

## TEACHERS' SENSE OF EFFICACY AND IMPLICATIONS FOR IMPLEMENTATION OF INCLUSIVE EDUCATION<sup>1</sup>

Danijela ILIĆ-STOŠOVIĆ<sup>2\*</sup>, Snežana NIKOLIĆ\*, Mirjana POPADIĆ\*\*

*\*University of Belgrade*

*Faculty of Special Education and Rehabilitation*

*\*\*Institution for Daily Residence "Sunce", Belgrade*

*Numerous studies confirm that self-efficacy positively correlates with teachers' readiness to accept innovations in teaching and meet students' needs, and with their satisfaction and performance at work.*

*The aim of this research is to examine teachers' sense of self-efficacy and, by analyzing it, to point to teachers' existing strengths and weaknesses in the implementation of inclusive education.*

*The sample consists of 148 teachers, 54.7% of whom are primary school teachers, and 45.3% are subject teachers. The research was conducted in five primary schools in Serbia. The Teachers' Sense of Efficacy Scale – TSES/Long form was used for the purpose of this research.*

*Overall answers of the teachers from our sample are within "I have quite a bit of influence" self-assessment framework in the Scale (AM 7.14, SD 0.66), with minimum self-efficacy assessment in "I have*

---

<sup>1</sup> The paper was realized under the research project "Creating of protocols for assessment of educational potentials in children with disabilities as criteria for writing Individual Education Plans" (number 179025), funded by Ministry of education, science and development of technology Republic of Serbia

<sup>2</sup> E-mail: d.i.stosovic@gmail.com

*some influence". Distribution of answers in the subscales is similar to the distribution of overall answers, but it is observed that in the subscale "Efficacy in Challenging Goals", regardless of high arithmetic mean (AM 6.50, SD 1.09), minimum self-efficacy assessment is closer to "I have very little influence".*

*Teachers' sense of self-efficacy is a construct which can significantly influence teachers' readiness to work in a challenging environment, and as such, has to be included in considering the implications for the implementation of inclusive education.*

**Key words:** *sense of self-efficacy, inclusive teaching*

## INTRODUCTION

The concept of self-efficacy was developed by Albert Bandura who characterized self-efficacy as an extent to which individuals believe they can organize and perform necessary actions so that they achieve a desired outcome. Self-efficacy basically deals with exercise of control (Davis & Kozel, 2009).

According to Coladarci (1992), in the context of teaching, collective efficacy can be defined as teachers' belief that well-guided instruction can reduce the effect of non-stimulating family environment. Personal efficacy would represent teachers' belief that they are capable of providing well-guided instruction, i.e. that an individual possesses personal traits which can meet pedagogical requirements.

According to Woolfolk Hoy and Davis (2005), existing studies indicate that self-efficacy greatly influences and controls motivation to study and performance. Teachers' perception of their own abilities is of great importance and is related to students' achievement. Teachers with a clear perception have a tendency to express greater commitment to their job, they are open to innovations, put more effort in teaching, and are more satisfied with their job. Martinez (2003) cites the results of different studies which confirm that teachers with a higher level of self-efficacy assessment use more effective teaching methods (Bender et al., 1995), they are less prone to refer students to assessment whether they need special education

(Meijer & Foster, 1988; Soodak & Podell, 1994), and set higher goals for their students (Allinder, 1995) when compared to teachers with low self-efficacy assessment. M. Skaalvik and S. Skaalvik (Skaalvik & Skaalvik, 2007) cite the research by Friedman & Farber (1992) which points out that teachers who consider themselves less competent in classroom management and maintaining discipline expressed a higher level of burnout syndrome when compared to teachers with a higher level of self-efficacy.

Since self-efficacy is a construct which is based on teachers' belief that they possess personal traits necessary to achieve educational goals, it is not surprising that there is an increase in research on the relation between teachers' self-efficacy assessment and the possibility of the implementation of inclusive teaching.

Thus, by reviewing available literature, it can be concluded that there is a considerable number of studies on the relation between the attitude and the perceived sense of self-efficacy and training of teachers for inclusive education and this sense.

