

# DIFFERENCES IN THE PROVISION OF INDIVIDUALISED EDUCATIONAL SUPPORT TO STUDENTS IN DIFFERENT GRADES

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**Abstract:** *Regardless of the fact that inclusion has a foundation in regulations of the educational system, many studies confirm that there are difficulties in implementing inclusion, because teachers do not adequately apply inclusive principles in their methodological and didactic approaches (Burns, 2002; Guskey, 2002; Bybee and Starkweather, 2006; Bouillet and Kudek Mirošević, 2015). Teachers are primarily expected to accept responsibility for making the teaching process in which all students are accepted and in which individualised forms of support are applied. Therefore, teachers play a crucial role in inclusion quality and in reducing failure of students with learning difficulties. The aim of the present study was to analyse the support that is provided by teachers to students with learning difficulties. Differences in provision of individualised educational support to students with learning difficulties by teachers (N=506) in the fourth, sixth and eighth grades of regular primary schools in Croatia were analysed. The authors hypothesised that there would be statistically significant differences in provision of individualised support among teachers in the different grades. Canonical discriminant analysis showed significant differences among teachers in the different grades. Individualised support was provided significantly more frequently by teachers in the fourth grade than by teachers in the sixth and eighth grades. Teachers in eighth grade provided the least individualised support.*

**Key words:** *teachers, individualised support, adjustment of methods, learning difficulties*

## INTRODUCTION

Educational inclusion is recognised as a process of realising quality education for all children that helps the school deal with and reacts to the different needs of all students (UNESCO, 2005). In this way, the participation of students with learning difficulties in the education process is increased, and their exclusion is reduced because of a less restrictive environment that is suitable to their needs. The phrase "students with learning difficulties" is contained in the Law on Education in Primary and Secondary Schools in the Republic of Croatia (NN, 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). In the present study, the phrase "students with learning difficulties" refers to all students for which individualised teaching and subject adaptation are necessary. The phrase includes students with developmental disabilities, behavioural and emotional

problems and students with learning difficulties conditioned by educational, social, economic, cultural and language factors. The inclusive educational approach implies the integration and participation of students with learning difficulties in activities of regular classes, thus enabling them to learn together with their peers who do not have learning difficulties. This practice is actually the foundation of quality education for all children. However, one of the factors that represents a serious challenge for the successful implementation of educational inclusion in schools is the implementation of individualised lessons in the realisation of this paradigm for inclusive education (Booth and Ainscow, 2011; Kraayenoord, 2007; Ahon Adaka, 2013).

Individualised teaching in educational practice refers to the creation of a stimulating learning environment and of student communities that enable students and teachers to obtain the necessary skills

that are determined by the 21st century (Ivančić and Stančić, 2015). This implies some important elements in schools, such as the practice of providing the right educational support to each student based on his or her abilities, interests and possibilities, as well the practice of surrounding students with their peers who do not have learning difficulties. Therefore, the teachers are expected to be professionals who are constantly developing their competencies within the framework of professional communities that educate them and enable them to cooperate. It is also expected that among themselves, teachers exchange their new knowledge and share their best practice examples and integrate the new teaching theories in their own work.

According to the study by Bouillet and Kudek Mirošević (2015), in which they analysed the differences in the perceived inclusive dimension of the educational process regarding the teachers' assessment of students' behaviour, the data suggested that students with disabilities were more likely to give up problem-solving and initiation of activities, have difficulties in understanding the contents of teaching and learning, refuse to participate in games and activities with other students and ask for help in solving tasks.

Furthermore, Opić and Kudek Mirošević (2011), explored the way teachers treat students with ADHD disorder within the education process. The authors started from the assumption that "different approaches to task performance during the lesson should be equally, if not more, important as suppression or control of disruptive behaviour within the classroom" (pp. 82, according to Barkley, 1994; Lauth and Schlottke, 2002).

Experience in the world indicates that it is necessary to reshape the current educational practice of teaching in our schools. Some researchers remind us that teachers are often not prepared or unable to use the technology of the 21st century in adopting new skills, but they also need to show interest and motivation for effective adoption of new knowledge and skills (Burns, 2002; Guskey, 2002; Bybee and Starkweather, 2006). Although the authors point out the importance of professional teacher development in the 21st century, they claim that during their professional development, they do not rely enough on the benefits of technology.

