

# FUTURE TEACHERS' ATTITUDES TOWARD INCLUSION: EMPIRICAL FINDINGS FROM 2020 AND 2025

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## Abstract

The paper analyses the attitudes of future teachers towards inclusive education in the context of educational reforms supported by the Slovak Recovery and Resilience Plan. It aims to identify which attitude components—cognitive, affective, and behavioral—have changed significantly between 2020 and 2025. The research uses the standardized MATIES scale, whose Slovak version proved to be valid and reliable. The results indicate the most positive shift in the affective component (emotional readiness for diversity), while the cognitive component (belief in the universal right to inclusion) remains weaker. The paper concludes with recommendations for teacher training and public policy.

## Key words

inclusion, attitudes, future teachers, MATIES, cognitive component, affective component, behavioral component

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## Introduction

In the current discourse of educational policy, inclusion has become one of the key principles of transforming school systems, with its success largely depending on the attitudes of those who are to implement this change – future teachers. The aim of this article is to analyze the attitudes of future educators towards inclusive education, to identify their main challenges, and to present systemic factors influencing their readiness to implement inclusion in practice. The focus is placed on the context of Slovak higher education institutions preparing teachers, and on findings from national and international studies conducted since 2020.

Between 2022 and 2024, inclusion in education in the Slovak Republic gained new significance through strategic reforms supported by the Recovery and Resilience Plan of the Slovak Republic. Component 6 of this document, entitled Accessibility, Diversity and Quality of Inclusive Education (Office of the Government of the Slovak Republic, 2022), defines inclusion as a fundamental principle of modern education, which should extend beyond special pedagogy and permeate regular classrooms, school environments, and support systems. In practice, this means reforming teacher training, systematically supporting assistant and professional staff, and developing methodological guidance for school principals and founders. The document refers to the vision of a school as an environment that actively responds to diversity and ceases to be a selective system (Office of the Government of the Slovak Republic, 2022). This shift is particularly significant for preventing early school leaving and for integrating pupils from socially disadvantaged backgrounds.

In contemporary academic literature, teacher preparation is considered the most important factor in the successful implementation of inclusive culture in schools (Pantic et al., 2022; Masse et al., 2022). Teachers not only perform instructional functions but also co-create the value frameworks and norms of the environment. As Jury et al. (2022) note, the quality of initial teacher education determines long-term attitudes towards the inclusion of disadvantaged pupils. Studies conducted in various countries show that student teachers' attitudes towards inclusion are shaped mainly by practical experience with diversity, their level of self-efficacy, and critical thinking skills (Fernandez et al., 2023; Belchior et al., 2022). According to Jury et al. (2021), a

positive orientation is more common among primary school teachers and those who have overcome the initial fear of the unknown. Specialization also remains an important factor – future lower secondary teachers generally display more reserved attitudes towards the inclusion of pupils with autism spectrum or behavioral disorders (Boyle et al., 2023; Ding & Hong, 2024).

In Slovakia, the situation has been reflected in several expert reports. The report of the Methodological and Pedagogical Centre (IvS, 2022) points to insufficiently defined competences of support teams and the limited readiness of schools to ensure an individual approach. Consultations with young people (RmS, 2024) confirmed that they perceive inclusion as a value-based rather than merely organizational issue – it is essential to build a culture of understanding and respect, not only to modify curricula. In Slovak conditions, teacher preparation for inclusive environments often focuses on legislative aspects and technical adjustments of conditions, while the dimension of attitudes, ethical dilemmas, and moral reasoning remains underdeveloped (NUCEM, 2022). New study program frameworks under Decree No. 233/2023 Coll. already emphasize reflective thinking, work with value diversity, and inclusive didactics, thus responding to the requirements of the European Competence Framework (European Commission, 2022).