Studies on the relation between the attitude toward inclusive education and teachers' perceived sense of self-efficacy have a positive correlation. Brigs et al. (2002, according to Gao & Mager, 2011: 103) point out that teachers' perception of the sense of self-efficacy and their beliefs with regard to differences at school can have a positive influence on each other. According to these authors, it is possible that teachers who are generally confident in their teaching will be less anxious when teaching students with learning and developmental disabilities. This practically means that teachers with a more positive attitude toward inclusion assess their experience in inclusive education more positively, which as a result increases the level of their self-efficacy perception. Gao and Mager (2011) determined a correlation between teachers' perception of self-efficacy and positive attitude toward the inclusion of students with learning disabilities or with disabilities in social functioning, but not

children with behavioral disorders. By examining teachers' self-efficacy assessment in South Africa and Finland, and their attitude toward inclusive education, Savolainen et al. (2012) obtained data that both groups of teachers express mainly positive attitudes toward inclusive education, but that teachers in South Africa express the highest level of self-efficacy assessment in managing students' behavior, while teachers in Finland self-assessed this area as their weakest point. Sharma et al. (2011) cite the results of numerous studies (Soodak et al., 1998; Wiesel & Dror, 2006; Shechtman, 2007; Sharma et al., 2008; Forlin et al., 2009; Sharma et al., 2009) which confirm the relation between a high sense of self-efficacy and positive attitude toward inclusion, but also point out that researchers determined that the best predictor of attitudes toward inclusion was teachers' belief that inclusive education is useful.

Studies provided in literature deal with determining the relation between training in inclusive education and self-efficacy assessment. Thus, Romi and Leyser (2006) conducted a research on a sample of 1155 Israeli teachers-to-be with the aim to determine the relation between teachers' training in the implementation of inclusive education and teachers' self-efficacy assessment. They determined that advancement in the training program increases the concern of teachers-to-be and decreases their support for inclusive education. Forlin and Chambers (2011) determined that increased knowledge of laws and inclusive policies, as well as improving future implementers' competencies in inclusive education, did not affect the reduction of teachers' concerns and experienced stress related to the idea that they will have a student with disability in their class. Different results were obtained by Leyser et al. (2011), who examined the relation of years of educational training, experience with children with special needs, and training in working with children in inclusive or special education with self-efficacy assessment of teachers-to-be. They obtained data that teachers-to-be who had great or at least some experience with children with special needs, expressed a higher level of self-efficacy assessment than teachers without such experience,

and that teachers-to-be who completed an intensive or at least some training program, expressed a higher level of self-efficacy assessment than those who did not have training in working with children with special needs.

The study conducted by Wertheim and Leyser (2010), the aim of which was to examine the beliefs of teachers-to-be about their efficacy and the choice of differentiated teaching methods in order to achieve effective inclusive education, led to the results that Personal Teaching Efficacy factor correlated with the choice of a teaching method, but that Teaching Efficacy factor did not have such correlation. The examinees expressed greater willingness to adapt instruction for all students in their class than to apply differentiated instruction.

Teachers' self-efficacy assessment and its implication for the implementation of inclusive education have not been researched in the Republic of Serbia so far, which was the main motive for conducting such research.

## RESEARCH AIM

The aim of this research was to examine teachers' sense of self-efficacy and, by analyzing it, to point to teachers' existing strengths and weaknesses in the implementation of inclusive education.

## RESEARCH METHODOLOGY

### Sample

The research sample consisted of 148 teachers, 81 (54.7%) out of whom are primary school teachers and 67 (45.3%) are subject teachers in three primary schools in Belgrade ("Veselin Masleša"; "Milena Pavlović Barili" and "Ivan Goran Kovačić"), one primary school in Nova Varoš ("Živko Ljujić"), and one

primary school in Prijepolje (“Vladimir Perić Valter“). Gender distribution of the examinees indicates that there were more female (129 or 87.2%) than male (19 or 12.8%) examinees. There were 25 (16.9%) examinees with 1-5 years of work experience, 33 (22.3%) with 6-10 years of work experience, 27 (18.2%) with 11-15 years of work experience, 24 (16.2%) with 16-20 years of work experience, 14 (9.5%) with 21-25 years of work experience, and 25 (16.9%) examinees who had over 25 years of work experience.

Willingness was the main criterion for including teachers in the research.

## METHODS AND TECHNIQUES

Teachers’ Sense of Efficacy Scale – TSES / Long form, (Tschannen-Moran, Woolfolk Hoy, 2001) was used in this research. The Scale consists of 24 questions. Teachers provided answers to each of the questions by circling a number on a nine-point scale, where 1 meant “I have no influence”, and 9 – “I have a great deal of influence”.