That technology is nowadays the central focus for advancing teaching strategies and providing individualised support to students.

The National Council for Special Education (NCSE) (2013) in Ireland observes the basic principles of educational inclusion by enabling children and adults with learning difficulties to achieve their developmental potential by applying individual estimates for planning the appropriate results and methods of teaching. Due to the central position of the teacher in the education of the student with learning difficulties, the NCSE (2013) believes that teachers should obtain specific competencies through initial education and continue to develop competencies throughout their professional development. The development and acquisition of organisational, social and communication skills of students with learning difficulties should be observed as a part of the responsibility of each teacher and should be an integral part of the school curriculum. Students with learning difficulties require qualified teachers who are competent in the skills necessary for recognising educational needs, planning and realisation of the methods of working with students with learning difficulties.

The authors Desforges and Lindsay (2010) concluded, based on the results of their study, that the educational assessment of students with learning difficulties should not be observed as a separate diagnostic element but rather as a process closely linked with planning appropriate educational intervention. Assessment, as the mentioned authors observe, is an integral part of the cycle in which educational assessment, planning and individual support interchange. Therefore, the authors advocate the ecological approach, in which the education system and teachers are key actors in the creation of an inclusive environment and identify the obstacles that each student with learning difficulties must overcome. In accordance with the ecological approach, it is necessary to stimulate the teacher to use a wide variety of different assessment methods and new methods and strategies in teaching.

Douglas and his associates (2012) stress the importance of the educational involvement of the teacher through formal and informal assessment in monitoring and measuring the results and outcomes of students with learning difficulties. Namely, they

state that in the educational assessment, outcomes for students with learning difficulties should include the assessment of the student's involvement, achievements and participation in class, the development of social interactions as well as independence and advancement. The same authors state that all students should be included in the monitoring and evaluation by means of reliable and relevant procedures that are implemented by the teachers and are suited to their individual needs.

There are three fields that require special attention in preparing teachers to successfully implement inclusion in the education system. These are 1) the attitudes of the teacher and assistant staff (for example, a teaching assistant), 2) the reform of initial educational programs for teacher training in order to ensure professional competencies of specific skills and knowledge for working in an inclusive classroom, and 3) lifelong development of the teacher by means of effective strategies for improving the quality of teaching methods (Ahon Adaka, 2013).

These fields form the basic principles of the Croatian education system. Namely, according to *The Act on Education in Primary Schools and High Schools in the Republic of Croatia* (National Gazette, 87/08, 86/09, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13, 152/14 and 07/17), working in schools is based on the evaluation of all education components, school work and self-evaluation of direct and indirect carriers of educational activity in the school, in order to fulfill the highest quality national education and pedagogic standards. These legislative determinants are in accord with the *Strategy of Education Science and Technology* (2014), which emphasises the need for innovation of the education system through the concept of lifelong learning, which gives the teacher access to education and recognition of different types of learning.

This links the Strategy with the Strategic Framework for European Cooperation in Education and Training, which especially tries to enforce early adoption and support of the concept of lifelong learning; the advancement of quality and effectiveness in the education and training system; the promotion of equal opportunities, fairness, social cohesion and active citizenship; and the enforcement of creativity and innovation on all levels and in all types of education (Stančić et al., 2011). In

accordance with this, the professional development of teachers as key participants in the sense of building professional capacity enables lasting possibilities for learning and using technologies in class and introducing and exchanging different work strategies. In that sense, it is important for schools to have an integral curriculum that, in order to improve learning and individualised teaching in class for students with learning difficulties, includes, apart from competence, the creativity of the teacher, self-evaluation of the quality of work, and openness and willingness to cooperate.

## OBJECTIVES AND HYPOTHESIS

Given the fact that Croatian law clearly points out that education in primary schools is based on equality of educational opportunities for all students according to their abilities, it is necessary to ensure a systematic method of teaching students, encouraging and improving their development in accordance with their abilities and affinities, and it is important to ensure that students obtain basic (general education) and professional competencies (*The Act on Education in Primary Schools and High Schools in the Republic of Croatia*, National Gazette, 87/08, 86/09, 92/10, 105/10, 90/11, 5/12, 16/12, 86/12, 126/12, 94/13, 152/14 and 07/17). Therefore, the question emerges in what measure is the law in our school practice enforced, that is, how much have inclusive principles been implemented in educational practice.

