## Anela Nikčević-Milković, PhD

University of Zadar, Department of Teacher Education Studies in Gospić, Croatia amilkovic@unizd.hr

# Denis Jurković, mag. paed. et mag. edu. philo.

University of Zadar, Department of Teacher Education Studies in Gospić, Croatia djurkovic@unizd.hr

## Lada Perković, senior lecturer

University of Applied Health Sciences, Zagreb, Croatia lada.perkovic@zvu.hr

# TEACHERS FROM LIKA AND SENJ COUNTY ATTITUDES TOWARDS WORKING WITH PUPILS WITH SPECIAL NEEDS

Abstract: All-inclusive education should be deeply rooted into the policy and practice of the educational system. In order to develop it further in certain micro regions it was necessary to research teachers from Lika and Senj County attitudes towards previous experiences, forms and manners of teaching practice with pupils with special needs. Main results of this research show that primary school teachers in this County have moderate to very positive attitudes on the implementation of inclusion; while secondary school teachers show higher degree of dissatisfaction when evaluating implementation of inclusion practice in their schools. The results indicate overall very good inclusive practice in this County. On the other hand, the results indicate insufficient formal teacher training in ways of teaching pupils with different abilities, which teachers try to compensate with various additional professional training. Most teachers in this County have support regarding special needs pupils, as well as good cooperation with the professional development team in the school. Gifted pupils are streamlined to take up additional activities and special forms of education by teachers. Teachers who have less professional training in working with these pupils tend to be more inclined toward methodically didactic teaching approach.

**Key words**: all-inclusive education, methodically didactic approach to teaching pupils with special needs, primary and secondary school teachers

#### INTRODUCTION

Pupils with special upbringing and educational needs are gifted pupils and pupils with disabilities (Primary and Secondary School Education Act, Official Gazette

nos. 87/08, 86/09, 92/10, 105/10, 90/11, 5 / 12, 16/12, 86/12, 126/12, 94/13, 152/14, 07/17, 68/18, 98/19). According to the herein Act, Article 63 (p. 18) states: "The school conducts the identification, monitoring and encouragement of gifted pupils and organizes additional work according to their preferences, abilities and interests." Koren (1989) states that giftedness consists of cognitive and non-cognitive factors, which means that it is more than the intelligence quotient itself. This characteristic makes it possible for an individual to perform extremely well above average and progress in one or more activities. Under this law, pupils with disabilities are the following: pupils with disabilities, pupils with learning disabilities, behavioral and emotional problems, and pupils with disabilities caused by upbringing, social, economic, cultural and linguistic factors. The above-mentioned Primary and Secondary School Education Act in the Republic of Croatia prescribes appropriate forms of education for these pupils, as well as special curricula. The Act prescribes that schools are to carry out, in addition to regular upbringing and education programs, special programs for pupils with disabilities, regular programs and special programs for children with disabilities in special classes and/or special programs for gifted pupils. Pupils with special upbringing and educational needs require family and social (institutional) support, as well as special upbringing-educational programs within which the individualization of the program is very important, meaning the program being adapted to each student individually, depending on his/her category of difficulties or type of giftedness, as well as methodological-didactic adaptation<sup>5</sup> of the form and manner of working with these pupils.

Educational inclusion refers to creating the conditions for adequate upbringing and education of all pupils. Inclusive upbringing means equal access to quality upbringing and education for all children and youth, directed to pupils respectively. individualized teaching that supports the development and learning of each pupil. Inclusive education promotes the development of competences for lifelong learning and participation in a democratic society. This approach gives each pupil in the upbringing and educational system a sense of belonging and partnership. Igrić (2015) emphasizes that environmental attitudes must contribute to the achievement of inclusion, because laws cannot realize this by themselves. Livazovic, Alispahic, and Terovic (2015: 7) state that "the founding of inclusive education is argumentative and justified in the plans of economic, neurobiological, educational and social nature." The basic principles of inclusive upbringing and education are a developmentappropriate and child-centered approach to teaching, equally accessible to all, an individualized teaching process, holistic approach to child development, stressed active role for families and the social community, and a learning environment that respects cultural specificities. The child develops autonomy, initiative, and identity,

Methodological-didactic adaptation means an individualized approach to appropriate didactic-methodological procedures in work that cover the choice of appropriate strategies and procedures of adaption in teaching in line with pupil capacities respectively. Appropriate and individualized didactic-methodological procedures are applied with the aim of achieving success with pupils. Adaption procedures are: perceptive, cognitive, speaking and adaption to requests. (Ivančić, Stančić, 2006).

preparing it for lifelong learning, civic competences, sustainable development, etc. The importance of inclusive upbringing and education is, therefore, to promote basic human freedom, the rights and needs in the modern world. This is a very important upbringing and educational issue because over the past four decades there has been an increase in the involvement of pupils with disabilities in the regular upbringing-educational system. During this period, the concept of upbringing-educational inclusion has changed from medical to social model, but this change is of a procedural nature, which means that it is still ongoing. The basic prerequisites for inclusion include the following: teacher competencies, cooperation with the school's professional development service and parents, involvement of teaching assistants, etc.

Every kindergarten, elementary or secondary school, and higher education institution should develop forms of support systems according to the appropriate upbringing-educational needs of children and young people with special needs. These forms of support should cover and ensure upbringing-educational conditions for all children and young people. These forms of support should cover and ensure upbringing-educational conditions for all children and young people. According to Article 65 of the Primary and Secondary Schools Education Act (Official Gazette nos. 87/2008, 86/2009, 92/2010), "Inclusive support derives from the diversity of students taking into account developmental difficulties, as well as those caused by environmental factors." Ivancic, Stancic (2006) and Kis-Glavas (2012) state that the system of types of support at school level imply material-technical, personnelorganizational, psychological-pedagogical, didactic-methodical and social readiness of the school for the education of all pupils. In the context of inclusive upbringing and education, it is essential for it to be accessible to all children and young people in the local community, whether by its proximity, by removing barriers to indoor and outdoor spaces, arranging transportation suitable for children and young people with special needs, etc. The institution must also have at its disposal general and specific equipment necessary for the effective work of pupils, general and specific didactic means and aids should be provided respectively, depending on the needs of the pupils and the existing difficulties. The availability of an institution, the removal of barriers, the procurement of the necessary materials require the necessary financial resources that these institutions often cannot afford, and are forced to seek the care of relevant ministries or local governments to meet the necessary standards. The aspiration of inclusive upbringing and education is the organization of work that enables all pupils to optimally grow and develop, to learn and participate in all teaching and extracurricular activities respectively. These possibilities are based on the regulations and documents that result from: the Primary and Secondary School Education Act (Official Gazette nos.87/2008, 86/2009, 92/2010, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13, 152/14, 07/17, 68/18, 98/19).

