# **Empowering Teachers for Inclusive Education: The Role of Initial Teacher Education**

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## **Abstract**

Initial teacher education for inclusive education (IE) plays an indispensable role in implementing inclusive classroom settings, and the review of the scientific literature has shown a global need for improvement of teachers' practices about IE. This paper aims to examine the impact of initial teacher training for students with special educational needs (SEN) on teachers' attitudes and beliefs towards IE environments. Firstly, a bibliometric analysis using a criteria-based approach was conducted, consisting of 41 articles, of which only 16 were determined eligible. Secondly, a questionnaire based survey on teachers' opinions of IE (N = 107) was applied to primary and secondary school educators from mainstream schools. Results show that teachers' attitudes towards the inclusion of students with disabilities (SWD) are generally positive, albeit their knowledge about IE principles and practices is often poor. In summary, the goals of this research have been met, and the findings can be used to conduct IE training programs for elementary and middle school teachers.

#### 1. Introduction

Romanian education policy on the inclusion of children with special educational needs in mainstream schools started to be implemented in 1995, when the newly adopted Education Law included a whole chapter dedicated to special education and introduced for the first time the concept of integrated education. This was Romania's first step in achieving the mission of the Salamanca Statement of promoting the right to inclusive education for children with disabilities and creating a school for all [37]. Moreover, Article 32 of the Romanian Constitution concerns the education of children and adolescents with special educational needs (SEN) enrolled in pre-primary, primary, lower secondary, upper secondary, or high school.

With the purpose of supporting the integration of children with special educational needs into mainstream education, the professional figure of the itinerant teacher was regulated by the adoption of the Teacher Statute Law in 1997. However, Government Decision No. 1251 of 2005 first introduced the concept of an inclusive education system in an effort to translate the experience of special schools into mainstream education.

Soon after, Article 24 of the Convention on the Rights of Persons with Disabilities [38] elucidated the measures involved in accomplishing the commitment to inclusive education in order to guarantee the students with disabilities' right to effective participation in school and in society. Besides this theoretical approach to inclusive education, UNESCO presented the fundamental points of inclusive education for all students: promoting student participation and reducing exclusion from and for education; the presence, participation, and achievement of all students, but especially of those who are excluded or at risk of marginalisation [36].

With the adoption of Education Law No. 1/2011, Romania continued the development of this inclusive education system by establishing a county resource centre for educational assistance with the role of offering speech therapy and school counselling for SEN students from public schools. The former special schools became school centres for inclusive education. Still, support services have proven to be either insufficient or inadequate and inefficient for all categories of actors involved in the educational process. As a result, the integration of children with SEN has mostly been characterised by its physical nature rather than a holistic approach to the psychopedagogical process.

Many teachers were forced to experience the inclusive approach to education without any proper prior training and instruction due to the fact that the Education Law No. 1/2011 was not preceded by a coherent educational strategy, which should have encompassed teacher training through inclusive education programmes. With no means to respond to the demands required by the national education policy in terms of inclusive education, teachers were confronted with the peculiar paradox of being forced to apply and transfer competencies they had not yet acquired.

Other teachers searched for new methods of teaching to include in their inclusive classes, such as: oral examination instead of written, reducing the tasks, alternative reading and learning methods, cognitive maps (with a growing interest in mind mapping as a learning and evaluation method for SEN students), digital tools (digital manuals, visual learning with video presentations, digital applications

and softs), and an innovative and friendly teaching approach for all students.

#### 2. Literature review

The most important competence included in the profile of inclusive teachers is represented by teaching through problem-solving activities, which emphasises the research skills and reflection on practice as key tools for personal and professional development. Concurrently, the Council Recommendation on promoting common values, inclusive education, and the European dimension of teaching and learning [6] underlines the importance of educational staff to promote common values and deliver inclusive education by "promoting initial and continued education, exchanges, and peer learning [...] for educational staff".

Learning difficulties are defined as students' "severe, extensive, and long-lasting deficiency in their learning capacity" [26] or as their "difficulties in performing academically at school at a level deemed appropriate for their age group" [35]. Since both definitions focus on students' performance at school, it must be noted that a mildly below average IQ of about 50 to 90 is frequently used as an additional diagnostic criterion for general learning difficulties (GLD) beyond general limitations in learning in various subjects [26].