The research results (Opić and Kudek Mirošević, 2011) indicated a partially positive inclusive approach in working with students, which showed inadequate models of providing individualised educational support to students requiring such additional support.

It is known that student age is negatively linked with student motivation and attachment to school, and Skinner and Belmont (1993) also argued that intrinsic motivation of the average student decreases with age as students become alienated. Further, Wendelborg and Tøssebro (2010) pointed out that the students with different ranges of disabilities are generally marginalised in regular class, and their participation also decreases with age. According to Raboteg Šarić, Šakić and Brajša Žganec (2009),

teachers provide less support and attention to older students, and their relationship changes in an unfavourable direction. Žic Ralić and Ljubas (2013) showed that the most support to students with disabilities comes from adults in school. Since there is insufficient research in our country as well as in the world, authors want to analyse whether teachers are sufficiently oriented to individualised approaches in teaching, especially according to students of different grades, which could consequently influence the academic progress and achievement of students.

In this way, the present paper analyses the individualised procedures of teachers working in fourth, sixth and eighth grades of regular primary schools in the Republic of Croatia, which include specific students with learning difficulties that the teachers had in mind while participating in this research study. **The aim of the research** in this paper was to analyse individualised teacher support that is provided to students with learning difficulties in their class and examination of differences in support strategies. According to available research, the authors **hypothesised** that there are statistically significant differences in the provision of individualised support to students with learning difficulties by teachers teaching in fourth, sixth and eighth grades (Raboteg Šarić, Šakić and Brajša Žganec, 2009).

## METHOD

### Participants

The research included 506 teachers from regular primary schools in the Republic of Croatia in class and subject teaching. Women aged between 30 and 50 were predominant, from 5 to 30 years on aver-

age in their current position. A detailed structure of the sample is shown in Table 1 with regard to the gender, class or subject teaching, age of the participants, years of service in the current position and the grade in which the teachers work.

### Measuring instrument

A part of the research presented in this paper is based on data acquired by a measuring instrument, *The Student Support Questionnaire*, which was designed for the needs of the research project titled "Quality Factors of Educational Inclusion", which was conducted in 90 randomly selected schools over the entire Republic of Croatia in the school year 2014/2015. Cronbach  $\alpha$  of the questionnaire was 0.911. The statements in this instrument are grouped into categories according to the individualisation of teaching, restrictive education and motivational strategies (Bukvić, in press). The research was conducted with the aim of analysing the factors affecting quality of the inclusive process in Croatian schools. The questionnaire was applied in the form of an ordinal scale assessment/self-assessment, which is usually used when assessing/self-assessing the characteristics or behaviour of subjects. The questionnaire comprises a header with an introduction and general instructions on how to fill it in. The first part of the measuring instrument collects data on the socio-demographic characteristics of the subjects, which includes age, years of service and current position (with regard to class or subject teaching), as well as familiarity with teaching students with learning difficulties. The second part of the measuring instrument is formed into a scale with 28 statements. These statements/claims are related to teaching strategies oriented toward the student with disabilities,

**Table 1.** Structure of the sample by gender, class/subject teaching, age and years of service in the current position, and grade (N=506, %)

Participants	%	Class/Subject teaching	%	Age	%	Years in current position	%	Grade	%
Male	11.3	Class teaching	30.6	up to 30 years	8.5	up to 5 years	10.8	in 4th grade	31.0
Female	88.7	Subject teaching	69.4	30-40 years	32.1	5-10 years	22.5	in 6th grade	33.7
				40-50 years	33.5	11-20 years	28.3	in 8th grade	35.3
				50-60 years	17.5	21-30 years	23.7		
				over 60 years	8.5	over 30 years	14.8		
<b>Total</b>	100		100		100		100		100