Teachers’ answers were analyzed according to the instructions given by the authors of the Scale. Confirmatory factor analysis of the main components with Oblimin rotation (used because of the assumption about correlating factors) was conducted. Factor structure of the questionnaire (3 factors) was confirmed, but identical distribution of items for all three subscales was not. On the basis of Cattell’s scree test, and by applying Guttman-Kaiser criterion and calculating factor loadings between factors and individual items, we determined three factors and the distribution of items with regard to the factors. The factors were named with regard to the original distribution of items done by the authors Tschannen-Moran and Woolfolk Hoy (2001) when designing the Scale and testing its validity and reliability. Thus, according to the original distribution, the items were grouped in three groups of factors, each consisting of eight items: 1) Efficacy in Student Engagement

(items: How much can you do to get through to the most difficult students?, How much can you do to help your students think critically?, How much can you do to motivate students who show low interest in school work?, How much can you do to get students to believe they can do well in school work?, How much can you do to help your students value learning?, How much can you do to improve the understanding of a student who is failing?, How much can you assist families in helping their children do well in school?, How much can you do to foster student creativity?); 2) Efficacy in Instructional Strategies (items: How well can you respond to difficult questions from your students ?, How much can you gauge student comprehension of what you have taught?, To what extent can you craft good questions for your students?, How much can you do to adjust your lessons to the proper level for individual students?, How much can you use a variety of assessment strategies?, To what extent can you provide an alternative explanation or example when students are confused?, How well can you implement alternative strategies in your classroom?, How well can you provide appropriate challenges for very capable students?) and 3) Efficacy in Classroom Management (items: How much can you do to control disruptive behavior in the classroom?, To what extent can you make your expectations clear about student behavior?, How well can you establish routines to keep activities running smoothly?, How much can you do to get children to follow classroom rules?, How much can you do to calm a student who is disruptive or noisy?, How well can you establish a classroom management system with each group of students?, How well can you keep a few problem students from ruining an entire lesson?, How well can you respond to defiant students?).

Factor analysis conducted on our sample determined that all eight original items of the subscale “Efficacy in Instructional Strategies” were distributed within the first factor, six items from the subscale “Efficacy in Classroom Management” were distributed within the second factor (item: How well can you establish routines to keep activities running smoothly? had

the highest loading in the first factor, while the item: To what extent can you make your expectations clear about student behavior? had the highest loading in the third factor). Items from the subscale “Efficacy in Student Engagement” were the most unstable, having factor loadings in the first factor (five items: How much can you do to help your students value learning?, How much can you do to foster student creativity?, How much can you do to get students to believe they can do well in school work?, How much can you assist families in helping their children do well in school? and How much can you do to improve the understanding of a student who is failing?), and in the third factor (three items: How much can you do to motivate students who show low interest in school work?, How much can you do to help your students think critically?, How much can you do to get through to the most difficult students?) (Table 1).

*Table 1 – Factor structure of the Scale*

Items	Components		
	Factor 1	Factor 2	Factor 3
To what extent can you craft good questions for your students?	0.793		
How much can you do to help your students value learning?	0.762		
How well can you respond to difficult questions from your students?	0.751		
How much can you do to foster student creativity?	0.666		
How much can you use a variety of assessment strategies?	0.637		
How much can you do to adjust your lessons to the proper level for individual students?	0.621		
How much can you gauge student comprehension of what you have taught?	0.608		
How well can you establish routines to keep activities running smoothly?	0.575		
To what extent can you provide an alternative explanation or example when students are confused?	0.536		
How much can you do to get students to believe they can do well in school work?	0.480		
How well can you provide appropriate challenges for very capable students?	0.462		
How well can you implement alternative strategies in your classroom?	0.431		



Items	Components		
	Factor 1	Factor 2	Factor 3
How much can you assist families in helping their children do well in school?	0.382		
How much can you do to improve the understanding of a student who is failing?	0.320		
How well can you keep a few problem students from ruining an entire lesson?		0.836	
How much can you do to calm a student who is disruptive or noisy?		0.823	
How well can you respond to defiant students?		0.750	
How well can you establish a classroom management system with each group of students		0.711	
How much can you do to get children to follow classroom rules?		0.587	
How much can you do to control disruptive behavior in the classroom?		0.568	
How much can you do to motivate students who show low interest in school work?			0.737
How much can you do to help your students think critically?			0.725
How much can you do to get through to the most difficult students?			0.639
To what extent can you make your expectations clear about student behavior?			0.359

