

TEACHERS' ATTITUDES TOWARD INCLUSIVE EDUCATION AND THEIR  
EFFICACY

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GRADUATE SCHOOL OF EDUCATION

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## ABSTRACT

Teachers' Attitudes Toward Inclusive Education and Their Efficacy

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MA in Curriculum and Instruction

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This study was conducted to systematically review the literature examining the attitudes and efficacy of teachers towards inclusive education in different regions between 2014 and 2024. As a result of the inclusion and exclusion criteria determined within the study's scope, 95 research articles were identified from the Web of Science and Scopus databases and were examined by following systematic analysis steps. Articles were categorized according to demographic, professional, and contextual factors, including methodology, data collection tools, sample size, and teachers' specializations. Results indicate that quantitative methods were most commonly used, with in-service teachers as the most frequently studied group. Sample sizes ranged from 8 to 4567, with a preference for small-scale studies. Primary school teachers represented the most frequently examined specialization, and nearly all studies focused on K–12 educators. The findings section discusses teacher attitudes, factors influencing these attitudes, teacher efficacy, and related variables. Implications for practice and suggestions for future research are also presented.

*Keywords:* Teachers' attitudes toward inclusive education, teacher efficacy, self-efficacy, inclusive education

## ÖZET

Öğretmenlerin Kaynaştırma Eğitimine Karşı Tutumları ve Yeterlikleri

Berfin Cansu Çiftci

Eğitim Programları ve Öğretim Yüksek Lisans Programı

Danışmanı: Dr. Öğr. Üyesi İlker Kalender

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Bu çalışma, 2014-2024 yılları arasında farklı bölgelerde öğretmenlerin kapsayıcı eğitime yönelik tutumlarını ve yeterliliklerini inceleyen literatürü sistematik olarak analiz etmek amacıyla gerçekleştirilmiştir. Çalışma kapsamında belirlenen dahil etme ve hariç tutma kriterleri sonucunda, Web of Science ve Scopus veri tabanlarından 95 araştırma makalesi belirlenmiş ve sistematik analiz adımları izlenerek incelenmiştir. Makaleler metodoloji, veri toplama araçları, örneklem büyüklüğü ve öğretmenlerin uzmanlık alanları gibi demografik, mesleki ve bağlamsal faktörlere göre kategorilere ayrıldı. Sonuçlar, nicel yöntemlerin en sık kullanıldığını ve hizmet içi öğretmenlerin en sık incelenen grup olduğunu göstermektedir. Örneklem büyüklükleri 8 ile 4567 arasında değişmekte olup, küçük ölçekli çalışmalara öncelik verilmektedir. İlkokul öğretmenleri en sık incelenen uzmanlık alanını temsil etmekteydi ve hemen hemen tüm çalışmalar K-12 eğitimcilerine odaklanmıştır. Bulgular bölümünde öğretmen tutumları, bu tutumları etkileyen faktörler, öğretmen etkinliği ve ilgili değişkenler tartışılmaktadır. Uygulama için çıkarımlar ve gelecekteki araştırmalar için öneriler de sunulmaktadır.

*Anahtar kelimeler:* öğretmenlerin kaynaştırma eğitimine yönelik tutumları, öğretmen yeterliği, öz-yeterlikleri, kaynaştırma eğitimi

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## **CHAPTER 1: INTRODUCTION**

### **Introduction**

Blankenship and Lilly (1981) say that throughout history, education has been in the hands of elites, and educational practices have reflected this group's orientation. This situation continued until the 19th century. In 1948, the Universal Declaration of Human Rights (UDHR) finally resonated with the right to education for individuals with special needs (SN) who had previously been left to their fate in mental hospitals or church-supported institutions (Foreman, 2020; Sigmon, 1983). In the 1970s, the United States started to implement inclusion practices. The Education for All Handicapped Children Act (EAHCA) in 1975, the Americans with Disabilities Act (ADA) in 1990, and the United Nations Educational, Scientific and Cultural Organization (UNESCO), Salamanca Declaration and Framework for Action in 1994 paved the way for more equitable education (Boroson, 2017; Foreman, 2020; UNESCO, 1994).