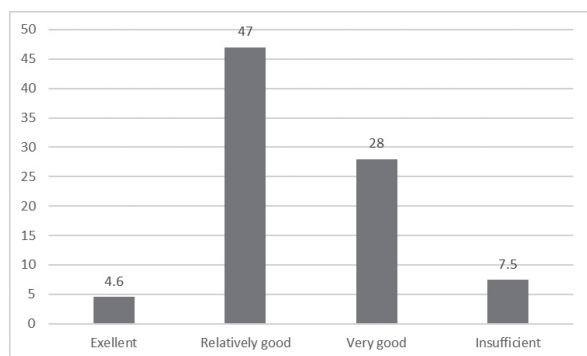
bearing in mind a specific student in the teacher's class. The subjects showed the level of agreement with individual statements on a five-level scale (1=not accurate at all; 2=mostly inaccurate; 3=can't decide; 4=partially accurate; 5=completely accurate). A paper-pencil form was used for data collection.

### Data analysis

Since we were interested in whether statistically significant differences between the groups of teachers in fourth, sixth and eighth grades exist with regard to their provision of individualised support to a specific student with learning difficulties from class, the results were analysed using a canonical discriminant analysis. Descriptive statistics of examined variables are shown in Table 2. The independent variable in this research represents the affiliation of the teacher to one of the class groups in which he or she works (fourth, sixth or eighth grade), bearing in mind a specific student in his or her class, and the dependent variables are made up of 28 statements from the measuring instrument about individualised support for the student. The statistical processing of the data was carried out using the SPSS program.

## RESULTS AND DISCUSSION

Before analysing the differences in teachers providing individualised educational support to students with learning difficulties, we checked their self-assessment of competencies in teaching these groups of students. The results are shown in Figure 1.



**Figure 1.** Knowledge of teaching students with learning difficulties

Regarding the fact that this research included teachers from all three groups of grades in which they teach, i.e. teachers from fourth, sixth and eighth grades, which have students with learning difficulties, subsequently it is evident that the teachers perceive their familiarity in working with students with learning difficulties as relatively good or very good, while only a small a part of them perceive it as insufficient regarding teaching students with learning difficulties. However, because fewer than 5% of teachers think that they have excellent knowledge of everything that should be represented in their work with students with learning difficulties, it is clear that the teachers who during their teaching career encounter students with learning difficulties face a professional challenge in providing educational support. Nevertheless, is expected of them to comply with the principles of educational inclusion based on the individualised approach and to provide equal foundations to ensure equal opportunities of participation for each student in class (*The National Framework Curriculum for Preschool Education and General and High School Education, 2011*).

Table 2 shows the basic descriptive parameters, the average value of the arithmetic means and the standard deviations for each statement or variable.

The results indicate a marked range in the values of the statements that describe the education strategies of the teacher towards the student with disabilities (bearing in mind a specific student). In that context there are different classifications of characteristics or the quality criteria with regards to the treatment of the student. In fact, the results show the highest category of replies, which indicates that it is only partially represented among teachers, that they include the student with learning difficulties into all class activities, that they use every opportunity to praise the student and that when giving instructions they speak directly to the student and teach the student to study on his/her own. These results demonstrate positive attitudes and appropriate support to the student with learning difficulties, and the awareness among teachers of the need to provide suitable support to such a student.

This is in accordance with the results of a few studies that state that the teachers in class have better attitudes towards working with students