Upbringing and Education Groups in Elementary State Pedagogical Standard of the Elementary Upbringing Education System (Official Gazette nos.63/2008, 90/2010), Regulation on the Number of Pupils in Regular and Combined Classes and School (Official Gazette nos. 124/2009, 73/2010), National Framework Cur-

riculum for Preschool Upbringing and Education, and General Compulsory and Secondary Education (2011).

The results of research in the field of educational inclusion so far show that there is a significant difference between primary and secondary school teachers in their attitudes on the educational inclusion of students with special needs in the regular education system. According to Kudek Mirošević and Jurčević Lozančić (2014), teachers of different levels of education (from kindergarten to higher education level) perceive differently the involvement of children and young people in the regular upbringing and education system, and the differences are most evident in the perception of personal professional competence in working with these pupils. Teacher competencies are a fundamental predictor of the quality of upbringing and education. Ljubić and Kiš-Glavaš (2003) research results show that teachers have a positive attitude on inclusion but are, at the same time, worried about the negative effects of including children with special needs in the regular upbringing-educational system such as additional workload and commitments, and the possibility of worsening class grades. According to Skočić Mihić, Gabrić, Bošković (2016), teachers agree with the fact that inclusive education contributes to the development of all pupils in class and school, both those with special needs and those of regular development. However, there are significant differences at the level of their agreement with the claim that inclusive education contributes to the development of all pupils in terms of age, years of service, type and content of the study program, but with no relation to the county in which they work. Younger teachers, those with fewer years of work experience respectively, show a higher level of agreement with the claim that inclusive education contributes to the development of pupils with special needs, as well as to the development of regular development pupils, compared to older teachers. Teachers who have completed university studies have a higher level of agreement with the claim that inclusive education contributes to the development of pupils with special needs and to the development of regular development pupils than those who have completed professional studies. Teachers and teachers who have taken course (s) on inclusive education show a higher level of agreement with the claim that inclusive education contributes to the development of students with disabilities and to the development of pupils with regular development compared to those who have not attended such courses. Kranjčec Mlinarić, Žic Ralić and Lisak (2016) state that teachers' assessments of the adaptive behavior of students with disabilities in the school environment are significantly lower than teacher's assessments of the adaptive behavior of regular development pupils. Teachers of upper basic education and inclusion education with more years of work experience have more knowledge and more developed basic competences compared to those of lower education with less years of work experience. Teachers who have better cooperation and support from professional associates and school principals feel more competent and have a more positive attitude towards the inclusion of pupils with special needs in regular classes. Teachers who have had pupils with special needs in their work experience so far have more positive views on inclusion.

### **METHODOLOGY**

### RESEARCH AIM AND PROBLEMS

The main objective of this research was to examine the attitudes of teachers of primary and secondary schools in Lika-Senj County towards working with students with special needs in their schools. It was also interesting to examine what the average teacher profile of Lika-Senj County looked like with respect to a variety of sociodemographic traits, and compare it with the average Croatian teacher profile to see if the results of teachers in this county could be generalized with those from the entire Republic of Croatia if the results were similar. Furthermore, it was interesting to examine how educated were the teachers of this county in their work with pupils with special needs, which were the most frequent categories of such students in their schools, and to examine the support given to teachers by school principals in their work with such pupils. The cooperation of teachers with parents of such pupils was also examined as the manner in which these teachers directed the mentioned pupils towards extracurricular activities and forms of schooling. It was also interesting to examine the correlation of sociodemographic variables of teachers with the methodological-didactic aspects of working with these pupils, and whether there was a significant difference between primary and secondary school teachers in these aspects of working with these pupils.

### **PARTICIPANTS**

The research was carried out on a sample of 197 research participants (average age M=40.3; SD=1.73), 155 class teachers and subject teachers in primary school (78.68%) and 42 high school teachers (21.32%) from the Lika-Senj County.

### **INSTRUMENTS**

# Questionnaire on the Evaluation of Inclusion in Education

The Questionnaire on the Evaluation of Inclusion in Education by authors Kudek Mirošević and Jurčević Lozančić (2014) consists of 37 statements. The sub-scale of the Questionnaire Teaching aspects of work (selection of adequate methods/manners of work) claims relate to the selection of appropriate methods and ways of working with pupils (particle examples: I select, apply and adapt methods of work to the individual needs of children; I evaluate my own work in setting upbringing-educational goals, ways of working, outcomes, and results). The entire Questionnaire contains 37 statements, and the 6-claim subscale is used. At the beginning of the Questionnaire, participants are instructed to respond honestly, that there are no correct and incorrect answers, that the questioning is anonymous and that it is solely for scientific research purposes. Participants give answers on a five-point Likert-type scale with the following values: 1 - never, 2 - rarely, 3 - sometimes, 4 - frequently,

5 - regularly. The authors included in the Ouestionnaire particles arising from the legislation and by-laws of pre-school and elementary school education, which emphasize the inclusion of children with special needs in the regular education system (Primary and Secondary Education Act in the Republic of Croatia, Official Gazette nos. 87/08, 86/09, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13; Early Preschool Education Act, Official Gazette no. 94/13; Preschool Upbringing and Education Act; State Pedagogical Standard for Preschool Education, Official Gazette no. 63/08; Regulation on Special Conditions and Criteria for the Implementation of Preschool Education Programs, Official Gazette no.133/97). In checking the structure of the Questionnaire and the possible latent dimensions of teacher assessment of inclusivity at school, an exploratory factor analysis procedure was applied, which also served to check the quality of the metric characteristics of the applied questionnaire. Questionnaire reliability calculated in the research by Kudek Mirošević and Jurčević Lozančić (2014) was based on the calculation of reliability coefficient of internal consistency – Cronbach alpha which was 0.78, and in this research 0.73, thus confirming the satisfactory reliability of this questionnaire.