Altogether, inclusive education is a matter of reaching alignment between inclusive policies, culture, and practices, and removing the barriers to learning and participation [2], [24]; but an inclusive educational approach must also take into account the need to adapt its systemic dynamic accordingly to students' capabilities and environmental demands rather than vice versa [10], [25], [39]. Still, even though many countries have committed to promoting inclusive education since the Salamanca Statement was adopted [37], its implementation has always been confronted with the scepticism and resistance of states with a long-standing practice of special education and a well-structured system of special schools [15], such as Romania.

First and foremost, not only the inherited differences in brain development determine the degree of difficulty for a child with reading, writing, and/ or calculation disorders, but also the type of didactic act the student benefits from plays a major role [21]. Students with GLD' brain is normal and usually very intelligent, although it has strengths in areas other than language and numeracy. Hence the key role of the expertise of the teacher in providing the students with GLD a mind mapping approach throughout the didactic act, which represents an essential tool that helps students to actively listen for key information and observe the relationships amongst different notions and related content.

Secondly, to the extent of improving educational staff's knowledge and skills in teaching all students and helping them to develop positive attitudes and beliefs towards inclusive education, scholars point out that developing pre- and in-service training programs can play a major role in preparing future teachers [3]. Moreover, despite taking a course in inclusive education, other scholars show that a third of teachers consider themselves still uncertain about terminology use or feel a lack of support for an inclusive classroom setting [23].

Other studies sustain the importance of initial teacher training in improving attitudes and behaviours towards special groups of students and highlight the impact of direct contact with people with special needs in improving preservice teachers' perceptions and attitudes, diminishing misinformation and prejudice, discrimination, and stigma [20], [29]. Furthermore, researchers have concluded that the correlation between teachers' self-efficacy and their attitudes toward inclusive education is positive and moderate (r = 0.351) by conducting a meta-analysis of scientific articles from 1994 to 2018 [40].

Therefore, experienced clinical judgement that takes into account a variety of sources remains the most reliable tool for the diagnosis of children with GLD [30]. In addition, screening needs to be replicated at a later stage to pinpoint problems not yet developing at nursery level; hence, identifying and assessing children's needs represents an iterative process [32].

In terms of psychological outcomes, inclusive classroom settings reduce the frequency of challenging behaviours among students with moderate, severe, and complex disabilities (MSCD), but also offer them more opportunities in terms of instructional time and peer interaction [9]. Additionally, there were not identified any negative effects on cognitive or psychological outcomes among students without GLD [16].

Therefore, this paper aims to investigate the role of initial teacher education for IE on teachers' attitudes and beliefs about inclusive classroom management tools and practices by means of both a systematic review and a questionnaire-based survey. Correspondingly, the main objective of this research is to examine the relationship between IE training courses and the perception of teachers regarding truly effective IE settings for children with SEN. Furthermore, the two research hypotheses were constructed around the role of initial teacher education for inclusive education:

Hypothesis1 (H1). It was assumed that initial teacher training for inclusive education (ITTIE) has a significant positive impact on the degree of teachers' knowledge, their ability to adapt to students with special educational needs, or even their set of inclusive education skills required for practical activities in inclusive settings.

Hypothesis2 (H2). It was presumed that the ITTIE must be followed up by continuous professional training concerning IE, as the vast majority of Romanian teachers have more than 35 years of pedagogical experience but have not yet acquired IE skills, nor have they been able to successfully promote inclusive practices throughout their didactic act.

## 3. Methodology

The research design is longitudinal and consists of applying a mixture of qualitative and quantitative methods for data collection and analysis: the bibliometric analysis using a criteria based review of 41 papers from Web of Science and Scopus databases published between 2018 and December 2022; but also the questionnaire based survey created and distributed online via Google Forms to educators from both rural and urban areas, which was administered during one month (from December 2022 to January 2023) and resulted in 107 valid responses.

First of all, it is important to underline that the bibliometric approach used in this study might ignore relevant journal articles or countries' reports related to IE since the main objective of this article is to evaluate the relationship between ITTIE and teachers' attitudes towards IE rather than assess the productivity of scientific researchers on this particular topic. Consequently, the limitation of the present study expressed by the omission of certain publications should have a minor impact on the assessment of the role of ITTIE.