**Table 2.** *Descriptive Statistics (N=506)*

Statement	Min.	Max.	Mean	Std. Deviation
In most cases this student has simplified tasks.	1	5	3.14	1.683
The student is allowed to use auxiliary technology (audio recording, computers...) in class.	1	5	2.81	1.551
I teach the student to study independently.	1	5	4.16	1.085
I often have a conversation with the student outside teaching.	1	5	3.88	1.091
I prepare teaching materials for the student in advance and give him special materials for teaching.	1	5	3.02	1.541
The student is included in every teaching activity.	1	5	4.58	0.790
I personally assist the student in learning outside teaching activities.	1	5	2.39	1.425
I often send written notes about his/her behaviour to his/her parents.	1	5	2.20	1.469
If needed, I allow the student to leave the classroom during the class/teaching.	1	5	3.89	1.421
Sometimes the student does not participate in some teaching content.	1	5	2.42	1.474
During class the student receives more assistance than the other students.	1	5	2.94	1.517
The student has the same learning criteria as the other students in class.	1	5	3.28	1.599
I often ask myself if my procedures towards this student are correct.	1	5	3.25	1.429
I check the student's knowledge individually more often than I do the knowledge of the other students.	1	5	2.93	1.551
I often have to warn the student about his/her behaviour.	1	5	1.93	1.347
I adapt the learning content for this student every day.	1	5	2.76	1.555
I use every opportunity I have to praise the student.	1	5	4.56	0.740
I always check if the student can understand the teaching tasks.	1	5	3.63	1.358
The student has more time to finish his/her learning tasks.	1	5	3.44	1.720
I regularly take notes about the student's progress.	1	5	3.82	1.172
I often send the student to talk to the school director or expert associate of the school.	1	5	1.62	1.027
I show the parents how to help the student to study at home.	1	5	3.29	1.538
When I give instructions in class I speak directly to him/her.	1	5	4.13	1.285
I often have to warn the student about class/school rules of behaviour.	1	5	2.10	1.449
I often ask for advice from the expert associate of the school about teaching this student.	1	5	2.49	1.412
I use help from other students for teaching the student.	1	5	2.62	1.495
I prepare additional teaching materials for the student.	1	5	3.06	1.524
I include the student in all class activities.	1	5	2.84	1.787

Min.=Minimum, Max.=Maximum, Mean=Arithmetic mean, Std. deviation=Standard deviation

with learning difficulties (for example, Ward et al., 1994; Villa et al., 1996). However, other studies have also reported that the teachers do not provide the support in class that they should be providing to students with learning difficulties, and that they do not provide sufficient support to educational inclusion (for example, Minke et al., 1996; Reiter et al., 1998).

This impact is particularly reflected in teachers' perception of what the task entails and insufficient knowledge recognition of the personal style of studying of each student, which obviously has an influence on the level and type of motivation of the teacher (Ivančić and Stančić, 2013 according to Ramsdem, 1992; Biggs, 2000; Bolhuis, 2003; Ivančić, 2012). This comes from the results that

point out that the teachers to a smaller extent allow the student to leave the classroom during lessons and that they often talk to the student outside of class. The teachers also to a smaller extent make notes on the progress of the student and even less talk to parents about how to help the student study, set criteria as they do for the other students, give the student more time to do tasks, additionally check whether the student has understood what the task entails as well as prepare special material in advance for class and reassess whether they are acting fairly towards the student. These results as well as the results of some research in Croatia and other countries indicate the presence of still many dilemmas among teachers when working with students with learning difficulties, which reflect the lack of the teacher's motivation,

**Table 3.** *Eigenvalues and Multivariate Tests*

Function	Eigenvalue	% of Variance	Cumulative %	Canonical Correlation	Wilks' lambda	Chi-square	df	Sig.
1	0.229	74.3	74.3	0.431	0.754	137.707	56	0.000
2	0.079	25.7	100.0	0.271	0.927	37.155	27	0.092

df= the degrees of freedom, Sig.=significance

a fear that he/she will not have the support of the school principal or a professional team, and the belief that students without learning difficulties will not accept the behaviour of the student with difficulties (Milenović, 2011; Ivančić, 2012; Ivančić and Stančić, 2013; 2015). According to Florian (2012), many teachers in school refuse to provide the right support for quality inclusion of students with learning difficulties in their class, believing that it disrupts the effective education of the other students. Therefore the teacher does not plan enough or achieve the goals and structure of the lessons as well as clarity of content with regard to students with learning difficulties. Teachers still focus insufficiently on the success of including the student into the learning process, the development and maintenance of the student's motivation as well as the diversity of methods that the teacher uses.

Indicators that the teachers have insufficient familiarity of teaching students with learning difficulties are the results indicating that they often send the student to talk to the principal or expert assistant, they do not often reprimand the student or remind him/her often about the class rules of behaviour and do not often send written notes about the student's behaviour to his/her parents. These results indicate insufficient professional competence on the part of the teacher in regulating student behaviour. In fact, teachers are not confident enough to objectively observe, assess and plan appropriate interventions for the student's behaviour. The second reason that can contribute to insufficient support of the teacher is their fear that they do not have enough skills required to deal with various situations with behavioural problems of the student, for quality cooperation and establishment of good communication.

