.09**	.81	7	-.291	.108	.565	.215
SPOCQ-Choice	3.46	.79	1	5	.09**	.76	7	-.527	.108	.181	.215
SPOCQ-Meaning	3.42	.98	1	5	.10**	.90	5	-.712	.108	.102	.215
SPOCQ-Ac. Self-efficacy	3.42	.79	1	5	.07**	.84	8	-.264	.108	.443	.215
CSRL-Learning	3.78	.96	1	5	.11**	.89	5	-.887	.108	.579	.215
CSRL-Performance	3.6	.66	1	5	.08**	.79	5	-.241	.108	.363	.215
CSRL-Avoidance	3.61	.06	1	5	.09**	.77	5	-.471	.108	-.010	.215

Note. *p<.05; **p<.01

The data were collected in March and April 2017 (as part of a more detailed research) using the paper-pencil method. The research was implemented in accordance with the research ethics recommended for research with children and youth, i.e. anonymously and with the option of withdrawing from the research at any time.

Results

With respect to the aspects of classroom quality, descriptive indicators (Table 1) show that, regardless of the demographic characteristics, students are not sure that the lessons teachers organise are challenging, meaningful or appealing, whether they have a possibility to choose what and how to do things, and if they have achieved the set learning outcomes. However, regardless of the fact these aspects fall under the domain

of students' uncertainty about class quality, Friedman's test[2] has shown a statistically significant difference ($\chi^2 = 241.56$; $p = 0.00$) between aspects of classroom quality. Namely, the levels of positive perception of choice (*Mdn* = 3.57), meaning (*Mdn* = .6) and achievement of the learning results (*Mdn* = 3.38) are somewhat greater than the appeal (*Mdn* = 3.0) and challenge level (*Mdn* = 3.14).

Analysing certain aspects of classroom quality using the Mann-Whitney U test, has shown that boys and girls are equally uncertain about the appeal of classes, the challenge it gives, the possibility to choose what to do and how, its meaningfulness, or if they mastered the set learning outcomes (Table 2).

The same statistical test showed that students in the seventh and eighth grades are equally uncertain about whether classes are challenging, the possibility of choosing what to do and how and whether they achieved the set learning outcomes. On the other hand, as opposed to the eighth-grade students, seventh-grade students assessed meaningfulness of classes more positively, the difference being statistically significant. Namely, students in the seventh grade see the meaning up to a certain level, while eighth-grade students are not certain about the meaning of activities, teaching contents or learning outcomes (Table 2).

Kruskal Wallis H test has shown that, regardless of general academic record, students are equally uncertain about whether the classes are appealing, meaningful, offer possibility to choose what to do and how to work and if they are challenging (Table 3). On the other hand, a statistically significant difference is visible when it comes to the perception of mastering the learning outcomes with respect to the previous general academic record. Namely, excellent students consider they reached the learning outcomes up to a point, while very good and good students are not sure about having mastered the set learning outcomes (Table 3). Additional Mann-Whitney U tests of differences in perceptions of mastering the learning outcomes between each group of students of an individual academic record, with Bonferonni's correction of significance level ($p < .01$), have shown a statistically significant difference between good and excellent students ($U = 6823.00$; $z = -6.87$; $p = .00$), and between very good and excellent students ($U = 11411.00$; $z = -7.23$; $p = .00$).

[2] Although it is not recommended (Field, 2009; McNabb, 2004), data were analysed using combined parametric and nonparametric tests, as in social sciences and the humanities, this is not a rare phenomenon. Namely, as most quantitative research in pedagogy and didactics, this research falls within the framework of the post-positivistic paradigm (Guba & Lincoln, 2005). Therefore, it is axiologically, epistemologically and methodologically justified and correct to combine these two test types. On the other hand, the conditions for parametric tests are a normal distribution of data, gathered with interval and ratio scales, and samples larger than 100 (not satisfying one of these conditions implies the use of nonparametric tests) (e.g. Field, 2009; McNabb, 2004). In that respect, it would be inappropriate to use parametric tests in almost all quantitative research in pedagogy, didactics and teaching methodologies (social science), especially as data in such research is gathered mostly with nominal and interval scales. Therefore, it is not a rare phenomenon that conditions for parametric tests are not tested at all, rather, they are applied exclusively (because there is a very rare occurrence of the difference in statistical significance gained by simultaneous use of parametric and nonparametric tests) for data analyses in social sciences (e.g. Brand et al., 2003; Joët, Usher, & Bressoux, 2011; Friedman, Krauss, & Cybele Raver, 2015). If it were not so, science would be deprived of using different multivariate analyses (Tabachnick & Fidell, 2007), i.e. of gaining epistemologically important scientific insights in certain areas.

Table 2

Differences in classroom quality concerning gender and grade

Factors		*M*	*SD*	*Middle rank*	*Sum of ranks*	*U*	*z*
Appeal	Boys	2.93	.93	243.86	59258.50	29612.50	-1.84
	Girls	3.07	.81	267.92	72069.50		
Challenge	Boys	3.07	.84	254.78	61912.00	32266.00	-.25
	Girls	3.13	.72	258.05	69416.00		
Choice	Boys	3.44	.81	253.78	61669.50	32023.50	-.40
	Girls	3.47	.78	258.95	69658.50		
Meaning	Boys	3.39	1.05	254.93	61948.50	32302.50	-.23
	Girls	3.46	.92	257.92	69379.50		
Ac. Self- efficacy	Boys	3.37	.81	245.31	59610.50	29964.50	-1.63
	Girls	3.49	.77	266.61	71717.50		
Appeal	7th grade	3.12	.84	277.20	57934.50	27337.50**	-2.63
	8th grade	2.92	.89	242.22	73393.50		
Challenge	7th grade	3.15	.73	261.44	54640.00	30632.00	-.63
	8th grade	3.07	.81	253.10	76688.00		
Choice	7th grade	3.49	.77	261.81	54718.00	30554.00	-.68
	8th grade	3.44	.81	252.84	76610.00		
Meaning	7th grade	3.56	.94	275.85	57652.50	27619.50*	-2.46
	8th grade	3.32	1.00	243.15	73675.50		
Ac. Self- efficacy	7th grade	3.48	.77	269.41	56307.00	28965.00	-1.64
	8th grade	3.40	.81	247.59	75021.00		

Note. *p<.05; **p<.01

Table 3

Differences in the teaching quality with respect to general academic record

Factors		*M*	*SD*	*Middle rank*	χ^2 (df=2)
Appeal	C	3.07	.89	268.32	1.06
	B	2.96	.82	249.98	
	A	3.00	.91	255.69	
Challenge	C	3.11	.78	256.25	1.95
	B	3.07	.70	244.90	
	A	3.12	.83	265.65	
Choice	C	3.52	.79	266.91	4.38
	B	3.35	.79	237.56	
	A	3.51	.79	266.05	
Meaning	C	3.51	.85	264.04	.39
	B	3.42	.93	253.38	
	A	3.38	1.08	255.18	
Ac. Self-efficacy	C	3.14	.76	197.70	72.59**
	B	3.20	.68	213.83	
	A	3.76	.77	318.96	

Note. *p<.05; **p<.01

With regards to target orientations in learning, students are mildly inclined towards the learning orientation and performance as well as avoiding effort, regardless of individual demographic features (Table 1). Nevertheless, although all three orientations are in the domain of extremely mild direction, Friedman's test has shown the existence of a statistically significant difference ($\chi^2 = 27.29$; $p = 0.00$) between orientations, i.e. the learning orientation (*Mdn* = 4.0) is somewhat greater than performance (*Mdn* = 3.6) and avoidance orientation (*Mdn* = 3.8).

By analysing the target learning orientations with respect to individual student features, Mann-Whitney U test has shown that girls and boys are equally mildly oriented to learning and performance in classes. Although boys and girls are still somewhat directed to avoidance, it has been proven that boys are nevertheless slightly more inclined to investing less effort in classes than girls, the difference being statistically significant (Table 4). In addition, Mann-Whitney U test has shown that students from seventh and eighth grades are equally oriented toward learning and performance in teaching, with no differences. On the other hand, eighth-grade students are mildly and somewhat more oriented to avoidance than seventh grade students, who are also mildly oriented to investing less effort in teaching achievements, the difference being statistically significant (Table 4).

Table 4

Differences in target learning orientations with regard to gender and grade

Factors		M	SD	Middle rank	Sum of ranks	U	z
Learning	Boys	3.68	1.06	245.60	59681.50	30035.50	-1.59
	Girls	3.78	.86	266.34	71646.50		
Performance	Boys	3.60	.67	260.30	63253.00	31660.00	-.56
	Girls	3.59	.64	253.07	68075.00		
Avoidance	Boys	3.69	.90	271.53	65982.50	29030.50*	-2.19
	Girls	3.55	.81	242.92	65345.50		
Learning	7th grade	3.86	.94	265.39	55466.50	29805.50	-1.13
	8th grade	3.74	.97	250.37	75861.50		
Performance	7th grade	3.60	.69	257.26	53767.00	31505.00	-.09
	8th grade	3.59	.64	255.98	77561.00		
Avoidance	7th grade	3.49	.86	233.41	48782.00	26837.00**	-2.94
	8th grade	3.70	.85	272.43	82546.00		

Note. *p<.05; **p<.01

Kruskal Wallis H test has shown that, regardless of the average general academic record, students are equally, without differences, mildly oriented to learning and avoidance in classes. On the other hand, with a statistically significant difference, excellent-students are mildly directed to performance and somewhat more than good students, who are also mildly directed to performance, and very good students, who have an average focus on performance (Table 5). Additional Mann-Whitney U tests of differences in the orientation to performance between each group of students with

individual academic record, with Bonferonni's correction of significance level ($p < .017$), have proven a statistically significant difference between good students and excellent students ($U = 10101.50$; $z = -2.90$, $p = .003$), and very good students and excellent students ($U = 16946.00$; $z = -2.40$; $p = .016$).

