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## Teacher's attitudes towards the most effective educational strategies for supporting inclusive education

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### **Abstract**

Inclusive education is an approach to education aimed at providing adequate support to all students regardless of their abilities in regular schools. Teachers, as the primary carriers of the educational process, often have dilemmas about what is the best way to support students with developmental disabilities in regular classrooms. In this regard, the goal of this paper is to examine teachers' attitudes on what are the best strategies for supporting students with developmental disabilities in regular schools. Additionally, I examined what teachers believe is the best way to support them in order to implement inclusive education. The sample for this research consisted of 375 teachers (294 or 78.4% females and 81 or 21.6% males) from Bosnia and Herzegovina (BIH). Teachers believe that the best strategy is to create positive, and motivating classroom environment followed by adapting the environment in such a way that it suits all students, and collaborative learning, or helping students to learn from each other. Teachers believe they could best be supported through the help in making Individualized Educational Programs. I conclude the paper with certain recommendations on how to improve inclusive education in BIH.

*Keywords:* inclusive education, teachers' attitudes, effective strategies

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## Introduction

Inclusive education is an approach to education which welcomes all learners, regardless of their gender, socioeconomic status, religious beliefs, race, and ability levels. Its aim is to support all learners in general education schools as much as possible. There are many definitions of inclusion (Krischler et al., 2019), depending on what social aspects one wants to include in the definition. In its narrower, educational sense, inclusive education is characterized by the delivery of suitable, high-quality instruction for students with special needs within mainstream schools (Pijl et al., 1997). Inclusive education operates on the principle that every student deserves the opportunity to engage in and benefit from high-quality education. It acknowledges the distinct abilities and obstacles faced by each student, aiming to offer tailored support to enable each one to achieve their utmost capacity. This approach fosters cooperation among educators, parents, and additional involved parties to establish a nurturing environment for every student. Inclusive education also emphasizes the importance of creating a diverse and accepting school culture that values differences and promotes equality among students. By integrating students with varying needs into mainstream classrooms, it challenges stereotypes and encourages empathy and mutual respect. Furthermore, this model of education invests in specialized training for teachers to equip them with the strategies and tools needed to meet the wide range of learning styles and requirements, ensuring that every student can thrive.

Although many European nations have recognized inclusive education as a method to ensure equal educational opportunities for everyone (Haug, 2017) its adequate implementation in practice still lacks behind from what is being advocated. Many studies have identified barriers and facilitators of inclusive education. For example, in one study from Bosnia and Herzegovina (BIH) by Biscevic et al. (2017), the authors found that the greatest obstacle for inclusion, as perceived by the teachers, was the lack of professionals trained to work with children with special educational needs in regular schools. In addition, barriers to inclusion include the exclusiveness of the curriculum, assessment procedures, and practices of mainstream provision, founded on notions of normalization, compensation, and deficit approaches to Special Educational Needs (Lloyd, 2008). On the other hand, studies have also identified some of the facilitators to inclusive education. In a study by Pavlović Babić et al. (2018), two primary types of facilitators at the school level were identified: inclusive practices and inclusive culture. The first type, focusing on tangible actions and relationships within the school and its surrounding community, unveiled five key themes: customization and the application of individual education plans; collaboration between teachers and the school's team of inclusive education experts; partnerships with both internal and external specialists; engagement with parents; and interaction with the local community. The second type, representing the underlying beliefs, values, and implicit norms of the school, was divided into five subcategories: a commitment to lifelong learning; a proactive approach; a strong sense of