In this context, the importance of teacher preparation at the level of higher education is increasing. As Masse et al. (2022) and Charitaki et al. (2022) state, knowledge of inclusive methods alone is not sufficient – the key is the ability of reflection, self-reflection, and managing ethical dilemmas. Hence, not only the cognitive component of attitudes (knowledge, beliefs) but also the affective (emotional stance) and behavioral (willingness to act) dimensions become crucial. The implementation of the curricular reform from 2026 creates space for changing learning objectives – it formally integrates inclusion into daily practice, supports outdoor learning, project-based education, and meaningful homework. This provides a favorable environment for the development of inclusive competences among future teachers. However, their attitudes will largely depend on whether higher education institutions are able to reflect these systemic changes in the content, forms, and assessment of teacher education.

### **Definition of the Concepts of Inclusion and Attitudes**

According to the OECD (2023), the culture of a school is the main determinant of its inclusive potential. Schools capable of adapting their processes, rules and values to reflect diversity demonstrate higher levels of teacher satisfaction, lower rates of bullying, and better academic performance among all pupils. Inclusion in this sense is not merely about integrating pupils with special educational needs, but a concept that transforms the very functioning of educational institutions. Research by Galaterou and Antoniou (2023), conducted in the Israeli school environment, confirms that schools with inclusion-oriented leadership and strong community participation are more effective in implementing measures to promote diversity and equal opportunities. These findings directly parallel the situation in Slovak schools with higher proportions of Roma pupils or pupils from socially disadvantaged backgrounds.

Masse et al. (2022) state that the development of cognitive and affective components of attitudes towards inclusion is possible only when future teachers are exposed to experiences with diversity while being guided towards value-based reflection. Critical thinking, therefore, ceases to be a purely academic skill and becomes an essential ethical tool of the inclusive school. The implementation of inclusive policies must be understood as a process that goes beyond legislative frameworks and affects teachers' professional identities, school organizational structures, and public discourse on justice. The OECD (2023) warns that without long-term political continuity, sufficient

resources, and professional support at the school level, so-called “inclusive fatigue” may occur – teachers accept the idea of inclusion but lack the means to put it into practice. Therefore, it is crucial to link policies with professional development and to ensure that inclusion does not remain a formal framework but becomes an everyday reality of teaching practice.

Higher education institutions educating future teachers should thus be spaces where inclusion is reflected not only as a pedagogical obligation but also as an ethical challenge. In recent years, critical thinking and moral reasoning have become integral parts of teacher preparation for inclusive practice. As Charitaki et al. (2022) note, the mere knowledge of inclusive methods does not lead to a change in attitudes. What is essential is the ability of critical reflection on one’s own biases, value orientations, and decision-making strategies within the context of moral responsibility for all learners.

In contemporary research discourses, inclusion is understood not as a one-time intervention but as a continuous process of creating an environment that actively responds to diversity and ensures equal opportunities for all learners (UNESCO, 2023). Florian and Spratt (2022) emphasize that true inclusion involves rethinking ordinary pedagogical practices so that they become accessible to the widest possible range of children – including those with physical, social, cultural or linguistic disadvantages. Unlike integration, which focuses on adjustments for individuals, inclusion transforms the entire system. According to OECD (2023), an inclusive school builds a community based on the values of cooperation, respect, fairness and active participation, while inclusion is understood as a cultural and political challenge rather than a purely didactic objective. In the context of inclusive education, the attitudes of teachers and future teachers play a crucial role. Current research defines attitudes as a three-component construct consisting of:

- Cognitive component (beliefs, opinions, knowledge),
- Affective component (emotional reactions),
- Behavioral component (willingness to act, practical responses).

This approach, also referred to as the “ABC model of attitudes”, enables a precise analysis of which dimensions may demonstrate the highest resistance to inclusion – for instance, positive beliefs may coexist with emotional discomfort or low willingness to change pedagogical practice.

International studies have identified several factors that influence attitudes towards inclusion:

- Experience with diversity – respondents with experience teaching pupils with disadvantages tend to display more positive attitudes (Masse et al., 2022).
- Type of study – future special educators usually demonstrate more positive attitudes than general pedagogy students (Jury et al., 2022).
- Gender – several studies indicate that women in teaching or pre-service roles show slightly more positive attitudes in the affective and behavioral components (Charitaki et al., 2022).
- Cultural context – the level of educational centralization, leadership support, and societal discourse on diversity influences the acceptance of inclusive principles (Galaterou & Antoniou, 2023).