Table 5

Differences in target orientations with respect to general academic record

Note. *p<.05; **p<.01		M	SD	Middle rank	χ^2 (df=2)
Learning	C	3.68	1.09	243.94	2.41
	B	3.76	.90	250.25	
	A	3.86	.94	267.61	
Performance	C	3.48	.67	229.09	10.76**
	B	3.55	.68	244.10	
	A	3.69	.62	279.79	
Avoidance	C	3.56	.91	250.25	.51
	B	3.67	.77	262.49	
	A	3.60	.90	254.95	

Note. *p<.05; **p<.01

Spearman correlation test (Table 6) has shown that girls have a higher average academic record and that boys are more inclined to the avoidance orientation. Students with a higher average academic record asses that they have mastered the set learning outcomes to a greater extent, but they are more inclined to performance orientation and proving themselves in front of others in greater measure. Seventh-grade students are more inclined to assesing that teaching has greater appeal and meaning, but are less inclined to the avoidance orientation than eighth-grade students are. Students who asses that classes have greater appeal are at the same time prone to assessing teaching as more challenging, that they have greater possibility of choice in classes, that it is more meaningful, that they have mastered the learning outcomes to a greater extent, are oriented to learning and not inclined to the avoidance or performance orientation. Furthermore, students who regard classes as challenging at the same time perceive they have the possibility to choose what to do and how, that teaching is meaningful, that they have mastered the learning outcomes to a greater extent, but are inclined to the performance orientation and proving themselves to a greater extent. Students who perceive they have the possibility to choose what to do and how to work to a greater extent at the same time asses that teaching is meaningful and that they have mastered the learning outcomes to a greater extent. They are more directed to the learning orientation, but also to performance and avoidance. In addition, students who regard the teaching as meaningful also feel they have achieved the learning outcomes to a greater extent and are directed to the learning orientation, but not to avoiding effort or performance. Students who asses they have mastered the learning outcomes to a great extent are at the same time more inclined to the learning orientation, but also to performance, while students more prone to performance are at the same time more inclined to avoidance in learning and classes. Students prone to learning performance

are also inclined to performance, but not to avoiding effort, while those inclined to performance are not prone to avoiding effort.

Table 6

Correlations between the research variables

	Factors	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1.	Gender	.18**	-.09*	.08	.011	.02	.01	.07	.07	-.03	-.09*
2.	Mark	1.00	-.01	-.02	.04	.03	-.02	.36**	.07	.14**	.01
3.	Grade		1.00	-.12**	-.03	-.03	-.12*	-.07	-.05	-.01	.13**
4.	SPOCQ-Appeal			1.00	.57**	.53**	.53**	.45**	.42**	-.21**	-.20**
5.	SPOCQ-Challenge				1.00	.49**	.44**	.39**	.40**	.11*	-.01
6.	SPOCQ-Choice					1.00	.662**	.520**	.426**	.153**	.09*
7.	SPOCQ-Meaning						1.00	.48**	.36**	.09*	-.09*
8.	SPOCQ-Ac. Self-efficacy							1.00	.34**	.12**	-.10*
9.	CSRL-Learning								1.00	.09*	-.10*
10.	CSRL-Performance									1.00	.29**
11.	CSRL-Avoidance										1.00

Note. *p<.05; **p<.01

Hierarchical regression analysis was implemented in two steps in order to establish the extent to which the students' demographic features and their perception of classroom quality can be considered predictors of target learning orientations. The first step entailed the demographic features, while the second regarded dimensions of the perceptions of classroom quality. The theoretical foundations for such order are in the fact that demographic features are basic and mostly fixed. Building upon that, there is the organisation of classes, i.e. aspects of classroom quality since teachers organise it, which make it mostly changeable.

With respect to predicting the target learning orientation (Table 7), demographic features were shown to be significant predictors (F (3.508) = 2.88; p =.00) and explain 1.7% of its variance. It was proven that girls, in this combination of factors, are more inclined to the learning orientation while students' marks or grade level are not significant for the learning orientation. In the second step, when aspects of classroom quality are added, alongside students' demographic features (F (8.503) = 24.47; p =.000), they explain 28% of the learning orientation's variance. The aspects of classroom quality themselves significantly enlarge the variance percentage of the learning orientation for additional 26.3% (F changes (5.503) = 36.82; p =.00). In that respect, both groups of predictors were shown to contribute to the explanation of the criterion variable. In other words, in the combination of demographic features and aspects of classroom quality, students who consider classes more appealing and who feel they can choose what to do and how, are at the same time more inclined to the learning orientation. On the other hand, gender, academic record, grade level, classroom challenge, meaning and the measure to which they have mastered the learning outcomes are not significant for the learning orientation.

Table 7

Classroom quality as the predictor of target learning orientations

Predictors	Criterion dimensions of target learning orientation					
	Learning		Performance		Avoidance	
	ΔR^2	β	ΔR^2	β	ΔR^2	β
Step 1 – demographic features	**.017***		**.02***		**.02***	
Gender		**.09***		-.04		-.06
General academic record		.06		**.14****		.02
Grade		-.05		-.01		**.11***
Step 2 – classroom quality	**.26****		**.02***		**.05****	
Gender		.06		-.04		-.06
General academic record		.04		**.13***		.01
Grade		-.02		-.01		.08
Appeal		**.26****		-.09		**-.30****
Challenge		.01		.09		.11
Choice		**.26****		.10		**.18****
Meaning		-.06		.01		-.06
Academic self-efficacy		.07		.03		.00
Total R^2	**.28****		**.040***		**.071****	
N	512		512		512	

Furthermore, when it comes to prediction of the target performance orientation (Table 7), demographic features were proven to be significant predictors (F (3.508) = 3.20; p =.023) and explain 1.9% of the variance. In that respect, students with higher marks (in this combination of factors) have shown greater inclination to the performance orientation. On the other hand, gender and grade level are not significant for the performance orientation. In addition, in the second step, the aspects of classroom quality, together with students' demographic features (F (8.503) = 2.62; p =.008), explain 4% of the performance orientation in total. Classroom quality aspects themselves significantly enlarge the percentage of the performance orientation variance by additional 2.2% (F changes (5.503) = 2.25; p =.048). Thus, it was proven that both predictor groups contribute to the explanation of the criterion variable. In other words, in the combination with demographic features and quality aspects, students with higher marks are more inclined to performance in classes. That is, the question of gender and grade level as well as classroom challenge, meaningfulness or the possibility to choose what and how to do, whether the teaching is appealing and the extent to which students have achieved the learning outcomes, are all insignificant when it comes to the performance orientation.

Finally, with regard to predicting the target avoidance orientation (Table 7), demographic features were proven as significant predictors (F (3.508) = 3.29; p =.021) and explain 1.9% of its variance. It shows that eighth-grade students, in this combination of factors, are more inclined to the avoidance orientation, while students' gender or academic record are not significant for the avoidance orientation. In the

second step, classroom quality aspects together with students' demographic features (F (8.503) = 4.79; p =.00) explain 7.1% of the avoidance orientation. Classroom quality aspects themselves significantly enlarge the percentage of learning orientation's variance with additional 5.2% (F changes (5.503) = 5.51; p =.00). In that respect, both groups of predictors were shown to contribute to the explanation of the criterion variable. That is, in the combination of demographic features and classroom quality aspects, students who do not find classes appealing and feel they have greater possibility to choose what to do and how, are, at the same time, more inclined to avoid effort in class. On the other hand, gender, marks and grade level, as well as classroom challenge, meaningfulness and achievement of the learning outcomes are not significant for the avoidance orientation.

Discussion

Research results have shown that students assess the quality of teaching as average. There is a difference in the students' perception of each individual aspect of quality teaching in which students perceive classes less challenging or appealing when compared to other aspects of classroom quality. Obviously, the classes students attend are not in tune with their expectations nor organised in a way that would be challenging or appealing.

Furthermore, there is no difference in assessments of all classroom quality aspects concerning gender. Such result could have been foreseen because teaching is not devised in a way that would take into consideration the specificities of learning with respect to gender, but stresses equal possibilities for all, which is a tendency of modern society. It should be noticed that girls perceive all aspects of classroom quality as somewhat higher than the boys do, but the difference is not statistically significant.

A difference was determined according to age, because younger students (seventh grade) assess classroom quality as more positive than the older students (eighth grade) in two aspects – meaningfulness and appeal. It seems that additional attention should be given to these two aspects of classroom quality because the change in assessment came in only one year. Classes should be made more interesting and meaningful in order for eight-grade students, who are probably more critical in their evaluation, to perceive it more positively. Gender difference is not determined when it comes to assessments of teaching, possibility of choice and self-efficacy. A possible explanation could be that the quality is not as important as meaning or classroom appeal for students of that age.