On the basis of detailed items analysis and original titles of the subscales, the items in our research are grouped in the following way: 1) Efficacy in Instructional Strategies (items: How well can you respond to difficult questions from your students?, How much can you gauge student comprehension of what you have taught?, To what extent can you craft good questions for your students?, How much can you do to adjust your lessons to the proper level for individual students?, How much can you use a variety of assessment strategies?, To what extent can you provide an alternative explanation or example when students are confused?, How well can you implement alternative strategies in your classroom?, How well can you provide appropriate challenges for very capable students?, How well can you establish routines to keep activities running smoothly?, How much can you do to help your students value learning?, How much can you do to foster student creativity?, How much can you do to get

students to believe they can do well in school work?, How much can you assist families in helping their children do well in school? and How much can you do to improve the understanding of a student who is failing?); 2) Efficacy in Challenging Goals (How much can you do to motivate students who show low interest in school work?, How much can you do to help your students think critically?, How much can you do to get through to the most difficult students?, To what extent can you make your expectations clear about student behavior?); 3) Efficacy in Classroom Discipline (How much can you do to control disruptive behavior in the classroom?, How much can you do to get children to follow classroom rules?, How much can you do to calm a student who is disruptive or noisy?, How well can you establish a classroom management system with each group of students?, How well can you keep a few problem students from ruining an entire lesson?, How well can you respond to defiant students?).

The variability coefficient for the complete Scale (Cronbach  $\alpha=0.926$ ), and the subscales designed in this way “Efficacy in Instructional Strategies” (Cronbach  $\alpha=0.906$ ), “Efficacy in Challenging Goals” (Cronbach  $\alpha=0.755$ ), and “Efficacy in Classroom Discipline” (Cronbach  $\alpha=0.879$ ) has very high and satisfactory values.

Data obtained from the Scale and the Questionnaire were quantitatively analyzed. Descriptive statistic procedures were used for statistical analysis of data (frequency, percentage, arithmetic mean, and standard deviation), and t-test was used for determining the significance of differences.

## RESEARCH RESULTS

*Table 2 – Distribution of teachers’ answers in the complete Scale and in the subscales. Descriptive statistics*

	AM	SD	Minimum	Maximum
“Efficacy in Instructional Strategies” subscale	7.27	0.66	5.80	9
“Efficacy in Challenging Goals” subscale	6.50	1.09	3	9
“Efficacy in Classroom Discipline” subscale	7.12	0.92	4	9
TSES in total	7.14	0.66	5.67	9

Overall answers of the teachers from our sample are within “I have quite a bit of influence” self-assessment framework in the Scale (AM 7.14, SD 0.66), with minimum self-efficacy assessment in “I have some influence”. Distribution of answers in the subscales is similar to the distribution of overall answers, but it is observed that in the subscale “Efficacy in Challenging Goals”, regardless of high arithmetic mean (AM 6.50, SD 1.09), minimum self-efficacy assessment is closer to “I have very little influence” (Table 2). Statistical analysis, done by means of t-test, did not confirm the existence of significant differences between arithmetic mean values in the subscales and the Scale in total (Table 3).

*Table 3 – Correlation between the subscales and the Scale in total*

		t-test for Equality of Means		
		Df	Sig. (2-tailed)	Mean Difference
“Efficacy in Instructional Strategies” subscale	Equal variances assumed	145	0.141	-0.24928
	Equal variances not assumed	22.571	0.184	-0.24928
“Efficacy in Challenging Goals” subscale	Equal variances assumed	145	0.555	-0.10804
	Equal variances not assumed	21.645	0.618	-0.10804
“Efficacy in Classroom Discipline” subscale	Equal variances assumed	145	0.672	-0.08655
	Equal variances not assumed	25.025	0.651	-0.08655
TSES in total	Equal variances assumed	145	0.367	-0.14796
	Equal variances not assumed	22.984	0.396	-0.14796

Table 4 shows teachers’ answers with regard to self-efficacy assessment in applying instructional strategies.