Masse et al. (2022) conducted a study among undergraduate education students in Québec. The results showed that the behavioral component (willingness to include disadvantaged pupils) was the most positive, while the affective component showed greater reservations. According to the authors, this phenomenon results from “academic normativity” – respondents declare correct attitudes but do not feel emotionally prepared to handle challenging situations. Charitaki et al. (2022) analyzed

attitudes in six countries and identified cultural differences. For instance, teachers in Greece and Turkey displayed higher levels of emotional resistance than those in the United Kingdom, which the authors associate with lower professional autonomy and insufficient systemic support. Jury et al. (2022) found that the main concerns of French teachers include a lack of resources, fear of classroom disruption, and the perceived “unsuitability” of certain pupils for inclusion. The findings suggest that attitudes are directly influenced by school culture and the availability of institutional support.

### **Validity and Reliability of the MATIES Research Instrument**

The Multidimensional Attitudes Toward Inclusive Education Scale (MATIES), developed by Mahat (2008), is a validated psychometric instrument designed to measure attitudes towards inclusive education. It is based on the classical ABC model of attitudes, according to which attitudes are conceptualized as a three-component construct: the cognitive component (beliefs and opinions), the affective component (emotional experience and attitudes), and the behavioral component (willingness and readiness to act). This three-dimensional structure enables a more detailed analysis of attitudes and a more precise identification of areas that require pedagogical intervention (Charitaki et al., 2022; Masse et al., 2022).

Validity of the questionnaire refers to the extent to which the instrument actually measures what it is intended to measure – in this case, attitudes towards inclusion. In both the original and subsequent validation studies (e.g., Mahat, 2008; Loreman et al., 2010), the content and construct validity of the instrument were confirmed, indicating that individual items adequately represent the psychological construct of attitude and form a coherent theoretical whole.

Reliability refers to the consistency of measurement – that is, whether the questionnaire provides stable and reproducibly accurate results. In the case of the MATIES questionnaire, reliability is commonly verified using Cronbach’s alpha, a statistical coefficient that measures the internal consistency of items within a single scale. The value of this coefficient ranges from 0 to 1, with values above 0.7 generally considered acceptable, above 0.8 good, and above 0.9 excellent (Tavakol & Dennick, 2011).

Cronbach’s alpha is calculated based on the covariances among the questionnaire items – the more closely related the items are, the higher the alpha value. In Mahat’s (2008) original study, the Cronbach’s alpha coefficients were as follows: for the cognitive subscale  $\alpha = 0.78$ , for the affective subscale  $\alpha = 0.84$ , and for the behavioural subscale  $\alpha = 0.81$ . These results indicate a high level of reliability across the subscales.

When translating the instrument into other linguistic and cultural contexts, it is recommended to reassess internal consistency, as language and cultural differences may affect the interpretation of individual items (Beaton et al., 2000). In our research, the questionnaire was translated into Slovak using the translation and back-translation methodology to preserve the semantic equivalence of individual statements. Subsequently, Cronbach’s alpha was calculated separately for each subscale on the research sample to verify the reliability of the Slovak version. The values in all three components exceeded the threshold of 0.75, indicating good internal consistency of the instrument in the Slovak higher education context.

In addition, within the questionnaire structure, reverse items – statements formulated negatively towards the principle of inclusion – were identified. Their purpose is to eliminate response bias, that is, the tendency of respondents to automatically agree or disagree with all statements. The reverse items were recoded during the analytical phase to ensure accurate interpretation of results (see the overview of reverse items in the original version by Mahat, 2008). Given the combination of high reliability values

and demonstrated content validity, it can be concluded that the MATIES questionnaire is a suitable and psychometrically sound tool for measuring attitudes towards inclusion within the Slovak academic context.