Studies investigating the role of initial teacher training for inclusive education in the early identification of children with special educational needs were identified through the search of several databases, including relevant journals and publications for the education sciences field (Scopus, Web of Science). The full text of these articles was retrieved from online databases using the institutional accreditation provided by the Bucharest University of Economic Studies.

In the first place, the search was conducted using the online databases for publications in English, applying the following series of three-word combinations (k = 56) in the title and abstract: (1) inclusive education, (2) initial teacher training, (3) education, (4) special education, (5) special educational needs, (6) students with disabilities, (7) teacher education, (8) initial teacher training for inclusive education. For the first round of full-text screening of the studies, the following inclusion criteria were used: the study must be written in English, French, or Romanian; the study must report original data concerning the IE; participants must be educators working in pre-schools, primary schools, or secondary schools; the study must assess the relationship between initial teacher training and teachers' attitudes toward inclusive education. The main exclusion criteria were the use of other languages than those above mentioned for the study, as well as case studies. According to the literature search criteria and inclusion process above presented, 41 studies were selected in the first round. Thus, after another round of full-text reviews of these articles was conducted, only 16 manuscripts were considered eligible for inclusion in the bibliometric synthesis.

Furthermore, the research is based on the development of an inquiry-based questionnaire applied to a sample of 100 schools included in the Recovery and Resilience Plan financed by the European Commission with 543 million euros to reduce school dropout. All questionnaires were sent via email after a selection based on the following criteria: there must be at least 2 schools from each county (41 counties), the level of marginalisation should be higher than 9, and the size of the educational unit must be large.

For the application of the questionnaire, the technique of indirect inquiry was used because all answers were completed via an online Google Forms questionnaire. Conforming to the IE theme, the questionnaire included both opinion and demographic profile questions (18 in total). Except for the last question, which is open, and for Item 15, which allows participants to choose multiple answers, all items were closed questions, permitting educators to choose only one correct answer from a multiple-choice series.

## 4. Results

Of the 16 reviews that met the inclusion criteria, nine articles represented systematic reviews reporting on the research literature on IE, while two focused on the implementation of IE practices using a quasi-experimental design of the study, and five papers focused on questionnaire-based surveys and interviews. The studies applied several teacher training intervention techniques that ranged in duration from three to five months. Despite the methodology or design, all 16 studies outline positive outcomes for IE-related attitudes, beliefs, knowledge, strategy, and skill development of the educational staff after the intervention.

The results of the study spotlight the importance of initial teacher training for inclusive education so that the educational staff acquires thorough knowledge regarding both the definition of the concept of inclusive education and the best inclusive practices.

# 4.1. Bibliometric synthesis

The studies included in the bibliometric analysis (Table 1) focus on teachers at the elementary school level or a combination of elementary and secondary education. The articles examined 10-29 years with sample sizes of 17-7084, mostly female teachers.

Table 1. Description of studies included in the bibliometric analysis

Author (years)	Pub type	Location	Design of research	Methodology	Findings
Amor, Hagiwara, Shogren et al. (2018)	JA	Spain	- systematic review of English and Spanish professional literature on the status of inclusive education research and practice regarding students with disabilities.	- period of time: from 2002 to 2016; -number of articles analysed: 2.380;	The ongoing need to ensure the translation of policy, theory, and descriptive knowledge into the creation of inclusive models and practices that can be implemented and adapted for various cultural contexts.
Borovic (2019)	JA	Romania	- quasi-experimental research related to the implementation of Project Based Learning in the Erasmus Plus KA201 project Work for an Inclusive School Heritage in Romanian high-schools.	- training of teachers from the 5 partner countries: Slovakia, Turkey, Catalonia - Spain, Italy and Romania; - 226 students surveyed;	The study proves a statistically significant increase of the students' positive attitudes toward migrants and minorities, social inclusion, but also of the desire to participate in solving problems of the community.
Comaru, Lopes, Braga et al. (2021)	JA	Portugal and Brazil	- bibliometric analysis of scientific production concerning the inclusion of people with disabilities.	- period of time: between 2009 and July 2019; - number of records: 119 articles (WoS);	Most research associated with IE is focused on the use of methodologies and resources, rather than on their development.
Crețu and Morandau (2020)	JA	Romania	- bibliometric analysis of research literature on ITEIE.	- period of time: from 1996 to 2020; - number of documents: 440 articles indexed by WoS;	Few countries and researchers have significantly contributed to the field due to poor collaboration.
Crişan, Albulescu and Turda (2020)	JA	Romania	- correlational and quasi-experimental design.	- intervention duration: 5 months; - number of participants: 130 teachers;	The study shows that older teachers show reluctance towards inclusive education, despite their experience, while all educators consider they need practical training courses and examples of good practices.