*Table 4 – Efficacy in applying instructional strategies. Descriptive statistics*

Teacher beliefs	AM	SD	Minimum	Maximum
How much can you do to get students to believe they can do well in school work?	7.35	0.96	5	9
How well can you respond to difficult questions from your students ?	7.43	0.89	6	9
How well can you establish routines to keep activities running smoothly?	6.90	1.00	5	9
How much can you do to help your students value learning?	7.15	1.08	5	9
How much can you gauge student comprehension of what you have taught?	7.61	0.89	5	9
To what extent can you craft good questions for your students?	7.57	0.91	2	9

Teacher beliefs	AM	SD	Minimum	Maximum
How much can you do to foster student creativity?	7.42	0.94	5	9
How much can you do to improve the understanding of a student who is failing?	6.98	1.07	3	9
How much can you do to adjust your lessons to the proper level for individual students?	7.31	0.88	5	9
How much can you use a variety of assessment strategies?	7.08	1.00	5	9
To what extent can you provide an alternative explanation or example when students are confused?	7.66	0.88	6	9
How much can you assist families in helping their children do well in school?	6.86	1.09	4	9
How well can you implement alternative strategies in your classroom?	6.70	1.13	3	9
How well can you provide appropriate challenges for very capable students?	7.41	1.07	5	9

Teachers' self-assessment of the sense of efficacy in applying instructional strategies is within "I have quite a bit of influence" framework in all the observed variables. The widest range of answers, from "I have very little influence" to "I have a great deal of influence" is observed in teachers' self-assessment of efficacy when crafting good questions for their students in the domain of motivating students who show low interest in school work, however, this is not the variable with the lowest arithmetic mean value. The lowest arithmetic mean (AM 6.70; SD 1.13; answers range from "I have very little influence" to "I have a great deal of influence") and, at the same time, the lowest self-assessment of the sense of efficacy is determined in teachers' self-assessment of the possibilities to implement alternative instructional strategies. Teachers assess that their efficacy is the highest when they have to provide an alternative explanation or example when students are confused. In 7 out of 14 variables, standard deviation larger than one is determined, which indicates that teachers' sense of self-efficacy is pretty unstable in this subscale (Table 4).

*Table 5 – Teachers' self-efficacy in challenging goals.*

*Descriptive statistics*

Teacher beliefs	AM	SD	Minimum	Maximum
How much can you do to get through to the most difficult students?	6.19	1.27	3	9
How much can you do to help your students think critically?	6.79	1.36	3	9
How much can you do to motivate students who show low interest in school work?	6.51	1.35	2	9
To what extent can you make your expectations clear about student behavior?	7.51	1.21	3	9

Table 5 shows teachers' answers in the assessment of self-efficacy in challenging goals. Teachers' self-assessment of the sense of efficacy in the domain of giving instructions is within "I have a great deal of influence" framework in almost all the observed variables. The highest level of teachers' self-assessed efficacy is determined in the possibility to make their expectations clear about student behavior (AM 7.51; SD 1.21). The highest variability of answers (ranging from "I have very little influence" to "I have a great deal of influence") is determined in assessing teachers' sense of self-efficacy in the possibility to motivate students who show low interest in school work, however, this is not the variable with the lowest arithmetic mean value (AM 6.51; SD 1.35). The lowest arithmetic mean (AM 6.19; SD 1.27) is determined in the assessment of teachers' sense of self-efficacy in getting through to the most difficult students. Standard deviation larger than one is determined in all the variables which examined teachers' assessment of self-efficacy in challenging goals (Table 5).

*Table 6 – Teachers' efficacy in classroom discipline.*

*Descriptive statistics*

Teacher beliefs	AM	SD	Minimum	Maximum
How much can you do to control disruptive behavior in the classroom?	6.71	1.41	2	9
How much can you do to get children to follow classroom rules?	7.26	1.07	3	9
How much can you do to calm a student who is disruptive or noisy?	7.02	1.10	3	9
How well can you establish a classroom management system with each group of students?	7.24	0.99	4	9
How well can you keep a few problem students from ruining an entire lesson?	7.09	1.24	2	9
How well can you respond to defiant students?	7.41	1.10	3	9

Teachers' self-assessment of efficacy in classroom management is within "I have a great deal of influence" framework. The highest level of teachers' self-assessed efficacy is determined in the possibility to respond to defiant students (AM 7.41; SD 1.11), and in getting children to follow classroom rules (AM 7.26; SD 1.07). The widest range of teachers' answers (from "I have very little influence" to "I have a great deal of influence") and the lowest arithmetic mean (AM 6.71; SD 1.41) is determined in teachers' self-assessment of efficacy in the possibility to control disruptive behavior in the classroom (Table 6).