### The Sociodemographic Questionnaire

The Sociodemographic Questionnaire compiled for the purposes of this research was also used. It collected data from teachers pertaining to: gender, age, years of service, city/place of school, number of students in the class, type of completed study program (three-year professional study, four-year professional or university study, five-year university study, master's or doctoral degree), education for working with pupils with special needs through study and/or work experience at school, past experience of working with students with special needs, school support in dealing with these pupils with regard to the type of special needs, support from the school principal in working with these pupils, cooperation with the parents of these pupils, cooperation with the parents of other students in the classroom, cooperation with the school's professional development department, domination of the assisting profession in working with these pupils, working with associations/organizations/institutions in the local community for the well-being of these pupils and their parents, keeping records of these pupils, technical adaption of the school to these pupils, directing pupils with special needs to additional activities and/or special forms of schooling, additional notes and suggestions for working with these pupils.

### RESEARCH PROCEDURE

The research took place from January to April in the 2018. year in the manner that the Questionnaire and the Survey were sent to all of the 15 primary schools and 5 high schools in the Lika-Senj County. The completed Questionnaires and Surveys were returned to the researchers by 11 primary schools and 3 high schools. The total number of correctly completed questionnaires was 197, accounting for one third. Consent by the Professional Council of the Department of Teacher Education Stud-

ies in Gospić, University of Zadar was obtained, while school principals were sent an invitation for teachers to participate in the research. After receiving the consent from the schools' Teachers' Councils, the researchers distributed the questionnaires to teachers at the ensuing Teachers' Councils. The questionnaires were completed within 40 minutes and followed the codes of ethics for conducting research.

#### RESULTS AND DISCUSSION

**Table 1.** Gender, age, years of service, profile, completed education of teachers from primary and secondary schools in Lika-Senj County

	Ge	nder	A	Age		ars of vice	Pr	ofile		pleted
	f	%	f	%	f	%	f	%	f	%
Male	51	26 %								
Female	146	74 %								
From 25 to 35 years			81	41 %						
From 35 to 55 years			82	42 %						
From 55 to 65 years			34	17 %						
Until 5 years					50	26 %				
From 5 to 25 years					103	53 %				
More than 25 years					44	22 %				
Teacher							67	35 %		
Teacher humanistic profile							53	27 %		
Social profile teacher							39	20 %		
Natural science teacher							20	160/		
							30	16 %		
Art profile teacher							8	4 %		
Three-year professional study									35	18 %
A four-year university degree									107	55 %

Five year university degree					40	20 %
Master's degree / PhD					14	7 %

N = 197; Legend: Sex: 1 - Male, 2 - Female; Age: 1 - from 25 to 35 years, 2 - from 35 to 55 years, 3 - from 55 to 65 years; Years of service: 1 - until 5 years, 2 - from 5 to 25 years, 3 - more than 25 years; Profile: 1 - Teacher from 1st to 4th grade, 2 - Teacher of humanistic profile, 3 - Teacher of social profile, 4 - Natural science teacher, 5 - Art profile teacher; Completed education: 1 - Three-year professional study, 2 - A four-year university degree, 3 - Five year university degree, 4 - Master's degree / PhD.

Table 1 shows the result of sample teachers of Lika-Senj County that participated in the research. The sample shows more teachers of female gender (74 %), which is in line with the data applying to the entire Republic of Croatia<sup>6</sup> <sup>7</sup>. Most of the participants of this research are middle-aged teachers (from 35 to 55 years) of which 42 %, which is in line with the results of TALIS 2018 survey, showing that 67 % of teachers in the Republic of Croatia belong to this age range. Younger age teachers follow (from 25 to 35 years) with 41 %, and with 17 % the least in this research being of older age (from 55 to 65 years). According to the research results of TALIS 2013 and 2018, the average age of teachers in the Republic of Croatia is 43 years (TALIS 2013), 42.1 years for teachers in primary schools and 45.4 years for teachers in secondary schools (TALIS 2018) respectively, which corresponds to the EU average of 45 years. The biggest number of teachers range from 30 to 39 years of age, young teachers (from 25 to 29 years) are only 14 % (according to TALIS 2013), 8.4 % of teachers in primary schools and 7 % in secondary schools (according to TALIS 2018) respectively, while 13 % are over 60 years of age. Furthermore, the teachers in this research have from 5 to 25 years of work experience (53 %), and up to 5 years (26 %) while more than 25 years (22 %), which is also in line with the research findings of TALIS 2013 and 2018. The sample of this research consists mostly of classroom teachers (35 %), 27 % are humanistic profile teachers, 20 % are teachers of social profile, 16 % are science teachers, while the least number are art profile teachers (4 %). According to TALIS 2018 survey, Croatian language teachers are in the highest number (15 %) as well as modern foreign language teachers (14 %). Finally, most of the teachers in this research sample have a completed four-year professional or university study degree (20 %), higher school or three-year

<sup>6</sup> According to OECD results of TALIS 2013 research performed in the Republic of Croatia, 74 % of teachers are women (http://www.nszssh.hr/pdf/TALIS\_2013.pdf), while the same research results from 2018 show that 78.2 % elementary school teachers and 67.2 % secondary school teachers are women (Markočić Dekanić, Markuš Sandrić and Gregurović, 2019)

<sup>7 &</sup>quot;TALIS research was launched by Organization for Economic Cooperation and Development (OECD) in year 2000 with the aim of collecting valid and comparative international data on learning and teaching in order to help participating countries to evaluate and redefine policies connected to learning and teaching. Researches are performed in 5-year cycles from 2008 (24 countries), then 2013 (34 countries, Croatia participating for the first time) until 2018 (48 countries). More than 240,000 pupils and teachers participated in TALIS 2018, with 13 000 principals from 48 countries of which 30 countries members of the OECD and 18 countries partners" (Markočić Dekanić, Markuš Sandrić and Gregurović, 2019: 13, 14, 15).

study degree (18 %), and those with a master's or doctoral degree are in the least number (7 %). According to TALIS 2018 survey, 91 % of teachers in primary schools and 92.1 % of teachers in secondary schools have a four-year or five-year graduate study degree, and for 66.7 % a teacher's career was their first choice career was their first choice (Markočić Dekanić, Markuš Sandrić and Gregurović, 2019).8

**Table 2.** Number of students in the class, additional education for working with students with special needs and experience of working with these students of teachers in Lika-Senj County

	student	ber of ts in the ass	Studying for work with students with special needs		worl stude	ving for k with nts with al needs	Previous experience working with special needs students		
	f	%	f	%	f	%	f	%	
Less than 15	77	40 %							
From 15 to 25	116	59 %							
From 25 to 35	4	2 %							
Yes			69	35 %					
No			128	65 %					
Yes					119	61 %			
No					78	40 %			
Yes							171	87 %	
No							26	13 %	

N = 197; Legenda: Number of students in the class: 1 - less than 15, 2 - from 15 to 25 students, 3 - from 25 to 35 students; Studying for work with students with special needs: 1 - Yes, 2 - No; Education through work in a school to work with students with special needs: 1 - Yes, 2 - No; Previous experience working with students with special needs: 1 - Yes, 2 - No.