Although various developments and legislation have been made, inclusive education has still not fully reached its goal. Salman (2020) mentioned that students with SN had not accepted the schools since some teachers and administrators believed the pupils with SN could not adapt to the classroom environment. One of the main reasons behind the negative attitudes and rejection of students with SN in mainstream schools is teachers' self-efficacy (Balci, 2009). Self-efficacy plays a crucial role not only in inclusive education but also in mainstream education in handling daily tasks effectively, guiding students, managing the classroom environment, engaging with relevant instructional methods and students'

motivations, and even collaborating with peers (Barni et al., 2019; Malinen & Savolainen, 2012; Sharma & George, 2016). Furthermore, teachers' self-efficacy is closely linked to the success of students and, as a result, to inclusive education (Woodcock et al., 2022). However, self-efficacy is not the only predictor of successful inclusive education. Similarly, to self-efficacy, attitudes of teachers play a significant role in the achievement of an effective inclusive education (Boyle et al., 2020). It is also revealed that teachers' attitudes related to their self-efficacy and factors such as gender and culture do not affect this relationship (Yada et al., 2022).

The roots of inclusive education go back to special education and the right of individuals with SN to receive education in mainstream classrooms (Osgood, 2005). However, today the framework of inclusive education has expanded to include groups that face problems in receiving education, such as the poor, individuals with different ethnic and cultural backgrounds, immigrants, and LGBTQI+ (which stands for 'lesbian, gay, bisexual, transgender, queer, intersex') students (Mezzanotte, 2022; UNESCO, 2001). However, this study focuses specifically on the attitudes of teachers and their efficacy toward students with SN in inclusive classrooms. The main reason for this focus is how inclusive education is operationalized in literature. As seen in the critical analysis conducted by Göransson and Nilholm (2014), inclusive education and special education needs are defined based on individuals with disabilities.

When it comes to teacher attitudes and self-efficacy, there are several reasons for focusing on students with SN. One of these is that these students may experience not only academic difficulties but also emotional and cognitive difficulties and, in some cases, behavioral problems. In addition, this focus is necessary so that teachers and field experts can reach students with SN more effectively by using special



teaching techniques and differentiated teaching approaches (Lamport et al., 2012). Given the systematic review methodology of this study, the inclusion criteria were determined according to the dominant focus of previous research. Most of the selected studies examined teachers' attitudes and self-efficacy in the context of students with SN, making this the most suitable population for synthesis and analysis.

This study aims to systematically review the research published in the last decade on teachers' attitudes and their efficacy toward inclusive education. Inclusive education is a dynamic field that is deeply related to pedagogy (Florian, 2014). Given the continuous developments in teacher education, special education policies, and inclusive teaching strategies, this study focuses on research conducted in the last decade. Another reason for determining the last decade as the time for review is that the issue of equity in education has increasingly been discussed in recent years. Discussions that unjust policies in schools prevent students from accessing adequate education and that equality in education cannot be achieved have led to the emergence of new pedagogical and political approaches in terms of students' academic success and general well-being (Howard, 2024).

It seeks to synthesize and categorize these studies while identifying the key factors influencing teachers' attitudes and their efficacy in inclusive classrooms. In particular, variables such as demographic characteristics (e.g. gender, age, experience), professional knowledge, available resources, and experience that shape teachers' attitudes and their efficacy are addressed. Given the critical role of educators in the success of inclusive education, understanding these factors is of great importance for formulating educational policies, developing teacher training programs, and designing school-based interventions. In addition to providing a

comprehensive assessment of the existing literature, this study also reveals significant gaps and suggestions for future research to improve inclusive education.