## DISCUSSION

The results of this research show that general trend of teachers' self-efficacy assessment in all three observed factors ranges from "I have quite a bit of influence" (factor "Efficacy in Student Engagement" and factor "Efficacy in Classroom Management") to "I have a great deal of influence" (factor "Efficacy in Instructional Strategies"), which can be characterized as generally high teachers' sense of self-efficacy in education. The results of our research are similar to the results of research conducted by Martinez (2003) with the aim to assess teachers' self-efficacy before and after the training in adapting teaching strategies in the education of students with disabilities. She found that the examinees in her sample had a generally high level of self-efficacy assessment before the training. More precisely, more than a half of the examinees believed that they have quite a bit or a great deal of influence in all TSES items. Thus, before the training 65.1% of the examinees in her sample believed in their ability to improve the understanding of a student who is failing, 82.6% believed that they can motivate students who show low interest in school work, 86.9% said that they can help students value learning, while after the training 60.8% of the examinees self-assessed their efficacy as "I have quite a bit of influence" and "I have a great deal of influence". All 100% of the examinees from her sample believed that they

can make their expectations clear about student behavior, and 91.3% that they can establish routines to keep activities running smoothly. In our research, self-assessment of efficacy within “I have a great deal of influence” framework (AM from 6.70 to 7.66) is also determined in items which examined self-assessment of teachers’ efficacy in instructional strategies. This high self-assessment of teachers’ efficacy in our sample can be explained by the results of some studies (e.g. Wolters & Daugherty, 2007; Ross, Cousins & Gadalla, 1996), which indicate that teaching experience itself can increase teachers’ sense of self-efficacy. Wolters and Daugherty (2007) studied the ways in which teacher beliefs about motivation and the practice of teaching can be related, and how these constructs can vary depending on teachers’ experience and the educational level of the implemented instruction. Their research confirmed the relation between teachers’ experience and a higher level of self-efficacy, which correlates with the research by Ross et al. (1996). Although this was not the subject of our research, we can say, for now only on the level of assumption, that such highly self-assessed efficacy can be the result of great experience of teachers from our sample, in which 42.57% of the examinees had 16 to 30 years of work experience.

With regard to the items, the teachers from our sample self-assessed that their highest efficacy in this area is in providing alternative explanations or examples when students are confused (AM 7.66; SD 0.88), in gauging student comprehension of what they have taught (AM 7.61; SD 0.89), in crafting good questions for their students (AM 7.57; SD 0.91), in their ability to respond to difficult questions from their students (AM 7.43; SD 0.89), and in fostering student creativity (AM 7.42; SD 0.94). Such results indicate teachers’ potentials which can directly be applied in the implementation of inclusive education, especially the part related to teachers’ capabilities to first determine whether some students are confused, and then make additional effort to provide alternative explanations or examples.

The lowest self-assessment of efficacy in this area is determined in the item "How well can you implement alternative strategies in your classroom?" (AM 6.70; SD 1.11). This result may indicate that one of the obstacles to successful implementation of inclusive education lies in teachers' inability to deviate from classic frontal work method and apply other numerous forms of organizing teaching and instruction (e.g. active instruction, partner instruction, differentiated instruction, problem instruction). Further research should provide an answer to the question of a sample with such low level of efficacy self-assessment for the application of alternative instructional strategies. For now, only at the level of assumption, it is possible that teachers need additional training in this field, and also regarding curricula which are potentially too extensive and which require the most economic teaching methods, which frontal method certainly is.

The results of our research indicate that lower, but not alarmingly low, self-assessment of efficacy is determined in the subscales "Efficacy in Challenging Goals" and "Efficacy in Classroom Discipline". At the same time, standard deviation is larger than one in all items of both scales, except in the item "How well can you establish a classroom management system with each group of students?", which indicates extreme instability of the answers. In the first subscale, the lowest self-assessment of teachers' efficacy is in the possibility to get through to the most difficult students (AM 6.19; SD 1.27), while with regard to self-efficacy in classroom discipline, the lowest self-assessment of teachers' efficacy is in controlling disruptive behavior (AM 6.71; SD 1.41). The obtained results may be associated with the results of some studies (Wilczenski, 1995; Subban & Sharma, 2006; Gao & Mager, 2011) which determined that teachers express negative attitude toward the inclusion of students with behavioral problems the most. From the context of our research, the results of the above mentioned studies are not surprising, since, if teachers feel that they have lower efficacy in controlling disruptive behavior, it is clear that their attitude toward the inclusion of children with behavioral