Table 1 (continued)

Author (years)	Pub type	Location	Design of research	Methodology	Findings
Dell'Anna, Pellegrini, Ianes and Vivanet (2020)	JA	Italy	- systematic review using bibliographic databases (ERIC, PsycINFO, Education Source) and ProQuest Dissertations and Theses Global.	- period of time: from 2009 to 2019 (ten years); - number of records: 1.338 articles;	In terms of psychological outcomes, inclusive settings reduce the frequency of challenging behaviours of students with MSCD and offer them more access to instructional time and peer interaction.
Hernández- Torrano, Somerton and Helmer (2020)	JA	Kazakhstan	- meta-analysis of the research literature on inclusive education.	- period of time: from 1995 to 2020 (25 years); - number of records: 7.084 Scopus indexed articles;	Four schools of thought define IE research: system and structures, special education, accessibility and participation, and critical research.
Kramer et al. (2021)	JA	Germany	- meta-analysis on cognitive and psychological outcomes among students with GLD and their peers without learning difficulties in inclusive versus segregated educational settings.	- k= 40 studies with 428 effect sizes; - total sample of students: N= 11.987; - period of time: between 1990 and 2019;	No detrimental effects were found on students without GLD. The study concludes inclusive schools are suitable for all children.
Lincă (2019)	JA	Romania	- questionnaire-based survey and interview.	- number of questionnaires created=3; - number of valid responses= 60 (out of 80);	Teachers with a high level of knowledge about ADHD tend to have a positive attitude towards ADHD students, but also manifest a low degree of trust in their own ability regarding best classroom management strategies for ADHD integration.
Lindner and Schwab (2020)	JA	Austria	- narrative synthesis of a criteria-based review.	- k=17 articles; - period of time: from 2008 to December 2018;	Inclusive education characteristics include collaboration, co- teaching, grouping, modification, individual motivation and feedback, and personnel support.

Table 1 (continued)

Author (years)	Pub type	Location	Design of research	Methodology	Findings
Lupu (2020)	JA	Romania	- quantitative research using questionnaire-based surveys.	- number of participants: 132 students (82 enrolled in primary school and 50 in secondary school);	The results showed a positive attitude of students towards inclusion, mostly influenced by factors such as gender.
Marin (2021)	JA	Romania	- quantitative research using questionnaires based on the TEIP scale.	Participants were third- year Educational Sciences BA students (n=64) who completed a 10-week inclusive education course. Data was collected at the end of the course over 3 generations.	A short training course can significantly improve pre-service teachers' knowledge, attitudes, and confidence towards inclusion and support provision.
Pachiţa and Gherguţ (2021)	JA	Romania	Correlational study of stereotypes, beliefs about inclusion and classroom practices using surveys.	90 teachers from rural and urban areas completed a 28-item questionnaire measuring beliefs about inclusive education using a 1-5 Likert scale.	Teachers who have experience working with children with SEN tend to have a low level of stereotyping.
Pîrciu, Niţulescu and Clavac- Prodan (2021)	JA	Romania	- quantitative research using an inquiry-based questionnaire concerning difficulties and opportunities of teaching to children with SEN in the online environment.	- number of participants: 50 teachers, and 10 of them have children with SEN in their class; - indirect inquiry via an online Google Forms questionnaire (14 questions);	Despite difficulties, 42% of teachers believe virtual education improved didactic quality through innovation, personalization, reduced bullying, and accessibility.
Tristani and Bassett- Gunter (2019)	JA	Canada	- systematic review in accordance with PRISMA guidelines.	- number of records: 6.671 articles (SPORTDiscus, Health Medline, ProQuest, ERIC and WoS); - period of time: 1990 - June 2019;	A workshop approach to teacher training can positively increase attitudes, perceptions, knowledge, strategy, and skill development for IE for SWD.
Yada, Leskinen, Savolainen and Schwab (2020)	JA	Finland and Austria	- a meta- analysis was used to examine relationships between teachers' attitudes and self- efficacy in inclusion.	- effects of 43 unique samples of in-service teachers aggregated in the research (k=855); - period of time: from 1994 to 2018;	Teachers' self-efficacy beliefs and attitudes toward inclusive education are positively and moderately correlated (r=0.351).