## **Background**

### **Milestones of Inclusive Education**

Uditsky (1993) defined inclusive education as integrating students with disabilities into regular schools and society. Inclusive education has become law to prevent segregation. One of the turning points in inclusive education was *Brown V. Board of Education* in 1954. The Supreme Court ruled that allowing children to receive an education was not sufficient equality and that separated students must be equal (*Brown v. Board of Education*, 1954). Another document supporting this law came only in 1975 with the UN Declaration on the Rights of Disabled Persons. The declaration identified disabled persons and pointed out that education is an essential human right and should be supported to provide equal opportunity for all (United Nations, 1975). After that, the Salamanca Conference (1994), held in Spain, emphasized the importance of inclusive education and education for all. Therefore, the world has reached a consensus regarding the importance of education for children with SN (UNESCO, 1994). In 1975, the Education for All Handicapped Children Act (EAHCA) was enacted, ensuring that students with SN receive a free and appropriate education in the least restrictive environment. This law was later reauthorized and renamed as the Individuals with Disabilities Education Act (IDEA) in 1990, further solidifying the legal framework for inclusive education in public schools (U.S. Department of Education, 2024).

The intentions of these rules and regulations and associated declarations were commendable; however, there has been a need to help teachers and students adapt to this new approach to education. After the Dakar Framework for Action (2000), there

was no significant development in empowering mainstream schools and teachers about inclusive education (UNESCO, 2000). As Rouse (2010) argues, considering that many educational programs provide insufficient information on inclusion, inclusive education is supported by law but not in practice. In the absence of adequate training and support, teachers have been forced to carry out inclusive education without sufficient resources. As teachers are at the forefront of inclusive efforts, understanding their attitudes and needs is crucial to ensuring their success (Sharma & Loreman, 2012).

### **Global Perspectives on Inclusive Education**

The education of individuals with disabilities has a long history, with early examples dating back to the 16th century. The Spanish monk Pedro Ponce de León was among the pioneers in this field, teaching hearing-impaired children to express themselves within the monastery setting. This development contributed to the initial acceptance of the idea that individuals with disabilities could be educated (Kuşçu & Günday, 2020). Following these early efforts, the first schools for individuals with hearing impairments were established in France, followed by schools for the visually impaired. A notable figure in this period was Louis Braille, a visually impaired student at one of these institutions, who later invented the Braille alphabet, enabling individuals with visual impairments to read and write (Sağlamtunç, 2010).

In Sweden, free healthcare and education services have been provided to all children under school age since 1937, including early diagnosis and intervention programs for individuals with SN. During the school years, students with disabilities receive education in institutions tailored to their specific needs. While Swedish education policies do not explicitly define inclusive education, they emphasize inclusiveness through individualized support mechanisms (Doğan, 2020; Pınar, 2006).

The Finnish education system also integrates inclusivity as a core principle. The 1998 Finnish Basic Education Act and the 2004 National Core Curriculum for Basic Education established the legal framework for educating students with SN in mainstream classrooms. Rather than focusing solely on the challenges of individuals, Finnish education policies prioritize the right of all students to receive education in mainstream institutions, emphasizing interdisciplinary collaboration among experts to enhance the learning environment and school community (Halinen & Järvinen, 2008). Currently, approximately 98% of students with SN are educated in inclusive classrooms, while only 2% attend special education classes (Järvinen, 2007).

In Germany, the education of students with SN has a long-established tradition. The country operates a system of Sonderschulen, comprising ten different types of special education schools tailored to various disabilities. However, the placement of students in these schools has been subject to legal disputes, as parents have frequently contested the labeling of students without a definitive diagnosis (Uçar, 2009).

### **Inclusive Education in Türkiye**

To understand and evaluate the evolution of inclusive education practices in Türkiye, the development process in question needs to be traced back to the Ottoman Empire period. During the pre-Republican period, steps were taken toward modernization under Mahmud II, and the education of individuals with disabilities gained attention in certain provinces. Notably, in 1874, a school for the visually impaired was established in Cairo, where the Braille alphabet was adapted to Arabic letters. The establishment of a school for the deaf and mute in Istanbul was realized in 1889 (Gündüz, 2014). In the early years of the Republic, schools that had been previously closed due to a lack of qualified teachers were reopened. In 1921, a

In Türkiye, integration began in 1983 with the Law on Children in Need of Special Education; with this law, students with SN began to attend regular classes, which resulted in teachers needing new information and resources to comply with the Special Education Regulation (Kutay, 2018). The intentions of this law and related regulations were admirable; however, teachers and students needed to adapt to this new educational approach. In 1991, the 1st Special Education Council came together and decided to increase the acceptance of students with SN to mainstreaming classes and to plan the individual needs of students accepted to mainstreaming classes and have them monitored by experts in the field (Uysal, 2003). In 1997, the Decree Law in the Field of Special Education provided for the entry of individuals with SN to education, mainstreaming practices and the organization of special education programs (Sucuoğlu & Kargın, 2010).