problems will be extremely negative. The fact that teachers need help in this field is further supported by the result of this research that teachers very highly self-assess efficacy in making their expectations clear about student behavior (AM 7.51; SD 1.21), and in getting children to follow classroom rules (AM 7.26; SD 1.07), and that, at the same time, they feel inefficient in controlling disruptive behavior. Apparently, teachers lack strategies for working with a group of children who do not respond to standard strategies of maintaining classroom discipline. It seems that alternative strategies of both teaching and maintaining classroom discipline are the most urgent problems teachers from our sample are faced with in assessing self-efficacy, and that they are the biggest obstacle to successful implementation of inclusion. Our attitude is further supported by the research conducted by M. Skaalvik and S. Skaalvik (2007:614), who, when referring to challenges that inclusive education sets before regular school teachers and greater need for teacher engagement in setting individual goals and adapting instructional strategies, say "However, the results from Norwegian schools indicate that teachers perceive this goal as extremely challenging, and many teachers do not know how to respond to different needs and abilities of students (Skaalvik & Fossen, 1995)". Martinez (2003: 473) points out that "... a significant number of regular school teachers (Vaughn, 1999) and those preparing to become one (Sprague & Pennell, 2000) state that they feel inadequately prepared for educating students with disabilities in inclusive classes."

## CONCLUSION

This research, the aim of which was to examine teachers' sense of self-efficacy and, by analyzing it, to point to teachers' existing strengths and weaknesses in the implementation of inclusive education, showed that teachers from our sample generally have a very high sense of self-efficacy. High sense of self-efficacy was determined in all the subscales, and was the

highest in the “Efficacy in Instructional Strategies” subscale. Thus, according to the results of this research, teachers do not lack patience and willingness to pay extra attention to students, regardless of whether they are students who have difficulty in comprehension of what has been taught, or students who have more potential than their peers, which is a resource that can be used for motivating teachers to work in inclusive education. The results of this research are encouraging, since, as Bandura (1997) points out, some studies have shown that teachers with high sense of self-efficacy expressed greater willingness to work in a more challenging environment, which inclusive education certainly is.

However, our results also indicate that it is necessary to raise the level of teachers’ self-efficacy in the application of alternative instructional strategies, as well as alternative strategies in working with children with behavioral problems. Gao and Magere (2011:105) confirmed that “teachers’ perceived self-efficacy and their attitude toward inclusion, as well as their beliefs about diversity, are in positive correlation” and that “improvement in any of these three aspects may lead to a positive influence on the other two.” With regard to that, adequate teacher training, more precisely, raising the level of teachers’ self-efficacy, may lead to the improvement of attitudes toward inclusive education and increasing teachers’ willingness to implement this type of education.

## REFERENCES

1. Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York: Freeman.
2. Coladarci, T. (1992). Teachers’ Sense of Efficacy and Commitment to Teaching. *The Journal of Experimental Education*, 60(4), 323-337.
3. Davis, H. A., & Kozel, S. (2009). Teacher Efficacy. In E. Anderman & L. Anderman (Eds.): *Psychology of classroom learning: An encyclopedia (PCL)*. Thompson Press.

4. Forlin, C., Chambers, D. (2011). Teacher preparation for inclusive education: increasing knowledge but raising concerns. *Asia-Pacific Journal of Teacher Education*, 39(1), 17-32.
5. Gao, W., Mager, G. (2011). Enhancing Preservice Teachers' Sense of Efficacy and Attitudes Toward School Diversity Through Preparation: A Case of One U.S. Inclusive Teacher Education Program. *International Journal of Special Education*, 26(2), 92-107.
6. Leyser, Y., Zeiger, T., Romi, S. (2011). Changes in Self-efficacy of Prospective Special and General Education Teachers: Implication for inclusive education. *International Journal of Disability, Development and Education*, 58(3), 241-255.
7. Martinez, R. S. (2003). Impact of a Graduate Class on Attitudes toward Inclusion, Perceived Teaching Efficacy and Knowledge about Adapting Instruction for Children with Disabilities in Inclusive Settings. *Teacher Development*, 7(3), 473-494.
8. Romi, S., Leyser, Y. (2006). Exploring inclusion preservice training needs: a study of variables associated with attitudes and self-efficacy beliefs. *European Journal of Special Needs Education*, 21(1), 85-105.
9. Ross, J. A., Cousins, J. B., & Gadalla, T. (1996). Within-teacher predictors of teacher efficacy. *Teaching and Teacher Education*, 12, 385-400.
10. Savolainen, H., Engelbrecht, P., Nel, M. & Malinen, O. P. (2012). Understanding teachers' attitudes and self-efficacy in inclusive education: implications for pre-service and in-service teacher education. *European Journal of Special Need Education*, 21(1), 51-68.
11. Sharma, U., Loreman, T., Forlin, C. (2011). Measuring teacher efficacy to implement inclusive practices. *Journal of Research in Special Education Needs*, 12(1), 12-21.
12. Skaalvik, E. M., & Skaalvik, S. (2007). Dimensions of Teacher Self-Efficacy and Relations With Strain Factors, Perceived Collective Teacher Efficacy, and Teacher Burnout. *Journal of Educational Psychology*, 99(3), 611-625.
13. Subban, P. & Sharma, U. (2006). Primary school teachers' perceptions of inclusive education in Victoria, Australia. *International Journal of Special Education*, 21(1), 42-52.