Note: JA=journal article; ITEIE=initial teacher education for inclusive education; WoS=Web of Science; MSCD=moderate, severe, and complex disabilities; IE=inclusive education; GLD=general learning difficulties; ADHD=Attention Deficit/Hyperactivity Disorder; TEIP=teacher efficacy for inclusive practices; PRISMA=Preferred Reporting Items for Systematic Reviews and Meta-Analyses; PD=professional development; SWD=students with disabilities.

Altogether, there was sufficient evidence to conclude that there is a positive relationship between teachers' attitudes and their professional training in inclusive education through course-based programmes [40].

In addition, findings from a correlational study of stereotypes and general beliefs about inclusion and classroom practices suggest that educators with strong teaching experience with students with SEN often express a low level of stereotyping [27].

Moreover, a meta-analysis on cognitive and psychological outcomes among students with SEN and their colleagues without general learning difficulties indicates that parents of students without GLD have no reason to believe their children will suffer from detrimental effects [16].

# 4.2. Teachers' demographic profile

One of the characteristics of Romanian teachers' profiles is the predominance of female teaching staff in pre-primary, primary, and secondary schools. According to the reports published by the Ministry of Education [31], most female educators work in preschool (99.7%) and primary school (91.8%).

The results of the inquiry-based questionnaire (N = 107) match the national statistics and emphasise the representativeness of the sample, with 94.4% of female teachers among the respondents.

In terms of job title and position held, one third of the respondents were teachers/ tutors/ professors for primary education; another third of them were teachers for secondary education; 15% were educators/ teachers for preschool; and only 3% were high school teachers (see Figure 1).

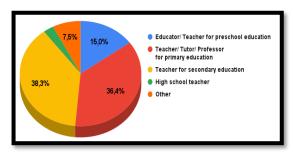


Figure 1. Educational staff distribution in terms of job title

The residence environment is a criterion with a strong impact on the distribution of teaching staff at the national level since only 36% of the teachers come from rural areas [31]. Considering the prevalent issue of limited internet access and digital skills in rural schools, the distribution of teaching staff by demographic areas in the data analysis is representative but slightly below national statistics, with 22.4% of respondents from rural areas.

Data analysis from the National Institute of Statistics of the evolution of the number of teachers during 2020-2021 showed that in the urban environment, staff increases were larger in secondary, high school, and preschool education, while in rural areas, the numbers of teachers in secondary and preschool education slightly improved.

The length of service in teaching plays an important role in educators' ability to create and implement inclusive methods for students with GLD. One third of the teachers questioned state they have an experience of 15-25 years, almost 20% have an experience between 25 and 35 years, and 12% have an experience higher than 35 years, which means that only 20% of the respondents have less than 15 years of teaching experience (see Figure 2).

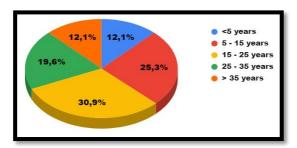


Figure 2. The distribution of educational staff by length of service in teaching

Figure 3 illustrates the level of psycho-pedagogical training completed by respondents. Accordingly, more than half of the participants declared that they graduated from Level I (52.3%), while Level II was graduated by 26.2% of them, and just 1/5 of the respondents are master's graduates (21.5%).

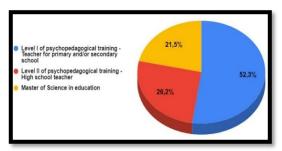


Figure 3.The distribution of teaching staff according to the level of psycho-pedagogical training completed

Although inclusive practices are very difficult to apply without taking a professional training course concerning children with SEN, 48.6% of teachers declare they have not yet attended any course in this regard.