As a result of the developments that followed, full-time and part-time mainstreaming practices were included in the Circular on Education Practices through Integration in 2008 (Ministry of National Education [MoNE], 2008). With the Circular on the Opening of Support Education Rooms, support education rooms for students with SN became mandatory in 2015 (MoNE, 2015).

## **Teachers' Attitudes Toward Inclusive Education**

Since the beginning of inclusive education, teacher attitudes have been frequently studied. The main reason for this focus is that researchers assume the success of inclusion can hinge on teachers' attitudes, beliefs, and implementation (Boyle et al., 2011; Carroll et al., 2003). While studies have investigated the prevalence of positive and negative attitudes among teachers, findings indicate that the level of negative attitudes has remained consistent despite changes in demographics. Researchers offer insights into the factors influencing teachers, their educational needs, and ways to enhance inclusive education by addressing specific requirements and resources. For instance, Rakap and Kaczmarek (2010) found that teachers often feel uncomfortable teaching students with SN in their classrooms. However, participants also expressed willingness to collaborate, participate in training, and develop new skills.

A crucial factor shaping teachers' attitudes toward inclusive education is the responsibilities they assume when a student with SN is enrolled in their classroom. These responsibilities begin even before the student enters the learning environment and continue throughout the educational process. As Battal (2007) highlights, upon the inclusion of students with SN, teachers must identify their educational needs and functioning levels. This includes developing Individualized Educational Plans (IEPs), maintaining a balanced classroom environment for both SN and non-SN students, and assessing the effectiveness of instructional strategies for SN students. Given the extensive responsibilities teachers bear, they clearly play a key role in the success of inclusive education. However, it is unrealistic to expect them to navigate this process alone. Effective inclusion requires collaboration with special educators, school administrators, and parents. If teachers feel overwhelmed or unsupported in

meeting the needs of their SN students, this may negatively impact their attitudes toward inclusive education.

Recent studies have examined the variability of teachers' attitudes toward inclusive education and the factors contributing to this variability (Lu et al., 2024). One of the primary obstacles educators faces in developing positive attitudes and empathy toward students with SN is a lack of sufficient knowledge about specific disabilities, diagnostic criteria, support systems, and available resources (Aktan, 2020). Similar studies suggest that teachers' lack of prior experience with SN students, insufficient training, and limited knowledge about disabilities reduce their self-confidence and, consequently, their self-efficacy (Alnahdi & Schwab, 2021; Frumos, 2018). Given that self-efficacy directly influences the effectiveness of inclusive practices, examining both teachers' self-efficacy and attitudes within the same study is essential for improving inclusive education (Leatherman & Niemeyer, 2005). Understanding this relationship can help educators feel more competent in their roles while also enhancing the overall success of inclusive education (Veisi et al., 2015).

### **Self-Efficacy and Teacher Efficacy**

Self-efficacy characterizes people's belief that they can achieve a desired outcome in a subject (Maddux, 2016). Self-efficacy is not the ability of people to predict the behaviors they want to do or can do but rather knowing what they can do (Bandura, 2006). Teacher self-efficacy is based on Albert Bandura's social cognitive theory and refers to teachers' belief in their ability to manage the classroom environment, ensure engagement and effective learning, and demonstrate their ability to motivate students (Lazarides & Warner, 2020).