The results have shown that differences in perceiving aspects of classroom quality with regards to general school success at the end of the school year are mostly non-existent. Therefore, a statistically significant difference was determined in only one aspect of teaching, that being academic self-efficacy. Excellent students, as opposed to very good students or good students, asses the gained results of learning as higher. Such assessment could be a consequence of greater effort invested and more time

excellent students put into achieving such learning results. The given results are in accord with the results of authors Reić Ercegovac and Koludrović (2010), whose research results pointed to a more significant connection between academic self-efficacy and general academic record.

Students are inclined to all three target learning orientations slightly above average. There is a difference between levels of target orientations themselves in that the students are mostly oriented to learning. Such results could be interpreted with the fact that students feel learning new content and achieving success, which results in a sense of pride, is most important. Such results, where students express orientation to knowledge more than orientation to performance or avoiding effort, was confirmed in the research by Rupčić and Kolić-Vehovec (2004).

Gender difference is determined only in respect to avoiding effort; boys are more oriented to activities in which they achieve satisfactory results in learning by investing minimal effort. This finding is in accord with previous research results (Patrick, Ryan, & Pintrich, 1999; Rijavec & Brdar, 2002; Roeser, Midgley, & Urdan, 1996; Stanišak Pilatuš, Jurčec, & Rijavec, 2013; Thorkildsen & Nicholls, 1998). Boys and girls want to learn new contents equally and it is important for them to prove themselves in front of their peers. We could interpret the given results with the general tendency of reducing cognitive differences between genders (Zarevski, Matešić, & Matešić, 2010).

When it comes to the avoidance orientation, we found age differences as well. Namely, older students are more inclined to invest less effort in class than younger ones. Such results are congruent with previous studies that indicate a decrease of motivation for learning with age, and the increase of motivation for avoiding effort (Eccles et al., 1993; Midgley, Feldlaufer, & Eccles, 1989; Stanišak Pilatuš, Jurčec, & Rijavec, 2013). The age difference was not determined in the learning orientation, which could be explained with the fact that desire for success does not fade and that students of seventh and eighth grades are motivated intrinsically. At the same time, the difference in the performance orientation was not determined either, which can point to the fact that peer perception is equally important to younger and older students.

On the overall sample, according to school success, difference was determined only in the performance orientation. Excellent students, as opposed to very good or good students, were more oriented to performance. The given results could be interpreted with the fact that excellent students have a greater need to prove themselves in front of others. Very good students or good students may not have the urge to prove themselves to others because they are aware of not being able to successfully reach the performance of excellent students and do not have the necessary self-confidence. The results of this research are not in accord with previous research that found the connection between positive outcomes in the educational context, i.e. school success and learning orientation (Ames, 1992; Linnenbrink & Pintrich, 2001; Stanišak Pilatuš, Jurčec, & Rijavec, 2013).

With regression analysis in the first step, demographic features of the subjects were put in as predictor variables, and the quality of teaching was added in the second step. In all three target orientations, both demographic features and classroom quality were significant.

In the learning orientation, significantly greater part is explained by classroom quality (26%) as opposed to demographic features (1.7%). The results show that, with respect to the socio-demographic features, gender is a significant predictor of the learning orientation. Girls are more oriented to learning new content and their desire for success is greater. Within aspects of classroom quality alone, meaning and appeal are especially significant. If the teaching is appealing for students, emotionally motivational and provides them with satisfaction, if they also see meaning in what they are learning, it is not surprising they will be more oriented to acquiring new content.

Furthermore, demographic features and classroom quality are also significant for the performance orientation. Nevertheless, together they explain a very small variance of the performance orientation; demographic features as little as 1.9% and classroom quality 2.2%. In the second step of the regression analysis, a higher school mark is a particularly significant predictor of the performance orientation. As opposed to very good students or good students, good performance is more important to excellent students because, it is to assume, they do not only care about learning new content and skills, but pay great attention to offering a high level of presentation.

Moreover, demographic features explain 1.9% of the avoidance orientation (the eighth grade is especially significant), and 5.2% of classroom quality. Slightly more significant predictors of the avoidance effort are dissatisfaction with classes and greater choice. Over the years, eighth-grade students have probably developed skills and 'learned the ropes' of how to achieve optimal results with minimal effort and are not reluctant to use them in the school context. If we add aspects of classroom quality, it is not surprising that precisely those students who are not satisfied, given the possibility, choose the activity that does not require great effort.

Conclusion

This research contributes to understanding classroom quality with respect to gender, grade level and general academic record, and the correlation with target learning orientations with students in the final grades of primary school (lower secondary education, ISCED level 2).

Students assessed the classes as average. In order to achieve a positive shift, special attention needs to be given to classroom challenge and its appeal, which received the lowest evaluations. Gender differences in the assessment of aspects of classroom quality aspects were not found. Concerning age, assessing classroom appeal and meaningfulness, younger students gave higher assessments than the older ones. Excellent students assessed only academic self-efficacy (amongst all other classroom quality aspects) higher than very good or good students.

Students assessed all three target learning orientations mildly above average. With respect to target orientations mutual relationship, the students are mostly directed to learning. Boys and older students are oriented to avoidance. With respect to academic record, excellent students are oriented to performance more than very good or good students.

The research results have shown that students' demographic features and classroom quality are significant for all three target orientations. It should be pointed out that classroom quality is stressed as the most important element in explaining the overall prediction of learning orientation and, if we want students to be additionally oriented to learning new contents and solving problems, we should make classes more appealing and give students greater possibility of choice. Demographic features and classroom quality explain target orientations to performance and avoidance significantly less.

It is evident that classroom quality has other aspects that could be included in future research in order to gain more complete data. Interesting data could be found by questioning the same students at a future point in time, i.e. secondary school. In that way, we would have the possibility to compare results and notice possible changes with students in the final grades of primary school and initial grades of secondary school. The stated considerations are at the same time an incentive for new research.

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Marina Đuranović
University of Zagreb, Faculty of Teacher Education
Savska 77, 10000 Zagreb, Croatia
marina.duranovic@ufzg.hr

Kvaliteta nastave u završnim razredima nižeg sekundarnog obrazovanja: demografske razlike i povezanost s ciljnim orijentacijama u učenju

Sažetak

Cilj istraživanja bio je ispitati obilježja kvalitete nastave s obzirom na spol, razred i opći školski uspjeh te povezanost s ciljnim orijentacijama u učenju kod učenika završnih razreda osnovne škole (niže sekundarno obrazovanje, ISCED razina 2). U istraživanju su sudjelovali učenici sedmih i osmih razreda (N = 512) osnovnih škola Splitsko-dalmatinske županije i Grada Zagreba. Upitnikom su prikupljeni demografski podatci (spol, razred i završni uspjeh), a za podatke o samoprocjeni kvalitete nastave koristio se Upitnik učeničke percepcije kvalitete nastave (engl. Student perception of classroom quality - SPOCQ). Podaci o ciljnim orijentacijama u učenju prikupljeni su Upitnikom ciljnih orijentacija (Components of Self-regulated Learning – CSRL). Dobiveni rezultati ukazuju na to da učenici, bez obzira na dob, spol i opći uspjeh, uglavnom percipiraju nastavu prosječnom prema svim dimenzija kvalitete te da su blago iznadprosječno skloni svim trima orijentacijama učenja. Nadalje, kao najznačajniji prediktori sve pojedine ciljne orijentacije u učenju pokazali su se aspekti kvalitete nastave, s time da se kvalitetom nastave objašnjava gotovo trećina orijentacije na učenje, ali veoma malo orijentacije usmjerene na izvedbu i izbjegavanje truda.

Ključne riječi: *ciljne orijentacije; kvaliteta nastave; osnovna škola; učenici.*

Uvod

Konstruktivistička paradigma školu shvaća kao zajednicu koja predstavlja optimalno ozračje za učenje te bi stoga ona trebala biti zajednica učitelja, učenika i roditelja u kojoj se oni brinu jedni za druge, zajedno donose važne odluke te u kojoj postoje zajednički ciljevi, norme i vrijednosti brige, pravde, odgovornosti i učenja kao i pristupačan, smislen i zanimljiv kurikulum (Battistich, Schaps i Wilson, 2004). Kako bi škola postala takva zajednica od iznimne je važnosti kompetentnost učitelja i kvaliteta njegovog rada. Prema rezultatima provedenih istraživanja postoji značajna pozitivna

povezanost kvalitete rada učitelja i njihove kompetentnosti na kvalitetu učeničkog postignuća (Hattie, 2003; Rivkin, Hanushek i Kain, 2005; Sanders i Rivers, 1996).