On the other hand, the Romanian educational system provides that each member of the teaching staff continues their professional development by participating in and graduating from courses quantified in transferable credit points (ECTS). Still, acquiring inclusive education competences

throughout these courses is not mandatory. Consequently, the total freedom of teachers in their decisions regarding the completion of certain subjects considered useful by them entails not only their distancing from the natural metamorphosis of the educational system towards an inclusive setting but also the perpetuation of inefficient and outdated practices in total discord with the contemporary era.

## 4.3. Analysis of teachers' opinions

In spite of the fact that nearly half of the participants have stated that they have not yet taken a professional training course for inclusive education, the vast majority of them (79.4%) appreciate that this step is very important for them.

Awareness that educators need to follow a training course on inclusive education is often determined by the interest shown by the community in the problem of students with SEN. For this reason, it is important to highlight that the majority of teachers (91.6%) consider their community to be confronting the issue of children with SEN, which is a very important problem. Only 4.7% of teachers state that this is not an important issue for their community, while 3.7% do not know if children with GLD represent a problem for their societies.

Students without GLD can only manifest positive attitudes towards their colleagues with SEN if they have been exposed to prior formal or informal training with regards to inclusive education and non-discrimination practices. Even though only half of the teachers inquired have attended a professional training course for inclusive education, it must be noticed that they consider a small number of their students without SEN (20%) to express negative attitudes such as ignorance or isolation towards their peers with GLD.

Moreover, the participants state that the level of support manifested by the students without GLD in relation to their colleagues with SEN is slightly higher (15.9%) than the negative attitude of ignorance (13.1%). Furthermore, teachers state that most students display acceptance (36.4%) and tolerance (29.9%) with regards to their classmates with SEN.

Inclusive education cannot be achieved in the absence of close collaboration with the parents of children with GLD and a deep level of their involvement in the inclusive educational process. As Fig. 11 illustrates, more than a third of the teachers questioned (38.3%) appreciate a moderate degree of parents' collaboration, while another third of them acknowledge that parents of students with GLD are very involved in their children's education.

With regard to their own attitudes towards students with SEN, most of the teachers (81.3%) state they show support. Still, a small percentage of teachers (5.6%) acknowledge that they simply tolerate children with GLD instead of supporting them.

An inclusive approach to education highlights the development of a close educational partnership between school counsellors, teachers, parents, and competent institutions. For that matter, teachers' opinions concerning the degree of satisfaction with the educational partnership were mostly positive. For instance, a quarter of the teachers (25.2%) declare that they feel a moderate level of satisfaction, and more than a third of them (34.8%) are very satisfied with this partnership.

As for the degree of involvement of the management in the implementation of an inclusive education, teachers' opinions converge towards a high level of satisfaction determined by a strong cooperation regarding the promotion of inclusive practices. Thus, only 8.4% of teachers believe that management is not involved at all, and 9.3% of educators believe that management is not involved enough in the implementation of inclusive education.

It was assumed that the initial teacher training for inclusive education could have a positive impact on creating inclusive learning environments for students with special educational needs. In spite of the fact that 48.6% of the participants state that they have not yet attended a professional training course for IE, almost 60% of the teachers declare that they promote an inclusive didactic strategy at school, while the rest of the respondents (41.1%) acknowledge that they adopt an integrative approach to their pedagogical strategy.

A close analysis shows that nearly 63% of the educators included in the research have more than 15 years of teaching experience. As a result, there is a positive correlation between the length of teaching service and the adoption of inclusive pedagogical strategies.

Nevertheless, the vast majority of teachers (93.5%) declare that they express a high or very high degree of empathy towards their students with special educational needs. In contrast, there are only two respondents who declare that they have a low or absent level of empathy.

In line with the international legislative framework [36, 37, 38], the integration of children with special educational needs depends on the following factors: the psycho-pedagogical training of teaching staff, the level of cooperation between teachers and parents, the educational policies on inclusive education, the early detection of specific learning disorders in children with SEN, and the intervention through individualised learning plans for each student with GLD (Fig. 4).

However, most of the respondents (70.1%) point out that the most important factor is the intervention through individualised learning plans, followed by the psycho-pedagogical training of the educational staff (65.4%), and the early detection of specific learning difficulties in students with SEN (59.8%). Though all those factors are equally important for IE, less than half of the participants (47.7%) consider that

educational policies play a decisive role in achieving inclusive teaching settings (Fig. 4).