In the sample of this survey, most of the teachers have 15 to 25 students in their class (59%), followed by less than 15 students in the class (40%). According to TA-LIS 2013 results, "there are 20 pupils in the average Croatian class, which is also less than the TALIS average (24 pupils)." According to the TALIS 2018 survey, the average number of pupils in class in the Republic of Croatia decreased - in primary schools there are 18.6 pupils while in secondary schools 21.3 pupils, which is again lower than the international context in which the classroom average is 24.5 pupils. In the Nikčević-Milković, Jurković and Durdov (2019) research, it was found that the teachers of Lika-Senj County, as well as all those of the Republic of Croatia (ac-

<sup>8</sup> The TALIS 2018 results show that Croatian teachers have a higher completed education degree than their colleagues in many countries. Even 91 % of Croatian primary school subject teaching teachers and 92 % of Croatian secondary school teachers have a 4-year or 5-year study degree. The international average is 41 % of teachers in participating research countries, 44 % of teachers in OECD countries, and 55 % of teachers in EU countries. When the formal education degree of teachers with good standing in the PISA international pupil knowledge evaluation is compared, it is then seen that the formal education of teachers should last for 4 years. Croatia is already at the top of the list of countries in terms of teacher formal education duration.

cording to Ljubić and Kiš-Glavaš, 2003), showed concern for the upbringing-educational process if a greater number of pupils with special needs integrated into regular classes, while, on the other hand, there was a lack in professional team assistance as well as the support of the school and local community. Teachers in Lika-Senj County were also concerned if the parents of these pupils got too involved in professional work, especially in classroom teaching where involvement was higher. In the sample of teachers in Lika-Senj County, according to the education criterion for working with these pupils, during the study, results were obtained of a larger number of teachers who were not educated for this work (65%), compared to those who were educated (35%). Furthermore, according to the criterion of education for working with these students during work at school (e.g. through seminars, conferences, workshops, individually), most teachers reported positive answers (61%), while negative responses were much smaller (40%).

Finally, there were more teachers stating that they had worked so far with these pupils in the classroom (87%) than those who had not (13%). According to the results of the study, Nikčević-Milković et al. (2019), Lika-Senj County teachers who had a lower formal education, as well as lower education in working with these pupils during their work at school, expressed better cooperation and support from the school in working with these pupils, and had a more positive attitude towards inclusion. According to the results of the TALIS 2018 survey, formal education programs in the Republic of Croatia showed a rather low representation of teaching-related content in multicultural and multilingual environments (25%), as well as teachingrelated content of students of different abilities (47%). The situation is similar in other countries. This may be due to the fact that the phenomenon of globalization has only emerged in the last few decades, and has only recently begun to be included in formal education programs for teachers. It is interesting to note that 73% of Croatian teachers feel better prepared pedagogically for the above contents compared to teachers from other EU countries (EU average is 60%) (Markočić Dekanić, Markuš Sandrić and Gregurović, 2019).

**Table 3.** Responses of primary and secondary school teachers in the County of Lika-Senj to the question: Have you had any special needs students in your class so far through your experience?

Kind of special need	Eleme Sch	entary 100l		ndary 100l
	f	%	f	%
Above average ability for particular artistic fields	16	8 %	1	1 %
Above average abilities for particular teaching and scientific fields	15	8 %	1	1 %
Above average psychomotor abilities	5	3 %	2	1 %
Above average general intellectual ability	14	7 %	-	-

Given that 87% of Lika-Senj County teachers had experience in working with pupils with special needs in the classroom, it was interesting to examine the extent to

which they were concerned with gifted and talented pupils. As can be seen in *Table 3*, primary school teachers report that 8% of all pupils with special needs were pupils with above-average abilities for particular artistic fields, as well as pupils with above-average abilities for individual teaching and scientific fields, 7% students with above-average general intellectual ability, and 3% of pupils with above-average psychomotor ability. Concerning the same question, secondary school teachers reported that they had 1% of students with above-average abilities for particular artistic fields, 1% of pupils with above-average abilities for particular teaching and scientific fields, and 1% of pupils with above-average psychomotor abilities.

**Table 4.** Responses of primary and secondary school teachers in Lika-Senj County regarding their current experience with special needs students at school and the answers to the question: Do you now have special needs students in the classroom?

Kind of special need	Elementa	ry School	Secondar	y School
Kind of special fieed	f	%	f	%
Above average ability for particular artistic fields	2	1 %	1	ı
Above average abilities for particular teaching and scientific fields	4	2 %	2	1 %
Above average psychomotor abilities	1	1 %	-	-
Above average general intellectual ability	4	2 %	1	1 %

As answer to the question whether classes currently had pupils with special needs, 117 teachers answered that they had currently had such pupils in class (60 %), while 69 responded they had not had them (35 %). Out of the total number of these pupils, 1% in elementary school were pupils with above-average abilities for particular artistic fields, 2% were pupils with above-average abilities in certain teaching and scientific fields, 1% were pupils with above-average psychomotor abilities, and 2% were pupils with above average general intellectual ability. In secondary school, however, there were 1% of pupils with above-average abilities in certain teaching and scientific fields, and 1% of students with above-average general intellectual abilities. According to the findings of the TALIS 2018 survey, 9.8% of elementary and 8.2% high school teachers in the Republic of Croatia were teaching in a class with more than 10% of pupils with special needs, which is much less than the international average which amounts to 21.7%.