Kvaliteta učitelja, a time i nastave koju organizira, objašnjava i do 30% varijance školskog postignuću učenika (Hattie, 2009). Učitelj svojim poticanjem ili umanjivanjem vrijednosti nekih ciljeva učenja u značajnoj mjeri može utjecati na mijenjanje učenikovih motiva za učenje (Covington, 2000). Pojavom diskursa „nove kulture učenja" (Rodek, 2011; Simons, van der Linden i Duffy, 2002) naglasak je stavljen na nastavu usmjerenu na učenika koja se u recentno vrijeme definira konstruktivističkom nastavom (Topolovčan, Rajić i Matijević, 2017), a time i pomak na to da se takva nastava smatra kvalitetnom. Naime, nastava usmjerena na učenika (konstruktivistička nastava), koja podrazumijeva i individualiziranu nastavu, prepoznata je kao element koji, uz broj i trajanje stupnjeva obrazovanja, kvalitetu programa, kao i vrijeme unutarnje i vanjske diferencijacije, značajno pridonosi kvaliteti obrazovnog sustava (Pastuović, 2012). Konstruktivistička nastava uvažavanjem učenikovih kognitivnih i psihomotoričkih sposobnosti učenja, njegove motivacije za učenje i razine predznanja omogućuje učeniku optimalna postignuća uvažavajući razvojne faze učenika posebice s aspekta primarnog i nižeg sekundarnog obrazovanja (Pastuović, 2012). Time se neutralizira značaj (nižeg) socioekonomskog porijekla učenika, tj. statusa njegovih roditelja kao čimbenika koji može objašnjavati i do 40% varijance učenikova školskog postignuća (Pastuović, 2012).

S druge strane, uz razvoj znanja, vještina, sposobnosti i vrijednosti, tj. kompetencija predviđenih nacionalnim i školskim kurikulom, neophodno je da učenici po završetku obveznog osnovnog obrazovanja (niže sekundarno obrazovanje, ISCED razina 2; UNESCO, 2012) imaju razvijenu i sposobnost za osobni razvoj i učenje tijekom cijeloga života. To se odnosi na kompetenciju *učiti kako učiti*. Drugim riječima, uz poželjan korpus činjeničnog, konceptualnog i proceduralnog znanja utemeljenih na poučavanju nastavnih sadržaja kulturnih, povijesnih i tehnoloških postignuća određenog društva, naglasak se stavlja i na metakognitivna znanja kao vrijednosna određenja i znanja visoke transformacijske vrijednosti. Imanentni element tih dimenzija znanja, a posebice metakognitivnog znanja, jest sposobnost *znati kako učiti*. Jedan od manifestnih mehanizama koncepta *znati kako učiti i razvijati se* jest i ciljna orijentacija u učenju, ponajprije u domeni orijentacije na učenje (Niemivirta, 1996, 1998). Sposobnost *znati kako učiti* moguće je razvijati konstruktivističkom nastavom. Naime, analizama značaja konstruktivističke nastave, na temelju teorijsko-komparativnih i empirijskih studija (Tobias i Duffy, 2009), ukazuje se na to da je takva nastava usmjerena na razvoj sposobnosti budućeg učenja (Schwartz, Lindgren i Lewis, 2009) i snalaženja u kasnijim nepoznatim situacijama kao što je donošenje krucijalnih odluka (npr. medicinskih dijagnoza) (Spiro i DeSchryver, 2009). U tom pogledu je, uz točno određena znanja, vještine i vrijednosti predviđene kurikulom osnovnog obrazovanja, značajan ishod i razvoj određenih ciljnih orijentacija u učenju.

U okviru motivacijskih teorija posljednja dva desetljeća vodeće mjesto zauzima teorija ciljnih orijentacija koja se razvila s ciljem proučavanja procesa učenja i njegovih

ishoda u školskom okruženju (Vizek Vidović, Rijavec, Vlahović-Štetić i Miljković, 2014). Osnovni konstrukt *ciljnih orijentacija* određuje se kao skup vjerovanja koji dovodi do različitih pristupa, angažiranja i odgovaranja na situacijske zahtjeve. Takva orijentacija određuje kriterije kojima pojedinac procjenjuje svoj uspjeh i razinu izvedbe, što utječe na druga motivacijska uvjerenja kao što su atribucije ili emocije te njegovu daljnju izvedbu i ponašanje (Pintrich i Schunk, 1996, prema Stanišak Pilatuš, Jurčec i Rijavec, 2013).

U literaturi se najčešće spominju dvije vrste ciljnih orijentacija: *orijentacija na učenje* i *orijentacija na izvedbu* (Dweck i Leggett, 1988). Kao zaseban, treći tip orijentacije, identificirana je *orijentacija izbjegavanja truda* (Nicholls, Patashnick i Nolen, 1985).

Ciljna *orijentacija na učenje* (znanje) za svrhu ima osobni rast i razvoj. Učenici koji je prihvaćaju, usmjereni su na učenje, ovladavanje aktivnostima i zadatcima (Ames, 1992). Skloni su istraživanjima, iniciranju i rješavanju zadataka, razvijanju novih vještina i svladavanju izazova (Dweck, 1986). Radi postizanja uspjeha skloni su ulaganju određenog napora u radu (Buluş, 2011). Zapažaju vezu između uloženog truda i ishoda te smatraju kako više zalaganja znači i veću kompetentnost. Ta orijentacija uključuje veći intrinzični interes, pozitivne stavove prema učenju (Eccles i Wigfield, 2002; Gagne i Deci, 2005; Stanišak Pilatuš, Jurčec i Rijavec, 2013), pozitivne emocije na nastavi i u ispitnim situacijama (Burić i Sorić, 2011; Pekrun, Elliot i Maier, 2006), dubinske strategije učenja (Biggs, 1987; Miškulin i Vrdoljak, 2017; Rončević Zubković i Kolić-Vehovec, 2014). Učenici koji imaju razvijenu ciljnu orijentaciju na učenje nisu skloni usporedbi s drugima, nego po učinku nastoje nadmašiti sami sebe. Odlikuje ih internalni lokus kontrole, što znači da zasluge za uspjeh pripisuju vlastitom radu i zalaganju, a čak i u slučaju neuspjeha, uspijevaju zadržati osjećaj samouspješnosti povećavajući svoj angažman kako bi u idućoj izvedbi bili bolji i uspješniji (Sorić, 2014).

Ciljnu *orijentaciju na izvedbu* karakterizira usmjerenost na demonstraciju vlastitih kompetencija (Ames i Archer, 1988). Učenici usmjereni na izvedbu skloni su se uspoređivati s drugima te im je primarni cilj postići bolji rezultat i uspjeh u odnosu na druge (Koludrović i Ercegovac, 2013). S obzirom na to da se oslanjaju na evaluaciju od okoline, često izbjegavaju zadatke za koje procijene da nisu kompetentni kako bi izbjegli negativnu povratnu informaciju (Sorić, 2014). Mišljenja su da uspjeh ovisi isključivo o njihovim sposobnostima i da uloženi trud nema velik utjecaj. Neuspjeh često vodi gubitku samopoštovanja i motivacije (Grant i Dweck, 2003).

Treću ciljnu *orijentaciju izbjegavanja truda* karakterizira težnja za ulaganjem što manje truda pri izvršavanju zadatka (Nicholls, Patashnick i Nolen, 1985). Zbog minimalnog zalaganja učenici su skloni svoj uspjeh/neuspjeh pripisivati faktoru sreće ili drugim vanjskim uzročnicima (Sorić, 2014). Ta ciljna orijentacija najčešće se veže uz slabije obrazovne ishode (Brdar, Rijavec i Lončarić, 2006; Elliot i Church, 1997) i nižu razinu učeničke samouspješnosti (Pajares, Brittner i Valiante, 2000).

Konstruktivističku nastavu moguće je definirati kao omogućavanje učenicima da konstruiraju vlastita znanja na temelju prethodnih iskustava, značenja i emocionalnih stanja, ali aktivnom interakcijom s društvenom i fizičkom okolinom učenja (Topolovčan, Rajić i Matijević, 2017). U tom pogledu dominiraju nastavne

strategije kao što su projektno, iskustveno, suradničko učenje i učenje igranjem, istraživanjem i otkrivanjem, usmjereno na djelovanje (Topolovčan, 2016; Topolovčan, Rajić i Matijević, 2017). Takvoj nastavi je, između ostalog, zajedničko to što učenicima pruža zadovoljstvo, izazov, smislenost onoga što uče, mogućnost biranja što i kako će raditi u nastavi te praktično ovladavanje onoga što uče. Upravo su to elementi koje Gentry i Owen (2004) smatraju aspektima kvalitetne nastave.

Prema navedenim autorima *zadovoljstvo* uključuje interes i užitak, što zahtijeva ugodno, sigurno i poticajno okruženje za učenje koje se stvara i potiče učiteljevim pozitivnim reakcijama: osmijesima, zanimanjem za učenike i održavanjem njihova zanimanja za nastavne teme i aktivnosti. *Izazov* uključuje dubinu i složenost. Optimalan izazov temelji se na pojedincima i uključuje ih u aktivno učenje. Taj pojam možda je najbolje opisao Vygotsky (1962) navodeći da je učenje za dijete najdjelotvornije i najizazovnije kada se pred njega postavljaju zadatci koji su malo iznad njegovih mogućnosti, odnosno takvi da ih može svladati uz tzv. zdrav napor. Kada su sadržaji koje učenici uče u školi povezani, kada su važni i u njihovu svakodnevnom životu, onda se može reći da su oni *smisleni*. Dati učenicima mogućnost *izbora,* znači osposobiti ih za usmjeravanje i donošenje važnih odluka vezanih uz njihovo učenje. To povećava njihovu motivaciju u učenju te se više i osobnije uključuju u obrazovni proces. Isto je tako od iznimne važnosti i da učenici ne stječu znanja samo na teorijskoj razini, nego i da *praktično ovladaju onime što uče*.