The values of the discriminatory function are shown in Table 3. The coefficient of Canonical correlation, Chi-squared test, Wilks' lambda, the

degrees of freedom and significance levels are stated. Table 3 clearly shows that in order to differentiate the teachers according to their class grades in which they teach based on the value assessment from two discriminant functions, discrimination analysis extracted one statistically significant discriminant function ( $p_{(F1)}=0.000$ ). The canonical correlation ( $r=0.43$ ) indicates a moderate connection between the groups (sub subjects). The low value of the characteristic root (0.229) is obvious; this indicates the extent to which the discriminant function discriminates between the categories. We did not take the second discriminant function into consideration due to the low canonical correlation ( $r=0.27$ ).

The discriminant coefficients (Table 4), known as the standardized beta forms, indicate the partial contribution of each variable in determining the discriminant function. The stated variables project (determine) the structure of the discriminant function well. This is the Pearson correlation coefficient (structural coefficients) of each variable with a discriminant function (discriminant liability).

From the structure matrix we can see that the variable *I regularly take notes on the progress of the student* has the largest correlation with a discriminant function and that it also strongly discriminates the teachers included in the group. With regard to the height of the coefficients, we can conclude that the variable *I teach the student to study independently* discriminates the teachers from the sample relatively well and to a smaller extent the variable *I include the student in all class activities*. The variable *I use every opportunity I have to praise the student*, discriminates the groups to a smaller extent while the other variables hardly discriminate the groups of teachers. Looking at this type of discriminant function structure we can conclude that the teachers ensure the basis of the inclusive principle, which according to

**Table 4.** *Structure Matrix*

Variable	Correlation with DF	Standardized coefficients DF
I regularly take notes about the student's progress.	0.440*	0.249
I teach the student to study independently.	0.427*	0.472
I include the student in all class activities.	0.338*	0.224
I use every opportunity I have to praise the student.	0.326*	0.147
The student is included in supplementary class.	0.277	0.445
I often send written notes about his/her behaviour to his/her parents.	0.198	0.256
I personally assist the student in learning outside teaching activities.	0.160	0.065
The student has the same learning criteria as the other students in class.	0.130	0.165
I always check if the student can understand the teaching tasks.	0.126	0.098
I check the student's knowledge individually more often than I do the knowledge of other students.	0.124	0.175
I adapt the learning content for this student every day.	0.112	0.229
During class the student receives more assistance than the other students.	0.105	0.412
In most cases this student has simplified tasks.	-0.097	-0.765
I often send the student to talk to the school director or expert associate of the school.	-0.004	-0.182
When I give instructions in class I speak directly to him/her.	-0.008	-0.282
I prepare additional teaching materials for the student.	0.231	0.295
I prepare teaching materials for the student in advance and give him/her special materials for teaching.	0.088	0.024
I show the parents how to help the student to study at home.	0.124	-0.022
The student is allowed to use auxiliary technology (audio recording, computers...) in class.	-0.075	-0.237
I often have to warn the student about class/school rules of behaviour.	0.104	0.404
I often have to warn the student about his/her behaviour.	0.091	-0.176
If needed, I allow the student to leave the classroom during the class/teaching.	0.142	0.166
I use help from other students for teaching the student.	0.015	-0.240
Sometimes the student does not participate in some teaching content.	-0.095	-0.250
The student has more time to finish his/her learning tasks.	-0.015	-0.379
I often ask for advice from the expert associate of the school about teaching this student.	0.081	0.172
I often ask myself if my procedures towards this student are correct.	0.044	0.029
I often have a conversation with the student outside teaching.	-0.015	-0.294

\* variables in the discriminant function with respect to the coefficients of the highest discriminating partition coefficients

Abbot (2006) means that those schools that adopt the inclusive approach in education enable a better learning environment with high expectations. This means that teachers teach according to the values of the vast range of the student's abilities and achievements and overcome the obstacles in the learning process and promote positive respect towards differences of individuals. Keeping these results in mind, it would seem that by implementing such individualised procedures and providing support, the teachers adhere to the basic principles of working in an inclusive classroom with regard to the differences among all students (Ainscow, 1999; 2007; Florian, 2008). In that way, they pay attention and give importance to the students with learning difficulties in the aim of improving their skills, boosting their self-confidence and enforcing their

independence. Furthermore, such relationships help to improve the student's learning abilities as well as behaviour (Lee and Odom, 1996) and also increase the success of individualised educational programs (Brinker and Thorpe, 1984; Ivančić and Stančić, 2006; Kudek Mirošević and Granić, 2014).