### **Levels of the Cognitive, Behavioral and Affective Components of Future Teachers' Attitudes Towards Inclusion**

The concepts of inclusion and attitude are closely interconnected in contemporary academic literature, with empirical findings from 2022–2025 pointing to the complexity of their relationship. It is not sufficient to focus solely on future teachers' knowledge – what proves decisive is the development of their critical reasoning, moral reflection, and sensitive pedagogical practice. Therefore, research on attitudes should always encompass all three components – cognitive, affective, and behavioral – as their analysis can reveal which barriers to a truly inclusive school still persist. In connection with the implementation of reforms in inclusive education supported by the Recovery and Resilience Plan of the Slovak Republic (Office of the Government of the Slovak Republic, 2022), the study of future teachers' attitudes towards disadvantaged pupils gains particular importance. Teachers represent a key element in translating inclusion into school practice, and their value orientation can significantly influence the overall success of this process (Charitaki et al., 2022; Masse et al., 2022). The aim of the research was to analyze the level and development of pre-service teachers' attitudes towards the inclusion of disadvantaged pupils in mainstream classrooms.

In the Slovak context, a key methodological resource is the brochure *Testing 5 – Inclusion of Disadvantaged Pupils*, published by NUCEM in 2022. According to Mahat (2008), the concept of an “inclusive attitude” is operationalized through statements thematically focused on:

- the evaluation of the equality of disadvantaged pupils,
- the perceived benefits of their presence in the classroom, fears of disrupting teaching, and
- beliefs about schools' capacity to provide adequate support.

In the presented study, three key issues were identified, corresponding to the tri-component concept of attitude (cognitive, affective, and behavioral). This structure is currently the most widely accepted conceptualization in the psychology of attitudes and allows for precise mapping of subtle nuances in future teachers' approaches to inclusive education (Charitaki et al., 2022).

1. What is the level of the cognitive component of future teachers' attitudes towards inclusion?

This research question focuses on the respondents' rational beliefs and knowledge about the possibilities, benefits, and challenges of inclusive education. It explores opinions on whether inclusion is feasible in mainstream classrooms, its impact on pupils' performance, and whether future teachers consider the right to inclusion as universal.

2. What is the level of the affective component of attitude?

The affective component concerns emotional reactions to various inclusive situations – for example, the presence of pupils with special educational needs in the classroom. It assesses emotional comfort or discomfort, openness to diversity, and respondents' empathetic disposition.

3. What is the level of the behavioral component of attitude?

This component examines the respondents' actual readiness and willingness to act in line with inclusive principles – that is, to actively engage all pupils in learning, adapt teaching methods, and cooperate with professionals. It focuses on the practical dimension of attitudes – the willingness to act.

Based on qualitative shifts in the educational environment between 2020 and 2025, as well as on previous research (e.g., Masse et al., 2022; OECD, 2023), it can be assumed that targeted changes in legislation, teacher education, and public discourse on equal opportunities have been reflected in more positive attitudes of future teachers towards inclusion.

Hypothesis (H): The attitudes of future teachers towards inclusion in 2025 have statistically significantly improved compared to 2020.

This assumption is based on several factors:

- the update of teacher education programs under Decree No. 233/2023 Coll., emphasizing reflective thinking and inclusive didactics; more intensive implementation of inclusion policies supported by the Recovery and Resilience Plan (Component 6);
- increasing the participation of future teachers in activities involving diverse target groups during their teaching practice.

The research design assumes a longitudinal or ex-post-facto comparison of two cohorts (2020 and 2025), examining the mean scores of each attitude component and testing differences using inferential statistical methods (e.g., independent-sample t-tests, Cohen's d as a measure of effect size). The expected trend is most pronounced in the affective and behavioral components, as these are the most sensitive to practical experience and current school culture norms (Jury et al., 2022).

### 3.1 Empirical Findings

The research was conducted using a quantitative approach through a standardized questionnaire. Each component of attitude was represented by several statements that respondents evaluated on a 6-point Likert scale, where:

- 1 to 3 indicated a positive attitude towards inclusion,
- 4 to 6 indicated a less positive or negative attitude.

Data were collected in two time periods:

- in 2020 (n = 170),
- in 2025 (n = 161),  
resulting in a total of 331 respondents – students enrolled in teacher education programs.

Table 1 presents the mean values of all three components of attitudes, as well as the overall attitude score in both observed years.