Valja naznačiti da didaktičku vrijednost konstruktivističke nastave i aspekata nastave koje ističu Gentry i Owen (2004) u vidu holističkog razvoja djeteta u recentno vrijeme potvrđuju spoznaje istraživanja mozga, tj. obrazovne neuroznanosti (npr. Geake, 2009; Herrmann, 2009). U tom pogledu konstruktivističkom nastavom (uz strategije učenja igrom, suradničku, projektnu, istraživačku i problemsku nastavu imanentna obilježja takve nastave su i ugodna atmosfera, intrinzična motivacija, društvene interakcije) potiče se formiranje novih sinaptičkih veza među neuronima i učvršćivanje postojećih (potiče se plastičnost mozga), što se manifestira socijalnim, emocionalnim, kognitivnim i psihomotoričkim (holističkim) razvojem djeteta (Gazzaniga, 2009; Geake, 2009; Herrmann, 2009; Kolb i Whishaw, 2009; OECD, 2002, 2007).

U tom je pogledu didaktički i istraživački značajno pitanje koja su obilježja učeničke percepcije kvalitete nastave (s uporištima u konstruktivističkoj paradigmi nastave) i ciljnih orijentacija u učenju, odnosno postoji li povezanost između tih dvaju koncepata kod uzoraka učenika u Hrvatskoj. Drugim riječima, može li se nastavnim aktivnostima, kako ih opisuju Gentry i Owen (2004), potaknuti učenike prema ciljnoj orijentaciji usmjerenoj upravo na učenje, kako je opisuje Niemivirta (1996, 1998) kao jednom od segmenata kompetencije *znati kako učiti*.

Metoda

Cilj istraživanja bio je ispitati obilježja kvalitete nastave s obzirom na spol, razred i opći školski uspjeh, kao i povezanost s ciljnim orijentacijama u učenju kod učenika završnih razreda osnovne škole (niže sekundarno obrazovanje, ISCED razina 2; UNESCO, 2012).

Uzorak

Istraživanje je provedeno s učenicima sedmih i osmih razreda osnovnih škola Splitsko- dalmatinske županije i Grada Zagreba (N = 512). Iz Splitsko-dalmatinske županije bilo je 244 (47,7%), a iz Grada Zagreba 268 (52,3%) učenika. Učenika sedmih razreda bilo je 209 (40,8%), 303 (43,9%) osmih, s obzirom na spol bilo je 243 (47,5%) muških i 269 (52,5%) ženskih ispitanika. S obzirom na mjesto škole bilo je 479 (93,6%) iz gradskih i 33 (6,4%) ispitanika iz prigradskih škola, a s obzirom na opći školski uspjeh iz prethodnog razreda bilo je 112 (21,9%) ispitanika s dobrim, 175 (34,2%) s vrlo dobrim i 225 (43,9%) učenika s odličnim uspjehom.

Instrumenti

Uz prikupljanje demografskih podataka (spol, razred i opći školski uspjeh), za podatke o procjeni kvalitete nastave koristio se, uz dopuštenje autora, Upitnik učeničke percepcije kvalitete nastave (engl. *Student perception of classroom quality - SPOCQ*) (Gentry i Owen, 2004). Podaci o ciljnim orijentacijama u učenju prikupljani su Upitnikom ciljnih orijentacija (eng. *Components of Self-regulated Learning – CSRL*) (Niemivirta, 1996, 1998), također uz dopuštenje autora.

Upitnik učeničke percepcije kvalitete nastave (engl. *Student perception of classroom quality – SPOCQ*) (Gentry i Owen, 2004) povratnim je prevođenjem preveden, a sastoji se od trideset i četiri manifestne tvrdnje Likertove skale od pet stupnjeva (1 = *u potpunosti se ne slažem*, 2 = *ne slažem se*, 3 = *neodlučan*, 4 = *slažem se*, 5 = *u potpunosti se slažem*). Te tvrdnje tvore pet dimenzija kvalitete nastave: Zadovoljstvo, Izazov, Izbor, Smislenost i Akademska samouspješnost.

Faktor Zadovoljstvo (engl. *appeal*) sastoji se od sedam tvrdnji i usmjeren je na činjenicu u kolikoj su mjeri učenici zadovoljni na nastavi („Volim ići na nastavu svaki dan"). Od sedam tvrdnji sastoji se i faktor Izazov (engl. *challange*), a usmjeren je na to koliko učenici percipiraju nastavu izazovnom, koliko im nastavne aktivnosti predstavljaju osobni izazov („Volim izazove koje učitelji pred mene stavljaju na nastavi"). Faktor Izbor (engl. *choice*) također se sastoji od sedam tvrdnji, a usmjeren je na percepciju mogućnosti biranja aktivnosti i načina rada na nastavi („Na nastavi mogu birati kako ću raditi"). Nadalje, faktor Smislenost (engl. *meaning*) sastoji se od pet tvrdnji te je usmjeren na to koliko je učenicima smislena nastava i koje značenje njima pružaju nastavne aktivnosti u stvarnom životu („Ono o čemu raspravljamo na nastavi mogu povezati sa svakodnevnim životom"). Faktor Akademska samouspješnost (engl. *academic self-efficacy*) sastoji se od osam tvrdnji, a usmjeren je na vlastitu procjenu postignutih ishoda učenja („Znam dobro objasniti nastavne sadržaje drugim učenicima, tako da i oni to razumiju").

Eksploratornom faktorskom analizom i oblimin rotacijom faktora (PCA) (*KMO* = ,93; a Bartletov test sferičnosti je bio značajan, χ^2 = 9038,04; p = 0,00) i zasićenjima većim od 0,40 i korijenom većim od 1, pokazalo se pet faktora koji zajedno objašnjavaju 59,8% ukupne varijance. Prvi faktor ima zasićenja s osam tvrdnji (korijen je 11,77 i

objašnjava 36,63% varijance), od čega je pet iz faktora Smislenost, pa ga je opravdano i takvim tumačiti. Drugi faktor ima zasićenja s osam tvrdnji (korijen je 2,6 i objašnjava 7,63% varijance) od kojih je šest iz faktora Akademska samouspješnost, zbog čega ga je u tom pogledu opravdano i njime smatrati. Treći faktor ima zasićenja sa sedam tvrdnji (korijen je 2,03 i objašnjava 5,98% varijance) od kojih je svih sedam iz faktora Zadovoljstvo. Četvrti faktor ima zasićenja s pet tvrdnji (korijen je 1,71 i objašnjava 5,03% varijance) od kojih su četiri iz faktora Izazov te ga je takvim moguće i tumačiti. Peti faktor ima zasićenja s četiri tvrdnje (korijen je 1,17 i objašnjava 3,45% varijance) od kojih su tri iz faktora Izbor i takvim ga je moguće tumačiti. Jedna tvrdnja nije imala zasićenje veće od 0,40. Budući da dobivena faktorska struktura na ovom uzorku poprilično dobro replicira originalnu strukturu, opravdano je kompozitno formirati faktore prema originalnoj strukturi, tj. koristiti se originalnom strukturom upitnika za daljnje analize. To potvrđuju i značajne unutarnje pouzdanosti svih faktora, kao i korelacije među njima (Tablica 1, Tablica 6). Deskriptivna obilježja faktora prikazana su u Tablici 1.

Upitnik ciljnih orijentacija sastoji se od petnaest manifestnih tvrdnji Likertove skale od pet stupnjeva (1 = *u potpunosti se ne slažem*, 2 = *ne slažem se*, 3 = *neodlučan*, 4 = *slažem se*, 5 = *u potpunosti se slažem*), a koje sačinjavaju tri dimenzije (svaka po pet tvrdnji). Faktor Orijentacija na učenje (engl. *learning orientation*) usmjeren je na želju da se nauči nešto novo, riješi problem i sl. utemeljeno na intrinzičnoj motivaciji i uspjehu kao vrijednostima samima po sebi („Sviđaju mi se zadaci u kojima mogu naučiti nešto novo"). Faktor Orijentacija na izvedbu (engl. *performance orientation*) usmjeren je na dokazivanje pred drugima („Važno mi je da nastavnici i drugi učenici misle kako sam dobar učenik"), a Orijentacija na izbjegavanje truda (engl. *avoidance orientation*) („Obično u školi napravim ono što moram i ne više od toga") usmjeren na ponašanje izbjegavanja rada na aktivnosti i/li postizanju minimalnog zadovoljavajućeg uspjeha. Upitnik je u Republici Hrvatskoj već primjenjivan, pa se u istraživanju koristio već postojeći prijevod (Stanišak Pilatuš, Jurčec i Rijavec, 2013). Eksploratorna faktorska analiza (PCA) s oblimin rotacijom (*KMO* = ,79; a Bartletov test[1] sferičnosti je bio