However, what seems to be cause for concern is insufficient provision of individualised educational support, which is reflected in the variables with coefficients of the parts that have the least discriminant power and that refer to giving instructions by directly speaking to the student, using technology on the part of the student and using peer collaboration in teaching and non-participation of the student in some class content, insufficient prolongation of time for the student to finish his or her tasks as



well as insufficient representation of communication between the teacher and the student outside of class. In fact, a lot of research worldwide stresses the importance of individualised teaching by professionally guiding the student and the importance of the classroom as an environment for stimulating learning; for example, planning a collaborative team has been identified as one of the key factors (Lipsky and Gartner, 1996; Sebba and Sachdev, 1997). This includes recognisable new innovations in information and communication technology (McKeown, 2000). It has also been proven that certain groups of students require special attention in some situations in learning (Saunders, 2000). Collaborative learning with peers can be significant in achieving positive academic and social results for students in general; however, there are results that indicate that the collaborative way of learning with peers does not always produce the expected and necessary achievements in students with learning difficulties (McMaster and Fuchs, 2002). This is yet another indication of the necessity of competence of teachers when teaching a class and the organisational collaborative way of learning of all students, as well as the creation of a stimulating class environment.

**Table 5.** *Functions at Group Centroids*

The grade in which teachers work	Function*
4	0.711
6	-0.247
8	-0.379

\* extracted discriminant function

The position of the groups in the discriminant area in relation to all the measured variables on providing individualised educational support of three teachers is shown with centroids of the groups (Table 5). From the allocation of the centroids in one-dimensional space of the extracted discriminant function, one can clearly see the direction of the grouping of the arithmetic means of the discriminant function. The differentiation of groups of teachers formed according to the class in which they teach is evident and considering the directions from the matrix structure, so that sixth and eighth grade teachers are at the negative pole, while fourth grade teachers are at the positive pole.

Such results confirm the hypothesis according to which there are statistically significant differences in providing individualised support to students with learning difficulties among teachers of fourth, sixth and eighth grades. Considering the arithmetic mean (centroids) of the teacher group on the discriminant function, we can conclude that the difference is mostly shown in the fact that class teachers (fourth grade teachers) provide the most individualised educational support to students with learning difficulties, while the value of the centroid groups of subject teachers indicate that the teachers provide less individualised educational support to students with learning difficulties. The results of the direction of the centroid groups of subject teachers indicate that provision of individualised educational support to students with learning difficulties negatively increases with higher grade. Teachers in eighth grade, where content is broader and more demanding with regard to the class curriculum, provide the least individualised educational support to students with learning difficulties.

These results can be compared to those of the OECD research project *Teaching and Learning International Survey* (TALIS) (2013), which was conducted in the Republic of Croatia on a sample of subject teachers from fifth to eighth grades. The results of that research indicate that 53% of Croatian teachers work in schools that face the problem of insufficient or inadequate computers and computer software for classes. Also, a fourth of Croatian teachers work in schools that face a significant lack of qualified and/or quality teachers and there is also a lack of teachers for teaching children with learning difficulties. The TALIS research showed that when it comes to the positive influence of feedback regarding the work of teachers on themselves, the largest percentage of teachers claim that the feedback that they received for their work led to average or greater positive changes in the way they evaluate students for the purpose of improving their learning, their classroom management and their implementation of teaching methods for teaching students with learning difficulties. These results are similar to the results of the research by Stančić, Horvatić and Nikolić (2011). This indicates the conclusion that each school should plan a school curriculum based

on individualised teaching and should determine precise criteria that will contribute to greater representation of individualised teaching.