The relationship between teachers' efficacy (self-efficacy and teaching efficacy) and inclusive education can be supported in several ways. Previous research shows that there is a significant relationship between teachers' efficacy and factors such as inclusive practices, setting school environments, and teachers' attitudes (Kuyini et al., 2020; Sharma et al., 2012; Wilson et al., 2022). Hussain and Khan (2022) revealed that teachers with high self-efficacy engage students with creative assignments, accept challenges, and adopt innovative instructional methods confidently, while teachers with low self-efficacy avoid challenges, do not incorporate creative tasks into their classroom practice, and adopt instructional methods that they feel competent in. Moreover, efficacy is closely linked to teachers' attitudes toward inclusive education since teachers who feel confident in their skills perceive inclusive education positively and embrace instructional strategies (Kuyini et al., 2020; Opoku et al., 2022). These views highlight the relevance of supporting self-efficacy through targeted interventions to ensure the success of inclusive education.

### **Problem**

Teachers' attitudes and their efficacy play a critical role in the successful implementation of inclusive education. Their role goes beyond creating physically inclusive environments; it involves fostering an inclusive atmosphere in schools, enhancing the sense of belonging among students with SN, promoting classroom participation, increasing academic achievement, and helping students build resilience (Mu et al., 2017; Rouse, 2008). However, without positive attitudes, teachers may struggle to embrace and fulfill these responsibilities effectively. Research indicates that teachers' attitudes are harmoniously integrated into the self-concept of students,



their attitudes toward learning, and overall educational excellence (Bethere et al., 2021; Ch et al., 2019).

Additionally, the successful implementation of inclusive practices largely depends on teachers' competencies and self-efficacy (Kiel et al., 2020; Pit-ten Cate et al., 2018). Teachers with high self-efficacy are more confident in adapting their teaching methods, managing diverse classrooms, and addressing the needs of all learners. However, insufficient teacher training, lack of experience, and limited collaboration opportunities negatively affect teachers' self-efficacy, reducing their ability to effectively implement inclusive practices (Zhang et al., 2024). These challenges underline the need to examine the relationship between teachers' attitudes toward inclusive education and their self-efficacy, as understanding this connection can inform policies and practices aimed at supporting teachers and advancing inclusive education.

Though an increasing amount of literature on teachers' attitudes and their efficacy is available, research is still inconsistent and fragmented. While some studies report positive attitudes and high efficacy among teachers, others highlight significant challenges and resistance to inclusive practices. Also, because they used different methods from qualitative case studies to quantitative surveys, it is difficult to generalize the findings. It is essential to carry out a systematic synthesis of this research to identify common themes and contradictions, as well as gaps in the literature. To address this gap, this study conducted a systematic review of the literature on teachers' attitudes and their efficacy toward inclusive education, synthesizing findings from various studies to provide a holistic and evidence-based perspective. The purpose of this study is to identify key themes, challenges, and facilitators in existing research to provide insights that will help enhance the efficacy

of teachers and foster more positive attitudes towards inclusive education through teacher preparation programs, policy development, and support mechanisms. As a result, it is intended to contribute to both theoretical discussions as well as practical strategies to improve inclusive education practices.

### **Purpose**

The aim of this research is to conduct a systematic review of the literature on teachers' efficacy and their attitudes toward inclusive education. This study explored the relevant studies according to research methodology, sampling, data collection methods, and study results. The study seeks to provide an overview of demographic, professional, and contextual factors to explore their influence on teachers' attitudes and their efficacy. Considering the importance of improving inclusive education, it is of great significance to examine teacher attitudes and their efficacy from a contemporary and global perspective. Therefore, to provide up-to-date insights, article selection was made in November 2024, focusing on studies published in the last decade. It is intended to bring the data of 95 articles to the attention of teachers, principals, and legislators who wish to update their knowledge regarding teacher attitudes and their efficacy in inclusive education.

### **Research Questions**

The following research questions will be addressed during the study:

1. How have teachers' attitudes toward inclusive education and their efficacy evolved over the past decade, based on systematic literature review findings?
2. What demographic, professional, and contextual factors (e.g., demographic characteristics, teachers' specializations, teaching and prior

experience, training, knowledge, resources, and support) influence teachers' attitudes toward inclusive education?

3. How do factors such as training, knowledge, and prior experience with disabled people influence teachers' self-efficacy and teacher efficacy, and what is the relationship between their efficacy and attitudes toward inclusive education?