[1] Iako nije preporuka (Field, 2009; McNabb, 2004), u analizama podataka su korišteni i kombinirani i parametrijski i neparametriski testovi, jer u društvenim i humanističkim znanostima to i nije rijetka pojava. Naime, ovo istraživanje je, kao i većina kvantitativnih istraživanja u pedagogiji i didaktici, u okviru post-pozitivističke paradigme (Guba i Lincoln, 2005), stoga je aksiološki, gnoseološki, epistemološki i metodološki opravdano i korektno kombiniranje ovih dviju vrsta testova. S druge strane, uvjeti za parametrijske testove su normalno distribuirani podaci, podaci prikupljeni intervalnim i omjernim skalama te uzorci veći od 100 (nezadovoljavanje jednog od ovih uvjeta implicira korištenje neparametrijskih testova) (npr. Field, 2009; McNabb, 2004). U tom pogledu, gotovo u svim kvantitativnim istraživanjima u pedagogiji, didaktici i metodikama (društvenim znanostima) bi bilo neprimjereno koristiti parametrijske testove, posebice što su u takvim istraživanjima podaci prikupljani uglavnom nominalnim i intervalnim skalama. Stoga, uvažavajući sve ove razloge, nije rijetka pojava da se uopće ne testiraju uvjeti za parametrijske testove, već se parametrijski testovi isključivo i primjenjuju (jer je izrazito rijetka pojava razlike u statističkim značajnostima dobivenih simultanim korištenjem parametrijskih i neparametrijskih testova) u analizama podataka u društvenim znanostima (npr. Brand i sur., 2003; Joët, Usher i Bressoux, 2011; Friedman. Krauss i Cybele Raver, 2015). U suprotnom, bilo bi se uskraćeno za korištenje različitih multivarijatnih analiza (Tabachnick i Fidell, 2007), tj. uskratilo bi se dobivanje epistemološki vrijednih znanstvenih spoznaja u određenim znanstvenim područjima

značajan, $\chi^2 = 3476{,}123$; $p = 0{,}00$) i zasićenjima većim od 0,40, kao i korijenom većim od 1 potvrdila je u potpunosti identičnu faktorsku strukturu upitnika sa zajedničkom ukupnom varijancom od 60,29%. Faktor Orijentacije na učenje (korijen je 4,46) objašnjava 29,71%, Orijentacije na uspjeh 11,26% (korijen je 2,90) i Orijentacije na izbjegavanje neuspjeha 19,3% varijance (korijen je 1,69). Deskriptivna obilježja faktora prikazana su u Tablici 1, a njihove su interkorelacije prikazane u Tablici 6.

Tablica 1

Podaci su prikupljeni u ožujku i travnju 2017. godine (kao jedan dio opširnijeg istraživanja) metodom papir-olovka. Istraživanje je provedeno u skladu s etikom istraživanja s djecom i mladima, tj. u potpunosti anonimno te su ispitanici mogli u bilo kojem trenutku odustati od ispunjavanja upitnika.

Rezultati

U vidu aspekata kvalitete nastave deskriptivni pokazatelji (Tablica 1) ukazuju na to da učenici bez obzira na demografska obilježja nisu sigurni da je nastava koju im učitelji organiziraju izazovna i smislena, pruža li im zadovoljstvo, imaju li mogućnost izbora što i kako će raditi te jesu li postigli postavljene ishode učenja. Ali, bez obzira na to što su svi ti aspekti u domeni da učenici „nisu sigurni" koliko im je takva nastava kvalitetna, Friedmanovim testom pokazalo se da postoji statistički značajna razlika ($\chi^2 = 241{,}56$; $p = 0{,}00$) među aspektima kvalitete nastave. Naime, razine pozitivne percepcije izbora (*Mdn* = 3,57), smislenosti (*Mdn* = 3,6) i postignuća ishoda učenja (*Mdn* = 3,38) nešto su više od razine zadovoljstva (*Mdn* = 3,0) i izazova (*Mdn* = 3,14).

Analizirajući pojedine aspekte kvalitete nastave, Mann-Whitney U testom pokazalo se da i dječaci i djevojčice podjednako nisu sigurni jesu li nastavom zadovoljni, je li im izazovna, da nisu sigurni mogu li birati što i kako će raditi te da nisu sigurni koliko im je nastava smislena, isto tako ni jesu li ovladali zadanim ishodima učenja (Tablica 2).

Istim statističkim testom pokazalo se da učenici i sedmih i osmih razreda podjednako nisu sigurni je li im nastava izazovna te imaju li mogućnost izbora kako i što će raditi, kao i jesu li postigli željene ishode učenja. S druge strane, učenici sedmih razreda statistički su značajno pozitivniji u procjeni zadovoljstva u nastavi od učenika osmih razreda. Vidljivo je, također, da učenici sedmih razreda statistički značajno pozitivnije procjenjuju smislenost nastave, za razliku od učenika osmih razreda. Naime, učenici sedmih razreda donekle vide smislenost, a učenici osmih razreda nisu sigurni vide li smislenost aktivnosti, nastavnih sadržaja i ishoda učenja (Tablica 2).

Tablica 2

Kruskal Wallis H testom pokazalo se da bez obzira na to kakav opći školski uspjeh postižu, oni podjednako percipiraju da nisu sigurni pruža li im nastava zadovoljstvo, smislenost, mogućnost izbora što i kako će raditi te je li im izazovna (Tablica 3). S druge strane, vidljivo je da postoji statistički značajna razlika u percepciji ovladavanja

ishodima učenja obzirom na opći školski uspjeh koji su učenici ostvarili. Naime, učenici s odličnim uspjehom donekle smatraju da su ovladali ishodima učenja, dok učenici s dobrim i vrlo dobrim uspjehom nisu sigurni jesu li ovladali postavljenim ishodima učenja (Tablica 3). Naknadnim Mann-Whitney U testovima razlika u percepciji ovladavanja ishodima učenja između svake skupine učenika s pojedinim općim uspjehom, uz Bonferonnijevu korekciju razine značajnosti ($p < ,01$), pokazalo se da postoji statistički značajna razlika između učenika s dobrim i odličnim uspjehom ($U = 6823,00$; $z = -6,87$; $p = ,00$), zatim učenika s vrlo dobrim i odličnim uspjehom ($U = 11411,00$; $z = -7,23$; $p = ,00$).

Tablica 3

U pogledu ciljnih orijentacija u učenju općenito se pokazalo da su učenici, bez obzira na pojedina demografska obilježja, blago pozitivno iznadprosječno skloni orijentaciji na učenje te na izvedbu, kao i na izbjegavanje truda (Tablica 1). Ali iako su sve tri orijentacije u domeni izrazito blage usmjerenosti, Friedmanovim se testom pokazalo da postoji statistički značajna razlika ($\chi^2 = 27,29$; $p = 0,00$) među orijentacijama, tj. da je usmjerenost na učenje ($Mdn = 4,0$) nešto viša od usmjerenosti na izvedbu ($Mdn = 3,6$) i izbjegavanje truda ($Mdn = 3,8$).

Analizirajući ciljne orijentacije u učenju s obzirom na pojedina demografska obilježja učenika, Mann-Whitney U testom pokazalo se da su dječaci i djevojčice bez razlika podjednako blago orijentirani na učenje i na izvedbu u nastavi. Iako su i dječaci i djevojčice još uvijek blago usmjereni na izbjegavanje truda, pokazalo se da su dječaci ipak statistički značajno nešto više skloniji ulaganju manje truda u nastavi od djevojčica (Tablica 4). Također, Mann-Whitney U testom se pokazalo da su učenici i sedmih i osmih razreda bez razlika podjednako blago orijentirani na učenje i na izvedbu u nastavi. S druge strane, učenici osmih razreda blago su i statistički značajno nešto više usmjereni na izbjegavanje truda u nastavi od učenika sedmih razreda, koji su isto blago usmjereni na ulaganje manje truda u nastavna postignuća (Tablica 4).

Tablica 4

Kruskal Wallis H testom pokazalo se da su, bez obzira na prosječan opći školski uspjeh, učenici podjednako bez razlika blago orijentirani na učenje i na izbjegavanje truda u nastavi. S druge strane, učenici s odličnim uspjehom blago su i statistički značajno nešto više usmjereni na izvedbu u nastavi za razliku od učenika s dobrim uspjehom koji su isto blago usmjereni, kao i učenika s vrlo dobrim uspjehom koji su prosječno usmjereni na izvedbu u nastavi (Tablica 5). Naknadnim Mann-Whitney U testovima razlika u orijentaciji na izvedbu između svake skupine učenika s pojedinim općim uspjehom, uz Bonferonnijevu korekciju razine značajnosti ($p < ,017$), pokazalo se da postoji statistički značajna razlika između učenika s dobrim i odličnim uspjehom ($U = 10101,50$; $z = -2,90$, $p = ,003$), kao i učenika s vrlo dobrim i odličnim uspjehom ($U = 16946,00$; $z = -2,40$; $p = ,016$).