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teamwork; refined personal philosophies on development and learning; and an embrace of diversity. Very often, teachers attitudes were examined as they are considered to be one of the main factors affecting whether inclusion will be a success or not. In United Kingdom, many teachers hold significant concerns regarding the widespread integration of students with Special Educational Needs (SEN) into mainstream schools (Florian, 1998). In a review paper by Avramidis and Norwich (2002), authors found that in the most studies they reviewed teachers had positive attitudes towards inclusion. There are several studies conducted in BIH regarding inclusive education and one of the finding was that little more than 50% of teachers supported inclusion but at the same time teachers believed they are not adequately supported to implement inclusion (Memisevic & Hodzic, 2011). In a yet another study (Stepanović & Ilić, 2022), teachers point to a general lack of a sense of competence to work with children with disabilities. As the biggest obstacles to inclusive education, teachers identified their own initial education and negative school culture. Finally, the results showed that there is no significant correlation between teachers' experience with students with disabilities and the length of work experience with the perception of different aspects of inclusive education. The concluding remarks emphasize the need for teachers to accept their roles and to feel competent in working with students with disabilities. The implications of the research relate to the directions of improving initial education and professional development of teachers in the field of inclusion.

Although several studies have examined attitudes of teachers in BIH towards inclusion there are no studies, to the best of authors' knowledge that examined attitudes of teachers towards what they think are the most effective strategies for supporting inclusive education. Thus, the goal of the present study was to fill this gap and examine the attitudes of BIH teachers on the use of educational strategies for supporting students in general education classes. I set to answer two research questions:

1. What teachers think is the best way they can be supported in order to implement inclusive education?
2. What teachers think are the most effective strategies for supporting inclusive education?

## **Method**

### *Participants*

The sample for the present study consisted of 375 elementary school teachers (294 or 78.4% females and 81 or 21.6% males) from all parts of BIH. Teachers were recruited through teachers' associations and online groups and were asked to complete an online survey regarding the educational strategies they think are effective in supporting inclusive education. The survey was prepared with Google forms.

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### *Survey*

A conveniently prepared survey was created for the needs of this study. Besides basic demographic information (gender, age, school), it asked teachers what they think are the most effective educational strategies in supporting students with developmental disabilities in their classes, and the question on what they think is the most effective support they need in implementing inclusive education. Given that this is a newly formed instrument, I cannot provide any psychometric properties of the survey but on face value it seems suitable to answer the research questions.

### *Statistical analysis*

In my study, I adopted a descriptive approach to present the findings, focusing on the calculation of means and frequencies to summarize and interpret the data. This method facilitated a straightforward comprehension of the central tendencies and distribution patterns within the dataset, offering insights into the prevailing trends and variations among the variables under investigation.

To conduct this analysis, I utilized the Microsoft Excel software, a widely recognized tool for its robust functionality in data organization, calculation, and visualization. By leveraging Excel's advanced features, such as pivot tables, formula functions, and charting tools, I was able to efficiently manipulate the data, perform precise calculations of means and frequencies, and generate compelling visual representations. These processes allowed for a detailed examination of the data, enabling the identification of key patterns and insights that are critical to the study's objectives.

The choice of Microsoft Excel as the analytical tool was motivated by its accessibility, user-friendly interface, and flexibility in handling diverse data types and complex analyses. This software not only facilitated a seamless analytical workflow but also ensured the reliability and accuracy of the results derived from the descriptive analysis. Through this approach, I aimed to provide a comprehensive and understandable depiction of the data, laying a solid foundation for further discussion and interpretation of the study's findings.

## **Results**

My first research question was 1. What teachers think is the best way they can be supported in order to implement inclusive education? Teachers were asked to rank from 1 to 7 (lower number means higher importance) the factors that can help them in supporting students with developmental disabilities.

The distribution of answers is presented in Table 1.

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Table 1. Ranking of elements according to their relative importance that can help in working with children with disabilities

<b>Element</b>	<b>Importance Rating</b>
Individual Education Plan (IPP) program	2.93
Adapted textbooks and teaching materials	2.97
Classroom assistant	3.13
Teaching aids specialized for specific developmental difficulties	3.16
Professional assistance and support within the school	3.30
Specialized team professional support	3.46
Active involvement of parents at home	3.51

As can be seen from Table 1, teachers think that the most important segment they need in order to implement inclusive education is the Individual Education Program. However, it is important to note that all answers were closed together, without any element being considered of much lesser importance.

In relation to my second research question, “What teachers think are the most effective strategies for supporting inclusive education?”, the results are shown in Table 2.