**Table 5.** Responses of primary and secondary school teachers in Lika-Senj County regarding school support in working with students with special needs with regard to the category of these students

		Elementary School							Secondary School					
	we	weak n		moderate		strong		weak		erate	strong			
	f	%	f	%	f	%	f	%	f	%	f	%		
School support for gifted students	31	16 %	72	37%	36	18%	16	8%	19	10 %	2	1 %		

School support for pupils with disabilities 8	4 %	96	49 %	49	25 %	8	4%	28	14 %	5	3%	
---	-----	----	------	----	------	---	----	----	------	---	----	--

N = 197

Table 5 shows that elementary and secondary school teachers consider that school support for pupils with special needs is moderate (49% for pupils with disabilities and 37% for gifted students), then strong (25% for pupils with disabilities and 18% for gifted pupils) and most weak (4%) for pupils with disabilities and 16% for gifted pupils). In the sample of secondary school teachers, the majority consider that support is moderate (14% for pupils with disabilities and 10% for gifted pupils), then weak (4% for pupils with disabilities and 8% for gifted pupils) and the least strong (3% for pupils with disabilities and 1% for gifted pupils).

**Table 6.** Results of the Lika-Senj County Elementary and Secondary School Teachers' Responses on the Support of Principals in Working with Students with Special Needs

	Elementa	ry School	Secondar	ry School
	f	%	f	%
Support of principals in working with gifted and talented pupils				
1 1	132	62 %	36	15 %
Support of principals in working with pupils with disabilities	152	55 %	40	17 %

N = 197

In the sample of elementary and secondary school teachers on the support of principals in working with pupils with disabilities, 62% were those who considered that support was generally strong or moderate in working with gifted and talented pupils, and 55% in working with pupils with disabilities. On the other hand, only 15% of secondary school teachers considered that support was moderate or strong in dealing with gifted and talented pupils, and 17% was moderate or strong in working with pupils with disabilities.

**Table 7.** Results of the responses of elementary and secondary school teachers in Lika-Senj County regarding cooperation with parents of students with special needs and the answers to the question: What forms and methods of work do you have good cooperation with parents of students with special needs?

Elementary School	ol		Secondary School				
Co-operation with parents of pupils with special needs	f	%	Co-operation with parents of pupils with special needs	f	%		
Conversation	61	31 %	Conversation	14	7 %		
Consultation	16	8 %	Consultation	7	4 %		
Counseling	8	4 %	Support	3	2 %		
Parent meetings	7	4 %	Counseling	3	2 %		

Support	3	2 %	Information	1	1 %
Information	3	2 %	Parent meetings	1	1 %
N = 197					

When asked about the quality of co-operation with parents of pupils with special needs, elementary school teachers generally considered it being good (58%) and significantly fewer thought not good (16%). High school teachers thought that collaboration was good (14%), significantly fewer thought it not good (6%) respectively. Furthermore, elementary school teachers found that cooperation with parents was mostly realized through the following: conversation (31%), consultation (8%), counseling (4%), parent meetings (4%), and less through support (2%) and information (2%). Secondary school teachers found that their cooperation was mostly

**Table 8.** Results of the responses of teachers in primary and secondary schools in the County of Lika-Senj on cooperation and forms of cooperation with the professional development service of the school

achieved through the following: conversation (7%), consultation (4%), support and counseling (2% each), and less through information and parent meetings (1%).

Elementary School	ol		Secondary School		
Co-operation with parents of pupils with special needs	f	%	Co-operation with parents of pupils with special needs	f	%
Conversation	42	21 %	Conversation	13	7 %
Counseling	16	8 %	Parent meetings	3	2 %
Consultation	10	5 %	Counseling	3	2 %
Parent meetings	6	3 %	Consultation	1	1 %
Support	5	3 %	Parent participation	1	1 %
Parent participation	3	2 %	Through different documentation	1	1 %
Information sharing	3	2 %	Information sharing	1	1 %
Through different documentation	2	1 %			

Teachers from elementary schools in Lika-Senj County considered that the cooperation with the professional development service of the school (educational rehabilitator, speech therapist, psychologist, educator, librarian) was generally good (64%), a far fewer number thought that it was not good (8%). Secondary school teachers believed that the cooperation was good (18%) and (3%) that it was not good. Elementary school teachers realized this cooperation mostly through: conversation (21%), less through counseling (8%), much less through consultation (5%), parent meetings (3%), support (3%), parent participation (2%), information sharing (2%), and through different documentation (1%).

Secondary school teachers realized this cooperation mostly through: conversation (7%), less through parental meetings (2%), counseling (2%), and the least through

consultation (1%), parental participation (1%), various documentation (1 %) and information (1%). In the study of Nikcevic-Milkovic et al. (2019), teachers of Lika-Senj County considered crucial for competent upbringing-educational work with pupils with special needs the cooperation with the school's professional development service, and support from the school in dealing with these pupils.

**Table 9.** Results of Lika-Senj County Primary and Secondary School Teachers' Responses on Targeting Gifted and Talented Students to Additional Activities or Special Forms of Education

Elementary School	ol		Secondary Schoo	ol	
Special forms of schooling	f	%	Special forms of schooling	f	%
Sport	30	15 %	Extracurricular activities	6	3 %
Music	27	14 %	Sport	4	2 %
Extracurricular activities	19	10 %	Music	3	2 %
Dance	6	3 %	Summer schools	2	1 %
Summer schools	6	3 %	Competitions	2	1 %
Druge aktivnosti u kojima pokazuje interes	5	3 %	Dance	1	1 %
Drama group	3	2 %	Drama group	1	1 %
Artistic groups	2	1 %	Computer science	1	1 %
Journalism	2	1 %			
Visits to cultural institutions and excursions	1	1 %			
Computer science	1	1 %			

N = 197

Regarding the sample of teachers from elementary schools in Lika-Senj County, 42% of them thought that they were directing gifted and talented students to additional extracurricular activities, and special forms of schooling, while 23% of them thought that they were not directing them. Regarding the sample of high school teachers, 11% of them thought that they were directing these students to the aforementioned, and 8% thought not. In observing the forms of pupil guidance, it can be seen that elementary and secondary school teachers directed their gifted and talented pupils mostly to: sport (15%), music (14%), school and extracurricular activities (10%), and then significantly less to dance (3 %), summer schools (3%), other activities of interest (3%), drama group (2%), and least of all to art and artistic groups (1%), journalism (1%), visits to cultural institutions and excursions (1%) and computer science (1%). Secondary school teachers directed these pupils mostly to: school and extracurricular activities (3%), sports (2%), music (2%), summer schools (1%), competitions (1%), least to dancing (1 %), drama group (1%) and computer science (1%).