14. Tschannen-Moran, M., & Woolfolk Hoy, A. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17, 783-805.
15. Wertheim, C., Leyser, Y. (2010). Efficacy Beliefs, Background Variables, and Differentiated Instruction of Israeli Prospective Teachers. *The Journal of Educational Research*, 96(1), 54-63.
16. Wilczenski, F. L. (1995). Development of a scale to measure attitudes toward inclusive. education. *Educational and Psychological Measurement*, 55(2), 291-299.
17. Woolfolk Hoy, A., & Davis, H. (2005). Teachers' sense of efficacy and adolescent achievement. In T. Urdan & F. Pajares (Eds.): *Adolescence and education: Self-efficacy beliefs during adolescence*, 5, 117-137. Greenwich, CT: Information Age.
18. Wolters, C. A., Daugherty, S. G. (2007). Goal Structures and Teachers' Sense of Efficacy: Their Relation and Association to Teaching Experience and Academic Level. *Journal of Educational Psychology*, 99(1), 181-193.

## **NASTAVNIČKI OSEĆAJ EFIKASNOSTI I IMPLIKACIJE ZA REALIZACIJU INKLUZIVNE NASTAVE**

Danijela Ilić-Stošović\*, Snežana Nikolić\*, Mirjana Popadić\*\*

\*Univerzitet u Beogradu – Fakultet za specijalnu edukaciju i rehabilitaciju

\*\*Dnevni boravak „Sunce“ Beograd

### **Sažetak**

Brojna istraživanja potvrđuju da samoeфикаsnost pozitivno korelira sa spremnošću nastavnika da prihvate novine u nastavi, izađu u susret potrebama učenika, kao i sa zadovoljstvom i učinkom na poslu.

Istraživanje je imalo za cilj da ispita nastavnički osećaj samoeфикаsnosti i da, njegovom analizom, ukaže na postojeće snage i slabosti nastavnika za realizaciju inkluzivne nastave.

Uzorak istraživanja je činilo 148 nastavnika. Nastavnici razredne nastave su činili 51,7%, dok je, 45,3% bilo nastavnika predmetne nastave. Istraživanje je obavljeno u pet osnovnih škola u Srbiji. Za potrebe ispitivanja korišćena je duža verzija Skale nastavničkih osećaja eфикаsnosti (Teachers' Sense of Efficacy Scale – TSES / Long form).

Ukupni odgovori nastavnika našeg uzorka na Skali nalaze se u okviru samoprocene „Imam dosta uticaja“ (AS 7,14, SD 0,66), sa minimalnom procenom samoeфикаsnosti u nivou „Imam nešto uticaja“. Distribucija odgovora na subskalama slična je distribuciji ukupnih odgovora, ali se uočava da je na subskali *Eфикаsnost u radu sa izazovnim ciljevima*, i pored visoke aritmetičke sredine (AS 6,50, SD 1,09) minimalna procena samoeфикаsnosti bliža nivou „Imam vrlo malo uticaja“.

Osećaj samoeфикаsnosti nastavnika je konstrukt koji značajno može da utiče na njihovu spremnost da rade u izazovnom okruženju i, kao takav, mora se uključiti u razmatranje implikacija za realizaciju inkluzivne nastave.

**Ključne reči:** osećaj samoeфикаsnosti, inkluzivna nastava

*Primljeno: 20.11.2015.*

*Prihvaćeno: 28.11.2015.*