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Table 2. The attitudes of teachers towards most effective strategies for supporting inclusive education

Strategy	Count	Percentage
Educational inclusion – strategy for adapting the environment to suit all students	54	14.6%
Collaborative learning - Help students learn from each other	46	12.4%
Peer support in learning - Use peers to teach each other	25	6.8%
Co-teaching - Become an effective team player	15	4.1%
Parental participation - Respect parental rights, skills, and needs	6	1.6%
Inclusive school culture - Create an environment of respect and challenge for all students	46	12.4%
Encouraging positive behavior... Create a system for preventing and reducing behavioral issues at multiple levels	6	1.6%
Stimulating physical environment - Ensure (design) a physical environment that aids learning	5	1.4%
Classroom climate - Create a positive, motivating classroom environment	55	14.9%
Social skills training - Teach students how to have positive relationships with others	10	2.7%
Cognitive learning strategies - Teach students ways of thinking	13	3.5%
Self-regulation - Help students take control over their own learning	8	2.2%
Mnemonics...- Help students remember essential information	6	1.6%
Reciprocal teaching - Help students understand what they read	6	1.6%
Phonological awareness and processing - Use read-aloud strategies	2	0.5%
Cognitive-behavioral therapy - Help students change their negative thinking	5	1.4%
Behavioral approach to learning - Manage immediate stimuli and consequences to change behavior	1	0.3%
Functional behavioral assessment - Manage undesirable behaviors by changing immediate stimuli...	7	1.9%
Direct instruction - Make lessons highly structured, dynamic, and successful	10	2.7%
Repetition and practice - Practice makes perfect	20	5.4%
Formative assessment... – Regularly check and inform students about their progress	10	2.7%
Assistive technology - Compensate for skill deficits in students	9	2.4%
Other	5	1.4%

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Note. Five teachers did not provide the answer, so the total number of teachers who answered is 370.

## Discussion

The goal of the present paper was to examine teachers' attitudes on what are the best ways to support their work in inclusive education. An additional goal was to examine teachers' attitudes on what are the most effective strategies to support inclusive education. The top two ways to support teachers in inclusive education were: Individualized Education Program and Adapted textbooks and Teaching materials. Similar results were obtained in other studies as well. Within the broader context of the importance of Individualized Educational Programs (IEPs), the findings highlight a critical aspect: general education teachers express a significant need for improved communication and professional development related to working with children with disabilities, alongside a call for additional planning time (LeDoux et al., 2012). This underscores the crucial role that tailored educational strategies play in fostering an inclusive classroom environment. Effective IEPs require not just specialized interventions, but also a collaborative approach that involves continuous learning and adjustment from educators. By addressing these identified needs, educators can better align with the personalized objectives of IEPs, ensuring that each student receives the support necessary to thrive academically and socially. This integration of enhanced communication, professional growth, and adequate preparation time into the fabric of IEPs emphasizes the comprehensive approach needed to meet the diverse needs of all students, particularly those with disabilities.

Indeed, studies have shown that the IEP plays an important role in fostering inclusive education. According to Tod (1999), the IEP principles important to inclusion are:

- a focus on pupil outcomes;
- SEN embedded in whole-school practice;
- the need for formative reflection and analysis rather than summative reporting;
- pupil and parent involvement;
- the use of a variety of instruction;
- rigorous evaluation of the effectiveness of support;
- sharing of responsibility for SEN support with other adults;
- peer involvement;
- collaborative multi-agency planning

Second most effective way to support teachers, according to their opinions, is through the usage of Adaptive textbooks and Teaching materials. The adaptation of textbooks represents a significant advancement in educational technology, facilitating a more inclusive and accessible learning environment for students (De Bra et al., 2004). This innovation allows learners to engage with the material in a variety of formats, catering to diverse learning styles and needs without the challenges