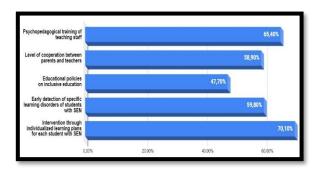


Figure 4. The teachers' opinion on the factors influencing the integration of SWD

As the narrative of the bibliometric analysis has already shown, inclusive education has greatly evolved over the last three decades. Yet, one third of the teachers questioned estimate that inclusive education will have a modest evolution (30.8%), and nearly 14% of them expect a bad or very bad development. More optimistic predictions were given by 55% of the educational staff included in the research.

Bearing in mind that all questionnaires were completed via Google Forms, all participants needed Internet access, which means that they could have tried to search online for the correct answer to Item 18 (the definition of an efficient IE).

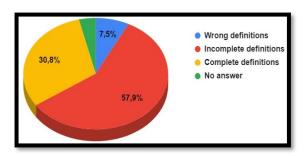


Figure 5. Teachers' responses to the definition of IE

Still, concerning the definition of IE, only 30.8% of the respondents managed to answer correctly and completely, while almost 60% gave incomplete definitions and 7.5% responded wrongly (see Figure 5).

#### 5. Discussion

The limitations of this scientific research must also be acknowledged. First of all, the bibliometric analysis only included articles from scientific journals written in English and Romanian. Indeed, there is valuable information on the role of ITTIE from researchers that has been published in other languages, and that could be informative. Yet, the bibliometric synthesis covered meta-analyses from all over the world in order to offer a holistic perspective on the research on IE: from Europe, Northern America (Canada), South America (Brazil), and Central Asia.

In addition, limitations within the current literature review must also be addressed. Thus, there is a noticeable absence of large-scale, longitudinal studies concerning the relationship between the initial teacher training for inclusive education and the identification of the most efficient inclusive practices for educators. The dearth of longitudinal designs could be justified by the prodigious amount of resources required for the effective execution of the research.

Lastly, the indirect inquiry was sent to teaching staff from large school units in all 41 counties of Romania, including the capital city of Bucharest. This means that data interpretation might omit teachers' opinions from small and medium school units. However, the statistical distribution and representation of the study have been achieved.

## 6. Conclusions

The most important factor in achieving good outcomes for all students is the quality of teachers and their teaching. Initial teacher education (ITE) is crucial for the quality of teachers, instructors, and trainers because it provides the knowledge and skills the staff need to teach effectively and to meet the needs of their students and institution, whether they work in early childhood education and care, a primary or secondary school, a college, or a university. By promoting inclusive education, teachers have the opportunity to crush the social inequities that have been dominating our societies for far too long.

The bibliometric analysis of 16 scientific papers examining the IE published in the last five years shows that there is a positive correlation between professional training in inclusive education through course-based programmes and teachers' attitudes towards children with SEN [8], [16], [17], [22]. Also, the vast majority of studies associated with IE focus on methodologies and resources rather than on their improvement [1], [7].

The interpretation of the results of the questionnaire indicates that a considerable number of the teaching staff participating in this study have acknowledged the necessity of a professional training course for IE. Although nearly 60% of the respondents self-evaluate their didactic strategy as an inclusive approach to education, only 30% were able to indicate a complete definition of the IE. On the other hand, only 51% of the teachers declare to have graduated from a professional training course for inclusive education. For this reason, there is an evident need for course-based training concerning IE, which confirms the research hypothesis H2.

Furthermore, findings from previous studies suggest that teachers who have strong experience

working with students with SEN tend to have a low level of stereotyping [27]. The analysis of teachers' demographic profiles revealed that the majority of participants are women (94.4%), located in urban areas (77.6%), and have a highly significant length of teaching service (63% of them have more than 15 years of experience). With respect to their opinion regarding their own attitude towards children with SEN, most teachers (81.3%) state that they show support. In this regard, participants in this study confirm the conclusion that the length of teaching service positively impacts the educational staff's attitudes and beliefs, and the research hypothesis H1 is also verified.

Since the bibliometric synthesis revealed poor collaboration among researchers from different countries and/or continents, further research should focus on examining the role of initial teacher training for inclusive education from multiple perspectives with the purpose of providing a clear and effective set of inclusive teaching practices.

### 7. References

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