Tablica 5

Spearmanovim testom korelacije (Tablica 6) pokazalo se da djevojčice postižu viši prosječni školski uspjeh i da su dječaci skloniji orijentaciji na izbjegavanje truda. Učenici s višim prosječnim školskim uspjehom procjenjuju da su u većoj mjeri ovladali postavljenim ishodima učenja, ali da su i u većoj mjeri skloniji orijentaciji na izvedbu i dokazivanje pred drugima. Učenici sedmih razreda skloniji su procjeni da im nastava pruža veće zadovoljstvo i smislenost, ali su u manjoj mjeri skloni orijentaciji na izbjegavanje truda od učenika osmih razreda. Učenici koji procjenjuju da im nastava pruža veće zadovoljstvo, ujedno su skloni procjenjivati da im je nastava i izazovnija, da imaju veću mogućnost izbora u nastavi, da im je nastava smislenija, da su u većoj mjeri ovladali ishodima učenja I da su usmjereni na orijentaciju učenja i nisu skloni orijentaciji izbjegavanja truda i na izvedbu. Nadalje, učenici koji smatraju da im je nastava izazovna, ujedno procjenjuju da imaju mogućnost biranja što i kako će raditi na nastavi, da im je nastava smislena, da su u većoj mjeri ovladali ishodima učenja, ali su i u većoj mjeri skloni orijentaciji na izvedbu i dokazivanje. Učenici koji percipiraju da u većoj mjeri imaju mogućnost biranja što i kako će raditi, na nastavi ujedno procjenjuju da je nastava smislena i da su u većoj mjeri ovladali ishodima učenja, u većoj su mjeri usmjereni na orijentaciju na učenje, ali i na izvedbu i izbjegavanje truda. Također, učenici kojima je nastava smislena, ujedno smatraju da su u većoj mjeri ovladali ishodima učenja te su usmjereni na orijentaciju na učenje, ali nisu na izbjegavanje truda i izvedbu. Učenici koji procjenjuju da su u većoj mjeri ovladali ishodima učenja, ujedno su skloniji orijentaciji usmjerenoj na učenje, ali i na izvedbu, a da su upravo učenici skloniji izvedbi ujedno skloniji i izbjegavanju truda u učenju i nastavi. Učenici koji su skloni izvedbi učenja, skloni su i izvedbi, ali nisu skloni izbjegavanju truda, a oni koji su skloni izvedbi, nisu skloni izbjegavanju truda.

Tablica 6

Sa svrhom utvrđivanja u kojoj se mjeri demografska obilježja učenika i njihova percepcija kvalitete nastave mogu smatrati prediktorima ciljnih orijentacija u učenju provedena je hijerarhijska regresijska analiza od dva koraka. U prvi su korak stavljena demografska obilježja, a u drugi su stavljene dimenzije percepcije kvalitete nastave. Teorijska polazišta za takav poredak demografska su obilježja temeljna i uglavnom nepromjenjiva. Na to dolazi organizacija nastave, tj. aspekti kvalitete nastave budući da je ona organizirana od učitelja i kao takva u većoj mjeri promjenjiva.

U pogledu predikcije ciljne orijentacije usmjerenosti na učenje (Tablica 7) pokazalo se da su demografska obilježja značajni prediktori (F (3, 508) = 2,88; p = ,00) i objašnjavaju 1,7% njezine varijance. Pokazalo se da su djevojčice, u ovoj kombinaciji čimbenika, sklonije orijentaciji na učenje, a da to kakvu ocjenu učenici imali i u koji razred išli, nije značajno za usmjerenost na učenje. U drugom koraku, kada se dodaju i aspekti kvalitete nastave, oni zajedno s demografskim obilježjima učenika (F (8, 503) = 24,47; p = ,000) objašnjavaju ukupno 28% varijance orijentacije na učenje.

Sami aspekti kvalitete nastave značajno povećavaju postotak varijance usmjerenosti na učenje za dodatnih 26,3% (F promjene (5, 503) = 36,82; p = ,00). U tom pogledu pokazalo se da obje grupe prediktora pridonose objašnjenju kriterijske varijable. Odnosno, u kombinaciji demografskih obilježja i aspekata kvalitete nastave, učenici koji su zadovoljniji nastavom i koji smatraju da u većoj mjeri mogu birati što i kako će raditi, ujedno su skloniji i orijentaciji na učenje. S druge strane, pitanje spola, ocjene i razreda, kao i to je li nastava učenicima izazovna, smislena i u kojoj su mjeri ovladali ishodima učenja, nisu značajni za usmjerenost na učenje.

Tablica 7

Nadalje, u vidu predikcije ciljne orijentacije usmjerenosti na izvedbu (Tablica 7) pokazalo se da su demografska obilježja značajni prediktori (F (3, 508) = 3,20; p = ,023) i objašnjavaju 1,9% njene varijance. U tom se pogledu pokazalo da su učenici s višom ocjenom (u toj kombinaciji čimbenika) skloniji orijentaciji na izvedbu. S druge strane, pitanje spola i razreda nije značajno za usmjerenost na izvedbu. U drugom koraku aspekti kvalitete nastave zajedno s demografskim obilježjima učenika (F (8, 503) = 2,62; p = ,008) objašnjavaju ukupno 4% varijance orijentacije na izvedbu. Sami aspekti kvalitete nastave značajno povećavaju postotak varijance usmjerenosti na izvedbu za dodatnih 2,2% (F promjene (5, 503) = 2,25; p = ,048). Stoga se pokazalo da obje grupe prediktora pridonose objašnjenju kriterijske varijable. Drugim riječima, u kombinaciji demografskih obilježja i aspekata kvalitete, učenici s višom ocjenom u većoj su mjeri usmjereni na izvedbu u nastavi. Odnosno, pitanje spola i razreda, kao i to je li nastava učenicima izazova, smislena i imaju li mogućnost biranja kako će raditi, pruža li im nastava zadovoljstvo i u kojoj mjeri su ovladali ishodima učenja nije značajno za usmjerenost na izvedbu.

Na kraju, u pogledu predikcije ciljne orijentacije usmjerenosti na izbjegavanje truda (Tablica 7) pokazalo se da su demografska obilježja značajni prediktori (F (3, 508) = 3,29; p = ,021) i objašnjavaju 1,9% njene varijance. Pokazalo se da su učenici osmih razreda, u toj kombinaciji čimbenika, skloniji orijentaciji na izbjegavanje truda, a da, bez obzira na to kakvu ocjenu učenici imali i kojeg su spola, nije značajno za usmjerenost na izbjegavanje truda. U drugom koraku aspekti kvalitete nastave zajedno s demografskim obilježjima učenika (F (8, 503) = 4,79; p = ,00) objašnjavaju ukupno 7,1% varijance orijentacije na izbjegavanje truda. Aspekti kvalitete nastave sami za sebe značajno povećavaju postotak varijance usmjerenosti na učenje za dodatnih 5,2% (F promjene (5, 503) = 5,51; p = ,00). U tom pogledu pokazalo se da obje grupe prediktora pridonose objašnjenju kriterijske varijable. Odnosno, u kombinaciji demografskih obilježja i aspekata kvalitete nastave, učenici koji nisu zadovoljni nastavom i s većom mogućnošću biranja što i kako će raditi ujedno su skloniji izbjegavanju ulaganja truda na nastavi. S druge strane, pitanje spola, ocjene i razreda, kao i to je li nastava učenicima izazovna, smislena te jesu li ovladali ishodima učenja nije značajno za usmjerenost na izbjegavanje truda.

Rasprava

Rezultati istraživanja pokazali su da učenici kvalitetu nastave procjenjuju prosječno. Postoji razlika u učeničkoj percepciji svakog pojedinog aspekta kvalitete nastave pri čemu učenici nastavu percipiraju manje izazovnom i pruža im manje zadovoljstva u odnosu na ostale promatrane aspekte kvalitetne nastave. Očito je nastava kojoj učenici nazoče u diskrepanciji s njihovim očekivanjima te nije organizirana na način koji bi njima bio izazovan i potaknuo njihovo zadovoljstvo.

Nije se pokazala razlika u procjenama svih aspekata kvalitete nastave po spolu. Takav se rezultat mogao predvidjeti jer nastava nije osmišljena na način da se uvažavaju specifičnosti učenja određenog spola, nego se naglašavaju jednake mogućnosti za sve, što je tendencija suvremenog društva. Valja napomenuti da djevojčice sve aspekte kvalitete nastave percipiraju nešto više od dječaka, ali ta razlika nije statistički značajna.

Razlika je utvrđena prema dobi jer mlađi učenici (sedmi razred) pozitivnije procjenjuju kvalitetu nastave u odnosu na starije učenike (osmi razred) i to u dva aspekta – zadovoljstvo i smislenost nastave. Čini se da bi trebalo dodatnu pozornost obratiti na ta dva aspekta kvalitete nastave jer je tijekom samo godine dana došlo do promjene u procjeni. Nastavu bi trebalo učiniti zanimljivijom i smislenijom kako bi je i učenici osmih razreda, koji su vjerojatno kritičniji u procjeni, percipirali pozitivnije. Razlika po dobi nije utvrđena u percepciji izazovnosti nastave, mogućnost izbora i akademskoj samouspješnosti. Moguće objašnjenje moglo bi biti da u promatranoj dobi te kvalitete nisu u tolikoj mjeri učenicima važne kao što je smislenost nastavnih sadržaja i osjećaj zadovoljstva.