**Table 10.** Basic statistical indicators of the Questionnaire on the assessment of inclusive educational practice for the factor Methodological-didactic aspects of work with students with special needs

Factor	N	М	D	SD	Min	Max	Skewness	Std. error Skewness	Kurtosis	Std. error Kurtosis
	155	4,26	4	0,477	3	5	-0,238	0,195	-0,635	0,387
Methodological-didactic aspects of working	42	3,98	4	0,639	2	5	-1,376	0,365	2,991	0,717

N = 197; Legend: M - Arithmetic mean; SD - Standard deviation; D - Dominant value; Min - Minimum score; Max - Maximum result; Skewness - Flattery index; Kurtosis - Asymmetry index.

In observing the first column of *Table 10*, which presents the results of elementary and secondary school teachers of Lika-Senj County, it can be seen that the range of values on almost all particles is from 3 to 5, which implies *moderate to extremely positive perceptions of teachers on the implementation of educational inclusion* as a subject of measurement. Secondary school teachers, on the other hand, had a larger range of responses, indicating a possible *greater dissatisfaction with the assessment of inclusive practice* in their schools, but the values of central tendency measures in both cases indicate that *inclusive practice in their schools was very good*.

According to Kline (2005), the extremely deviating distributions were those whose flattening index was greater than 10, while the asymmetry index was greater than 3, the magnitudes of these indices were checked, and found not to exceed the stated values in this study. According to Kudek Mirošević and Jurčević Lozančić (2014), teachers found that they had insufficient knowledge in working with pupils with special needs, and that the existing professional trainings intended for them were not sufficiently practical. According to TALIS 2013 results, an average of 63% of Croatian teachers worked in schools that lacked teachers for teaching pupils with special needs (TALIS average was 48%), moderate were the participation rates in training programs most needed by teachers (46%), and one such program was precisely the teaching of students with special needs. On average, 23% of teachers reported little or no positive impact on programs processing the topic of teaching pupils with special needs and classroom management, while 80% of teachers reported moderate or high importance connected with the topic of teaching pupils with special needs (TALIS average 82%). According to Čepić and Kalin (2017), Croatian teachers, like the Slovenian ones, were evaluated as capable of inclusive teaching, using the advice of professional associates, applying individualized procedures. collaborating and shaping the classroom environment through enhancing the social skills of all students, and positive classroom discipline.

**Table 11.** Correlations of sociodemographic variables of elementary and secondary school teachers in Lika-Senj County and Methodological-didactic aspects of working with students with special needs

Factor	Sex	Age	Degree of completed education	Number of students in the class	Education to work with students with special needs in study	Education to work with students with special needs through experience in school			
Elementary School	Elementary School								
Methodological- didactic aspects of working with pupils with special needs	0.11	-0.02	0.05	0.04	-0.16*	-0.12			
Secondary School									
Methodological- didactic aspects of working with pupils with special needs	0.48*	-0.08	-0.02	0.20	-0.10	-0.33*			

p < .00; N=197

According to the results of the Spearman correlations, a negative and statistically significant correlation was found between the education of teachers of elementary schools in Lika-Senj County in the study of work with pupils with special needs and the methodological-didactic aspects of working with them (rS = -0.16, p < 00), meaning that teachers with less formal initial education in working with these pupils gave more importance to the methodological-didactic aspects of working with them. This result was in line with the results of the research performed by Nikčević-Milković et al. (2019), according to which teachers with a less formal education had a more positive attitude towards the inclusion of pupils with special needs in the upbringing-educational system. Teachers who were less educated through their study and/or through their experience in working with these pupils had a more positive attitude towards professional training and cooperation compared to teachers with a higher education. Teachers with lower levels of formal education had a more positive attitude towards the inclusion of these pupils in the upbringing-educational system, and a more positive attitude on these pupils in being accepted by their peers of regular development and their parents compared to the teachers with a higher level of education. A negative and statistically significant correlation was also found in the education of teachers from Lika-Senj County through school work experience on how to work with pupils with special needs and the methodical-didactic aspects of working with them  $(r_s = -0.33, p$ < .00), which meant that teachers who were less educated through their school experience with these pupils had a more positive attitude towards the methodological-didactic aspects of working with them. It is as if teachers wanted to compensate their lower education for working with pupils with special needs with a better methodological-didactic engagement of working with them.

**Table 12.** Correlations of sociodemographic variables of teachers in Lika-Senj County and Methodological-didactic aspects of working with students with special needs

Factor	students with	students with	School support in working with students with special needs	Collaboration with parents of special needs students	Teacher's collaboration with the school's professional development service	Collaboration of teachers with professionals outside the school			
Elementary School	ol								
Methodological- didactic aspects of working with pupils with special needs	-0.15	0.03	0.20*	-0.18*	-0.12	-0.17*			
Secondary School									
Methodological- didactic aspects of working with pupils with special needs	-0.31*	0.01	0.34*	-0.19	-0.03	-0.15			

<sup>\*</sup>p < .00; N = 197

In observing elementary schools, the *Methodological-didactic aspects of work* factor is insignificantly and positively related to school support in working with pupils with special needs (rS = 0.20, p < .00), which means that the greater the school support in working with these pupils, the better the methodological-didactic engagement with these pupils; it is slightly negatively related to the cooperation with the parents of these pupils (rS = -0.18, p < .00), which means that the smaller the cooperation with the parents of these pupils, the more emphasized is the methodological-didactic engagement in working with the pupils; it is slightly negatively associated with the cooperation with out-of-school professionals (rS = -0.17, p < .00), which means that the lower the involvement of these teachers with out-of-school professionals, the greater the methodological-didactic engagement in working with these pupils.