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traditionally associated with standard textbooks. Through interactive features, multimedia elements, and adjustable reading settings, textbooks can be customized to suit individual preferences and requirements. For instance, text size and background color can be altered for better visibility, while audio versions of the text cater to auditory learners or those with visual impairments. Furthermore, embedded quizzes and interactive diagrams provide an engaging way to test knowledge and understand complex concepts, making learning more dynamic and effective. By offering these flexible learning tools, adapted textbooks not only enhance the educational experience but also promote equality in education by ensuring that all students, regardless of their learning abilities or disabilities, have the opportunity to succeed. In the same line, adaptive teaching materials play a pivotal role in fostering inclusion within educational settings, breaking down barriers that students with diverse learning needs might face. By leveraging these materials, educators can create a learning environment that is welcoming and effective for all students, regardless of their abilities, learning styles, or backgrounds. It is of utmost importance for teachers to expand their didactic possibilities. It is believed that professional development for teachers achieves its greatest impact when it directly relates to their real-world teaching experiences and highlights the significance of fostering a collaborative school environment where educators can interact with researchers (Tjernberg & Heimdahl Mattson, 2021). A key observation is that the researchers focusing on inclusive education in this study are keen on imparting new insights to educators. This aims to expand their perspectives on overcoming social and structural hurdles to inclusivity. The researchers specializing in reading and writing discussed in this study engage in a reciprocal process designed to enhance the pedagogical skills of teachers, refine the research inquiries of the researchers themselves, and ultimately, improve student learning outcomes. Another consideration is the potential benefits of establishing cooperative research partnerships between experts in inclusive education and didactics. Such collaborations could more efficiently achieve the shared objective: to guarantee the engagement and educational success of every student.

Additional goal was to examine the most effective strategies for supporting inclusive education. Teachers believe that the most effective strategy for promoting inclusive education is the creation of positive, motivating, classroom environment. The argument suggests that regardless of whether students are driven by intrinsic or extrinsic motivation to participate and excel in classroom activities, it is crucial to inspire and encourage them. The ultimate goal is for students to develop an internal, intrinsic motivation for learning and achievement, rather than relying on external, extrinsic motivators (Zajda, 2021). A nurturing classroom atmosphere, where both teachers and classmates provide support and encourage the demonstration of positive social behaviors, seems to be vital in fostering students' commitment to and engagement with positive social objectives (Wentzel, 2003). Thus, it is clear that teachers in Bosnia and Herzegovina might benefit from trainings aimed at increasing motivation of students. Second strategy that teachers found important was adapting the environment to suit all students. Although, it can be seen withing the first selected



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strategy as well, as the environment can affect motivation, I will regard it as a separate strategy. Creating an inclusive socio-cultural environment within educational settings, grounded in tolerance, respect for diversity, and equal opportunities, is essential for ensuring rights and access to quality education for everyone (Chernukha et al., 2021). The final strategy I will mention that has relevance for supporting inclusion according to teachers' attitudes is collaborative learning. Collaborative learning (CL) represents a pedagogical strategy where learners engage in groups to tackle a problem, accomplish a task, or produce a product together. CL is characterized by an instructional technique that encourages students of different abilities to collaborate in small teams to achieve a shared objective. The five key elements of CL include: positive interdependence, accountability at both individual and group levels, the development of interpersonal and small group skills, direct promotive interaction among group members, and the practice of group processing (Laal & Laal, 2012).

This study is not without limitations. I tried to find out in what ways teachers can best be supported for inclusion and what are the strategies that might help them in that endeavor. Although the sample of teachers is relatively large, I cannot be sure that it represents the attitudes and positions of all teachers in Bosnia and Herzegovina. Second limitation deals with the application of the methods used as it certainly would be beneficial to collect data from more questionnaires and take into considerations some of demographic factors that have shown to have relevance in such studies (e.g. gender, experience, residence etc.). Future studies should take into account the mentioned limitations of the present study.

## Conclusions

Teachers believe that the pivotal factors in the effective implementation of inclusive education are predominantly the Individualized Education Program, alongside adapted textbooks and teaching materials. Regarding the strategies deemed most efficacious in fostering an inclusive educational setting, educators advocate for the establishment of a positive and motivating classroom atmosphere, the adaptation of the learning environment, and the promotion of collaborative learning.

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