## CONCLUSION

The aim of this research paper was to analyse individualised support that teachers provide to their students with learning difficulties. The hypothesis assumed that there would be statistically significant differences between teachers in providing individualised educational support to students with learning difficulties in fourth, sixth and eighth grades. This hypothesis was confirmed. The results show that there are differences in providing individualised educational support between class and subject teachers. Fourth class teachers provide individualised educational support to students with learning difficulties the most, whereas subject teachers in sixth and eighth grades provide less individualised educational support to their students with learning difficulties. Furthermore, the results indicate that teachers in eighth grade provide the least individualised educational support to students with learning difficulties. Results from this research are similar to studies of other authors, and it is evident that teacher support decreases with student age for all students, not just students with learning difficulties. The results of this research are pointing out the need for class teachers and especially subject teachers in the Republic of Croatia to obtain additional competencies. This means setting the necessary standards for individualised teaching and learning and for acquiring specific competencies of the 21st century in the system of inclusive education (Batarelo Kokić et al., 2009).

Judging by the results of our research, teachers require more competencies and the right kind of knowledge about their responsibilities towards individualised teaching of students with learning difficulties. In order to ensure long-term support for teachers, the education system needs to make an effort at all levels and ensure quality cohesive transition from teacher education to professionals competent in inclusive education. For the generalisation of these results, additional research on a representative sample of teachers of selected grades is required. However, these results can be used as one of the many starting points for further improvement and development of support strategies within the specific competencies of teachers in inclusive school.

As for study limitations, only teacher perception of a single student with learning difficulties was the basis for responding to the survey. Future work should include students with other specific difficulties in the learning process who require other specific support strategies. Also, teacher support was investigated only to students with learning difficulties, but teachers may provide such support to all other students in class. This research is based only on teacher self-report and teaching materials were unavailable.

In future research, attention should be focused on causes of student learning difficulties and lack of failing in school. Also, at some point, differences between all students with disabilities and average peers should be analysed according to teacher support. When researchers are estimating teacher support to students regardless of their difficulties, teaching materials and class observation should also be examined by researchers.

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## RAZLIKE U PRUŽANJU INDIVIDUALIZIRANE ODGOJNO-OBRAZOVNE PODRŠKE UČENICIMA RAZLIČITIH RAZREDA

**Sažetak:** Bez obzira što inkluzija ima utemeljenje u zakonodavstvu odgojno-obrazovnoga sustava, mnoga istraživanja potvrđuju da je inkluziju teško provoditi, jer učitelji nedovoljno primjenjuju metodičko-didaktičke pristupe prema inkluzivnim načelima (Burns, 2002; Guskey, 2002; Bybee and Starkweather, 2006; Bouillet and Kudek Mirošević, 2015). Od učitelja se prvenstveno očekuje da prihvate odgovornost za stvaranje nastavnog procesa u kojem će svi učenici biti prihvaćeni i u kojem će biti primijenjeni individualizirani oblici podrške. Stoga učitelji imaju ključnu ulogu u kvaliteti uključivanja i smanjenju neuspješnosti učenika s teškoćama. Sukladno tome, cilj istraživanja u ovom radu je analizirati podršku koju učenicima s teškoćama pružaju njihovi učitelji. Analiziraju se individualizirani postupci učitelja (N=506) koji rade u četvrtim, šestim i osmim razredima redovitih osnovnih škola u Republici Hrvatskoj, u kojima su uključeni učenici s teškoćama učenja. Postavljena je hipoteza prema kojoj postoje statistički značajne razlike u pružanju individualizirane podrške između učitelja koji rade s učenicima s teškoćama u učenju četvrtih, šestih i osmih razreda. Za tu svrhu primijenjena je kanonička diskriminativna analiza. Rezultati pokazuju da se grupe ispitanika razlikuju, odnosno da je pružanje individualizirane podrške najviše zastupljeno kod učitelja koji rade u četvrtom razredu, zatim kod učitelja u šestim razredima, a najmanje individualizirane podrške pružaju učitelji osmih razreda.

**Ključne riječi:** učitelji, individualizirana podrška, prilagodba metoda, teškoće učenja