Year	Cognitive	Affective	Behavioural	Overall
2020 (n=170)	3.16	3.68	2.86	3.22
2025 (n=161)	3.25	3.18	2.84	3.14

- The affective component recorded the most significant improvement – a decrease from 3.68 to 3.18 indicates a more positive emotional disposition and greater acceptance of the idea of inclusion. The behavioral component remained consistently positive – already in 2020, it had the lowest mean score (2.86), and it slightly improved in 2025 (2.84), confirming the willingness of future teachers to act in accordance with inclusive principles.
- The cognitive component showed a slight decline (from 3.16 to 3.25), suggesting that the belief in the right of all children to be educated together is weaker than the other components.

This slight decline mainly relates to the statement:

“All children – regardless of their abilities or disadvantages – have the right to be educated in the same environment.”

This statement had the highest mean value in 2025 among all items, signaling a certain value-based uncertainty or caution in perceiving inclusion as a universal right.

The data were processed using descriptive statistics. For each component, the arithmetic mean was calculated. The results were interpreted with regard to the direction of the scale (lower value = more positive attitude). The comparison between 2020 and 2025 focused on identifying trends rather than testing the statistical significance of differences.

- Overall attitudes towards inclusion improved from an average score of 3.22 in 2020 to 3.14 in 2025.
- Affective orientation clearly shifted in a positive direction – respondents in 2025 more frequently expressed positive emotions towards diversity.
- Practical willingness to act in favor of inclusion remained consistently high.
- Reservations persist in the area of beliefs – that is, in the cognitive dimension, where students’ opinions remain somewhat inconsistent, particularly regarding value-based and ethical dilemmas.

These findings support the hypothesis that reforms and awareness-raising efforts have a measurable effect, yet the transformation of beliefs is a slower and more complex process.

### **Conclusion and Recommendations**

The research demonstrated that the reform changes in the field of inclusive education in Slovakia are reflected in more positive attitudes among future teachers. Particularly encouraging are the results concerning the affective and behavioral components – students appear more open, empathetic, and practically prepared to embrace diversity in the classroom. On the other hand, the slight decline in the cognitive component – specifically the weaker belief that all children have the right to be educated in the same environment – highlights the need for more intensive work on the value-based anchoring of inclusion.

These findings are significant not only for the academic field but also for policymakers defining the criteria of an inclusive school as a cultural and social project. The results of this research also reinforce the broader consensus in the academic literature that knowledge of inclusion alone is insufficient. As Charitaki et al. (2022) and Masse et al. (2022) note, attitudinal change occurs when future teachers are exposed to real-life situations, are guided towards reflection, and develop the capacity for moral reasoning. In this context, critical thinking plays a crucial role – it ceases to be merely an academic competence and becomes a prerequisite for ethical decision-making in diverse educational settings.

Qualitative consultations with young people within the 10th cycle of the European Youth Dialogue (Pechacova, 2024) indicate that young people do not perceive inclusion as an ideological concept but as an everyday reality of school life, hindered by insufficient support, infrastructure, and preparation. Their calls are directed towards stronger participation, the presence of youth organizations in schools, and active involvement in shaping inclusive strategies.

From a pedagogical perspective, it is therefore necessary to:

- expand discussions on the philosophy of human rights and inclusion within teacher education programs,
- integrate case studies and model situations into curricula to strengthen the ability to resolve ethical dilemmas in practice,
- ensure students’ contact with disadvantaged groups during their studies, reinforce self-reflective tools such as portfolios and reflective essays, and

- systematically build the value dimension of teachers' professional identity.
- From a policy perspective, it is essential to:
- institutionalize courses in inclusive didactics, ethics, and critical thinking as compulsory parts of teacher education programs,
  - ensure stable funding for school support teams and establish their legislative anchoring as part of the regular operation of schools,
  - introduce the assessment of attitudes and moral reasoning into professional qualification frameworks, and
  - support longitudinal research on the impact of higher education training on inclusive attitudes in practice.

In conclusion, inclusion cannot be perceived merely as a didactic or technical issue but as a deeply value-oriented challenge that transforms the school into a space of justice, dignity, and equality of opportunity for all.

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