There is a slight and negative correlation with secondary school teachers between the experience of working with these pupils so far and the methodological-didactic aspects of working with them (rS = -0.31, p < .00), which means that the smaller the experience so far with these pupils, the greater the methodological-didactic engagement in working with them; moderate, positive correlation between school support in working with these pupils and methodological-didactic aspects of working with them (rS = -0.34, p < .00), which means that the greater the school support in working with these pupils, the greater the didactic-methodical engagement in working

with them. In the study of Nikcevic-Milkovic et al. (2019), a finding was obtained according to which the less support the school had in working with these pupils, the more teachers had a more positive attitude towards the inclusion of these pupils in the upbringing-educational system. They individually compensated for the lower support of the school as a system because they were aware of the positive characteristics of inclusion. Likewise, with less school support teachers had a more positive attitude to pupils with special needs being accepted by their peers and parents. It is as if pupils and their parents feel and know that inclusion is positive for the overall dynamics of the upbringing-education system, i.e. for the adequate growth and development of both pupils with special needs as well as other pupils. The result obtained here according to which less cooperation with parents of students with special needs gave teachers a more positive evaluation of their competence in working with them and assistance in the implementation of individual programs and professional development. It seems that too much parental involvement of students with special needs in the professional work of teachers can sometimes be a disruption to the work.

**Table 13.** Examination of differences (t-test) between primary and secondary school teachers of Lika-Senj County for Methodological-didactic aspects of working with students with special needs

FACTOR	M	M	t-test	df	p	N	N SŠ	SD	SD	F-ratio	p
	OŠ	SŠ				OŠ		OŠ	SŠ		
Methodological- didactic aspects of working with pupils with special needs	4,26	3,98	3,12*	195	0,00	155	42	0,477	0,639	1,800*	0,011

\*p < ,00, N = 197; Legend: M OŠ - average values for primary and secondary school teachers; M SS - average values for secondary school teachers; t - test for calculating the statistical significance of the difference; df - number of participants per group; p - probability; N OŠ - number of participants from primary schools; N SS - number of participants from secondary schools; F - ratio - The difference between intra-group variability and intra-group variability.

The difference between teachers of elementary and secondary schools in Lika-Senj County on the factor *Methodological-didactic aspects of work* is statistically significant (t = 3.12, p <0.00). Elementary school teachers (M = 4.26) are significantly better at choosing adequate methods and ways of working, they have more adequate methodological and didactic approaches in working with pupils with special needs compared to secondary school teachers (M = 3.98) respectively. According to the results of the study, Nikčević-Milković et al. (2019), teachers from elementary schools in Lika-Senj County had a statistically significantly positive evaluation of the use of adequate methods and ways of working with these pupils, the application of individualized programs, and the professional development and cooperation compared to secondary school teachers. The possible reasons for this are: greater experience of elementary school teachers in working with these pupils because some high school classes do not have pupils with special needs due to the complexity and difficulty of high school programs; in the last fifteen years, teacher education studies,

especially those for classroom teachers, have had more special education courses for pupils with special needs (both those with development disabilities and gifted and talented pupils), and a more hours for didactic-methodical courses.

### CONCLUSION

According to the results of the present research, elementary school teachers, with regards to secondary school teachers, are applying more and more the individualization of programs, and are being more professionally trained, which is to be expected given the higher number of pupils with special needs in elementary schools. Ljubić and Kiš-Glavaš (2003) also state that inclusion is increasingly growing in primary and secondary schools in the Republic of Croatia. Its objective and organizational assumptions are more satisfied in primary than in secondary schools, however, they are still have not been fully satisfied. Teachers who have not had much experience in working with pupils with special needs have a more positive attitude toward inclusion. Through their own experience of working with these pupils, teachers have witnessed numerous shortcomings in the practical implementation of inclusion. Therefore, further research into the analysis of objective, subjective and organizational preconditions for inclusion ism needed. Kranjčec Mlinarić, Žic Ralić and Lisak (2016) state that teachers principally express support for the process of inclusion, but it is noticeable that they cope differently with these professional challenges. They generally consider inclusion as positive and good for pupils with special needs, as well as for their peers of orderly development. It is evident that their opinion is also influenced by the type of special needs of pupils and classes with a large number of pupils, which results in the inability of giving sufficient attention to the work of pupils with difficulties and gifted students. According to Skočić Mihić, Gabrić and Bošković (2016), there are significant differences in the level of agreement of teachers with the claim that inclusive education contributes to the development of all students in terms of age, years of work, type and content of the study program. Those who have completed university studies with fewer years of work service, who have taken course(s) on inclusive education, show a higher level of agreement with the assertion that inclusive education contributes to the development of pupils with special needs, as well as to the development of regular development pupils. Teachers who have better cooperation and support from professional associates and school principals, and those who have so far had students with special needs in the classroom, feel being more competent in their work and express more positive views concerning inclusion.

The conducted research found that there were far more teachers in primary and secondary schools in Lika-Senj County who had not formally been educated to work with students with special needs during tertiary education with regard to those who had been. However, most of them were further educated to work with these students while working at school. Most of the respondents had worked with these students in their classes until then, and they still had these student(s) in the class.

According to the results of the TALIS 2018 survey, the representation of teach-

ing-related content in a multicultural and multilingual environment and the teaching-related content of pupils of different abilities in formal teacher education programs in the Republic of Croatia is still poor. Therefore, teachers feel less prepared to work with these pupils. However, Croatian teachers feel being better pedagogically prepared compared to teachers from other EU countries.

Most teachers in Lika-Senj County consider that the support of the school and the principal in working with pupils with special needs is appropriate. The majority of those interviewed have a good cooperation with the parents of these pupils, which is mainly realized through discussions and consultations. The cooperation of teachers with the school's professional development service, which is crucial in working with these students, is also good in both elementary and secondary schools of the mentioned county, and is mostly realized through discussions.

Most of the teachers who participated in the survey direct gifted and talented students to additional extracurricular and extra school activities and special forms of education, which is extremely important for the progress of these students.

Primary and secondary school teachers have moderate to extremely positive perceptions on the implementation of educational inclusion, while secondary school teachers show greater dissatisfaction with the evaluation of inclusive practice in their schools. However, the results show very good inclusive practice in both primary and secondary schools in this county.

Elementary school teachers with less formal education in working with students with special needs give greater importance to the methodological-didactic aspects of working with them. Secondary school teachers less educated to work with these students acquire, through their work experience, a more positive attitude toward the methodological-didactic aspects of working with them. The greater the school's support in working with these students, the less cooperation there is with parents and professionals outside the school, then better methodological and didactic engagement of primary and secondary teachers in this county in working with students with special needs. The less work experience acquired so far, and the greater the school's support in working with these students, the greater the methodological-didactic engagement of high school teachers in this county in working with students with special needs.