Rezultati su pokazali da uglavnom nema razlika u percepciji aspekata kvalitete nastave s obzirom na opći školski uspjeh koji su učenici ostvarili na kraju školske godine i da postoji statistički značajna razlika samo u jednom aspektu nastave, akademskoj samouspješnosti. Odlični učenici, za razliku od učenika koji su s dobrim ili vrlo dobrim uspjehom završili razred, postignute ishode učenja procjenjuju višima. Takva procjena mogla bi biti posljedica većeg truda i dužeg vremena koje su odlični učenici uložili u postizanje ishoda učenja. Dobiveni rezultati u suglasju su s rezultatima autorica Reić Ercegovac i Koludrović (2010) koje su u svojem istraživanju ukazale na značajnu povezanost akademske samouspješnosti i općeg uspjeha.

Učenici su blago iznadprosječno skloni svim trima ciljnim orijentacijama u učenju. Postoji razlika među razinama ciljnih orijentacija međusobno, pri čemu su učenici ponajviše usmjereni na učenje. Takav rezultat mogli bismo tumačiti time da je učenicima najvažnije naučiti nove sadržaje i postići uspjeh koji rezultira osjećajem ponosa. Takve rezultate, u kojima učenici iskazuju više izraženu orijentaciju na znanje, nego orijentaciju na izvedbu i izbjegavanje, potvrđuje istraživanje autorica Rupčić i Kolić-Vehovec (2004).

Spolna razlika utvrđena je jedino u pogledu izbjegavanja truda; dječaci su usmjereniji na aktivnosti kojima će uz ulaganje minimalnih napora postići zadovoljavajuće rezultate u učenju. To je u skladu s rezultatima dosadašnjih istraživanja (Patrick, Ryan i Pintrich, 1999; Rijavec i Brdar, 2002; Roeser, Midgley i Urdan, 1996; Stanišak Pilatuš,

Jurčec i Rijavec, 2013; Thorkildsen i Nicholls, 1998). Dječaci i djevojčice u podjednakoj mjeri žele naučiti nove sadržaje, važno im je da se dokažu pred vršnjacima, a dobivene rezultate mogli bismo tumačiti općim trendom smanjivanja kognitivnih razlika prema spolu (Zarevski, Matešić i Matešić, 2010).

Kod Orijentacije na izbjegavanje truda utvrđena je i dobna razlika. Naime, stariji učenici skloniji su ulagati manje truda u nastavi od mlađih učenika. Takvi rezultati u suglasju su s dosadašnjim istraživanjima koja pojašnjavaju da se s dobi smanjuje motivacija za učenje, a povećava motivacija za izbjegavanjem truda (Eccles i sur., 1993; Midgley, Feldlaufer i Eccles, 1989; Stanišak Pilatuš, Jurčec i Rijavec, 2013). Dobna razlika nije utvrđena kod Orijentacije na učenje, što bi se moglo objasniti činjenicom da želja za uspjehom ne jenjava te da su učenici i sedmih i osmih razreda intrinzično motivirani. Istodobno, nije utvrđena ni razlika kod Orijentacije na izvedbu, što može ukazivati na to da je percepcija vršnjaka jednako važna i mlađim i starijim učenicima.

Na cijelom uzorku, prema školskom uspjehu, dobivene su razlike samo na Orijentaciji na izvedbu. Učenici koji imaju odličan školski uspjeh, za razliku od učenika koji su postigli vrlo dobar ili dobar uspjeh, više su usmjereni na izvedbu. Dobiveni rezultati mogli bi se tumačiti time da učenici koji postižu odličan uspjeh imaju izraženiju potrebu dokazivanja pred drugima. Vrlo dobri i dobri učenici možda nemaju poriv pokazati se pred drugima jer su svjesni toga da ne uspijevaju doseći izvedbu odličnih učenika te nemaju potrebno samopouzdanje. Rezultati ovog istraživanja nisu u suglasju s dosadašnjim istraživanjima koja pronalaze povezanost između pozitivnih ishoda u obrazovnom kontekstu, tj. povezanost između školskog uspjeha i orijentacije na učenje (Ames, 1992; Linnenbrink i Pintrich, 2001; Stanišak Pilatuš, Jurčec i Rijavec, 2013).

Regresijskom analizom u prvom koraku kao prediktorske varijable unesena su demografska obilježja ispitanika, a u drugom koraku kvaliteta nastave. U sve tri ciljne orijentacije značajna su i demografska obilježja i kvaliteta nastave.

U orijentaciji usmjerenoj na učenje znatno veći dio objašnjava kvaliteta nastave (26%) za razliku od demografskih obilježja (1.7%). Rezultati pokazuju da što se tiče socio-demografskih obilježja, spol ima značajnu predikciju na orijentaciju na učenje. Djevojčice su usmjerenije na učenje novih sadržaja i kod njih je izraženija želja za uspjehom. Unutar samih aspekata kvalitete nastave posebno su značajni zadovoljstvo i smislenost nastave. Ako je nastava učenicima privlačna, emocionalno poticajna i pruža im zadovoljstvo, a k tome i vide smisao u onome što uče, ne čudi da će biti usmjereniji na usvajanje novog.

Nadalje, i u orijentaciji usmjerenoj na izvedbu značajna su demografska obilježja i kvaliteta nastave, ali zajedno objašnjavaju veoma malu varijancu usmjerenosti na izvedbu, demografska obilježja tek 1.9% i kvaliteta nastave 2.2%. U drugom koraku regresijske analize posebno značajan prediktor usmjerenosti na izvedbu je veća školska ocjena. Učenicima koji su ostvarili odličan školski uspjeh, za razliku od vrlo dobrih i dobrih učenika, važnije je da izvedba bude dobra jer, može se pretpostaviti, da im nije samo bitno naučiti nova znanja i vještine, nego veliku pozornost posvećuju i tome da način izlaganja i prezentiranja bude na visokoj razini.

U orijentaciji usmjerenoj izbjegavanju truda 1.9% izbjegavanja objašnjavaju demografska obilježja (osmi razred je posebno značajan) i 5.2% aspekti kvalitete nastave, s time da su nezadovoljstvo nastavom i veći izbor nešto značajniji prediktori izbjegavanja truda. Učenici osmih razreda vjerojatno su tijekom svih godina školovanja usavršili vještine i „ispekli zanat" kako uz minimalan trud postići optimalne rezultate te se ne ustručavaju iskoristiti ih u školskom kontekstu. Ako tome dodamo aspekte kvalitete nastave, ne čudi da upravo oni učenici koji su nezadovoljni, a k tome postoji mogućnost da odaberu neku drugu aktivnost, izabiru onu koja ne zahtijeva velik napor.

Evidentno je da su aspekti kvalitete nastave najznačajniji za usmjerenost na učenje. Osim što se kvalitetnom nastavom potiče usmjerenost na učenje, pokazalo se da kvaliteta nastave ne objašnjava velik dio usmjerenosti na izvedbu i izbjegavanje truda.

Zaključak

Ovo istraživanje doprinosi razumijevanju obilježja kvalitete nastave s obzirom na spol, razred i opći školski uspjeh te povezanost s ciljnim orijentacijama u učenju kod učenika završnih razreda osnovne škole (niže sekundarno obrazovanje, ISCED razina 2).

Učenici nastavu procjenjuju prosječnom, a kako bi došlo do pozitivnih pomaka osobitu pozornost treba obratiti izazovnosti nastave i osjećaju zadovoljstva nastavnim aktivnostima koji su najniže procijenjeni. Spolne razlike u procjenama svih aspekata kvalitete nastave nisu pronađene, a što se tiče dobi, procjene zadovoljstva i smislenost u nastavi mlađih učenika više su od procjena starijih učenika. Odlični učenici jedino akademsku samouspješnost (među svim aspektima kvalitete nastave) procjenjuju višom od vrlo dobrih i dobrih učenika.

Sve tri ciljne orijentacije u učenju učenici procjenjuju blago iznadprosječno, a gledajući ciljne orijentacije međusobno, učenici su ponajviše usmjereni na učenje. Dječaci i stariji učenici usmjereniji su na izbjegavanje truda, a što se tiče školskog uspjeha, odlični učenici, više od vrlo dobrih i dobrih učenika, usmjereniji su na izvedbu.

Rezultati ovog istraživanja ukazali su na to da su za sve tri ciljne orijentacije značajna i demografska obilježja učenika i kvaliteta nastave. Valja istaknuti da se kvaliteta nastave ističe kao najvažniji element u objašnjavanju ukupne predikcije orijentacije usmjerene na učenje te želimo li da učenici pozornost dodatno usmjere na učenje novih sadržaja i rješavanje problema, treba se više angažirati u postizanju učeničkog zadovoljstva i osiguranju mogućnosti izbora. Demografska obilježja i kvaliteta nastave u znatno manjoj mjeri objašnjavaju ciljnu usmjerenost na izvedbu i izbjegavanje truda.

Evidentno je da kvalitetna nastava ima i druge aspekte koji bi se mogli uključiti u buduća istraživanja kako bi se dobili potpuniji podaci. Zanimljive podatke moglo bi se dobiti i ispitujući iste učenike u drugoj vremenskoj točki, odnosno u srednjoj školi. Na taj bi se način dobila mogućnost usporedbe rezultata i uočavanja eventualnih promjena kod učenika završnih razreda osnovne škole i početnih razreda srednje škole. Navedena promišljanja ujedno su i poticaj novim istraživanjima.