The findings indicate that educational inclusion in elementary and secondary schools in Lika-Senj County has come to life, but still leaving room for further progress.

#### LITERATURE

- Čepić, R.,; Kalin, J. (2018). Profesionalni razvoj učitelja: status, ličnost i transverzalne kompetencije. Rijeka: Učiteljski fakultet Sveučilišta u Rijeci, Odgojno-obrazovne teme, 1-2: 179-192.
- 2. Dorman, G. (1981). *Middle grades assessment program*. Chapel Hill, XC: Centre for Early Adolescence.
- 3. Državni pedagoški standard osnovnoškolskog sustava odgoja i obrazovanja. Narodne novine, br. 63/2008, 90/2010.
- 4. Fuchs, R.; Vican, D.; Milanović Litre, I. (2011). Nacionalni okvirni kurikul za predškolski

- odgoj i obrazovanje te opće obvezno i srednjoškolsko obrazovanje. Zagreb: Ministarstvo znanosti, obrazovanja i športa RH. Preuzeto s: http://mzos.hr/datoteke/Nacionalni okvirni kurikulum.pdf (2.8.2019.)
- 5. Igrić, Lj. (2015). Osnove edukacijskog uključivanja škola po mjeri svakog djeteta je moguća. Zagreb: Edukacijsko-rehabilitacijski fakultet Sveučilišta u Zagrebu, Školska knjiga, d.d.
- 6. Ivančić, Đ.; Stančić, Z. (2006). Individualizirani odgojno-obrazovni programi. Od teškoća u razvoju prema planu podrške učenicima s posebnim potrebama. Časopis *S vama*, Polugodišnjak Hrvatske udruge za stručnu pomoć djeci s posebnim potrebama IDEM, 3 (2/3): 91-119.
- Kiš-Glavaš, L. (2012). Univerzalni dizajn za učenje i akademski standard. U: Vulić-Prtorić, A.; Kranželić, V. i Fajdetić, A. (ur.), *Izvođenje nastave i ishodi učenja, Studenti s invaliditetom (17–42)*. Zagreb: Offset NPGTO d.o.o.
- 8. Kline, B. R. (2005). *Principles and Practice of Structural Equation Modeling*. New York: The Guilford Press.
- 9. Koren, I. (1989). Kako prepoznati i identificirati nadarenog učenika. Zagreb: Školske novine.
- 10. Kranjčec Mlinarić, J.; Žic Ralić, A.; Lisak, N. (2016). Promišljanje učitelja o izazovima i barijerama inkluzije učenika s poteškoćama u razvoju. Školski vjesnik: časopis za pedagogijsku teoriju i praksu, 65: 233-247.
- 11. Kudek Mirošević, J.; Jurčević Lozančić, A. (2014). Stavovi odgojitelja i učitelja o provedbi inkluzije u redovitim predškolskim ustanovama i osnovnim školama. *Hrvatska revija za rehabilitacijska istraživanja*, 5(2): 17-29.
- 12. Lipsitz, S. J. (1984). Successful schools for young adolescents. New Brunswick, NJ: Transaction.
- 13. Livazović, G.; Alispahić, D.; Terović, E. (2015). Inkluzivni odgoj i obrazovanje, Udruženje "društvo ujedinjenih građanskih akcija". Sarajevo, Bosna i Hercegovina. Preuzeto s: https://bib.irb.hr/datoteka/756708.INKLUZIVNI\_ODGOJ\_I\_OBRAZOVANJE DUGA\_2015. pdf (5.7.2019.)
- 14. Ljubić, M.; Kiš Glavaš, L. (2003). Razlike u stavovima nastavnika osnovnih i srednjih škola prema edukacijskoj integraciji. *Hrvatska revija za rehabilitacijska istraživanja*, 39(2): 129-136.
- 15. Markočić Dekanić, A.; Markuš Sandrić, M.; Gregurović, M. (2019). TALIS 2018: Učitelji, nastavnici i ravnatelji – cjeloživotni učenici. Nacionalni centar za vanjsko vrednovanje. Preuzeto s: http://dokumenti.ncvvo.hr/Dokumenti\_centra/TALIS/TALIS\_2018\_nacionalni\_izvjestaj.pdf (1.8.2019.)
- Nikčević-Milković, A.; Jurković, D.; Durdov, J. (2019). Estimate of Implementation of Educational Inclusion by Primary School Teachers and High School Teachers. *Croatian Journal of Education*, 21(2): 599-638. doi: 10.15516/cje.v21i2.3107
- 17. Podaci TALIS istraživanja. Zagreb: Nezavisni sindikat zaposlenih u srednjim školama Hrvatske. Preuzeto s: http://www.nszssh.hr/pdf/TALIS 2013.pdf (12.6.2019.)
- 18. Pravilnik o osnovnoškolskom odgoju i obrazovanju učenika s teškoćama u razvoju. Narodne novine, 23/1991.
- 19. Pravilnik o posebnim uvjetima i mjerilima ostvarivanja programa predškolskog odgoja. Narodne novine, 133/1997.
- 20. Pravilnik o broju učenika u redovitom i kombiniranom razrednom odjelu i odgojno-obrazovnoj skupini u osnovnoj školi. Narodne novine, 124/2009, 73/2010.

- 21. Skočić Mihić, S.; Gabrić, I.; Bošković, S. (2016). Učiteljska uvjerenja o vrijednostima inkluzivnog obrazovanja. *Hrvatska revija za rehabilitacijska istraživanja*, 52(1): 30-41.
- 22. Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi. Narodne novine, 87/2008, 86/2009, 92/2010.
- 23. Zakon o odgoju i obrazovanju u osnovnoj i srednjoj školi. Narodne novine, 87/2008, 86/2009, 92/2010, 105/2010, 90/2011, 5/2012, 16/2012, 86/2012, 126/2012, 94/2013, 152/14, 07/17, 68/18, 98/19.
- 24. Zakon o predškolskom odgoju i obrazovanju; Državni pedagoški standard predškolskog odgoja i naobrazbe. Narodne novine, 63/2008.