### **Significance**

Systematic literature reviews are one of the significant ways to develop literature and contribute to the field by examining the results of previous studies (Lame, 2019). With this method, future studies are shed light, the reader learns the breadth of research on the subject, and practical questions are answered by existing research (Okoli & Schabram, 2015). Systematic literature reviews become even more important when it comes to providing equality in education and the success of the education of students with SN, such as inclusive education. It provides a broad framework by examining concepts such as teacher attitudes and self-efficacy that affect the success of inclusive education in depth, with samples from different cultures, different dates, and different demographic backgrounds. It should be taken into consideration and examined that teacher attitudes and self-efficacy are related and that this relationship determines the success of inclusive education (Kurniawati et al., 2012; Meidrina et al., 2017).

While previous research has extensively examined teacher attitudes and self-efficacy separately, fewer studies have included teacher efficacy and systematically analyzed the interaction between attitudes and efficacy in a variety of educational contexts. This study aims to fill these gaps by systematically reviewing the literature over the last decade and to provide a comprehensive synthesis of the various factors

that shape teachers' attitudes and efficacy in inclusive education. The universal nature of the study is important in understanding education policies and teachers' attitudes and their efficacy. The findings are expected to contribute to research, policy, and teacher training programs by offering a more holistic perspective on the interplay between attitudes, efficacy, and contextual influences in inclusive classrooms.



## **CHAPTER 2: REVIEW OF RELATED LITERATURE**

### **Introduction**

Including students with different educational needs in regular classes and reforming education in this direction has catalyzed school change (Savolainen et al., 2012). This educational reform has various effects on students and society. Ainscow (2006) defines inclusive education as a reform and argues that integrating students into mainstream classes, regardless of their differences and backgrounds, encourages society to embrace and value diverse perspectives. While inclusive education affects the acceptability of society, it also increases the students' self-confidence and enables them to gain a place in the community (Gadagbui, 2010).

Effectiveness and equality factors are of great importance for the success of inclusive education (United Nations Convention on the Rights of the Child, 1989). Equality does not mean applying the same teaching techniques to every student in the same way but providing equal learning opportunities without ranking the students (Muntaner, 2000). According to Gerschel (2002), an equitable approach can be characterized by providing fair treatment to students with disabilities, addressing their individual needs, and ensuring they derive the maximum possible benefit from their educational experience. In addition, if equal opportunities are to be implemented and inclusive education is to be successful, teachers need to know their students and be knowledgeable about their needs (Gerschel, 2002).

Since the main implementer of inclusive education is the teacher, the traits of educators are the main factor affecting the success of inclusive education (Norwich, 1994). The European Agency for Development in Special Education (2011) stated

that teachers' skills, knowledge, and attitudes determine the effectiveness of inclusive education. Yada et al.'s (2022) meta-analysis discussed that teacher attitudes are a frequently researched topic because teacher attitudes affect their behavior, and because of the research, it was revealed that teacher attitudes have a positive relationship with their self-efficacy. Research examining teacher attitudes and efficacy towards inclusive education shows that higher attitudes and self-efficacy teaching strategies are closely related to successfully implementing inclusive practices (Campbell et al., 2003; Tschannen-Moran & Hoy, 2001). To examine these factors that play a major role in the success of inclusive education, this chapter presents a comprehensive review of the literature, focusing on three key areas: inclusive education, teachers' attitudes, and the role of teacher effectiveness. Although significant research has examined these areas separately, a detailed understanding of the relationship between these factors is needed. This section aims to fill this gap by synthesizing existing studies.

### **Inclusive Education**

To fully understand the concept of inclusive education, it is essential first to grasp the notion of inclusiveness. The idea of inclusiveness forms the basis of inclusive education as it emphasizes the removal of barriers to equal participation. According to Cambridge University Press (n.d.), the inclusion is "the idea that everyone should be able to use the same facilities, participate in the same activities, and enjoy the same experiences, including people with a disability or other disadvantage". Based on this definition, it can be said that inclusive education is the inclusion of individuals in education in an equal environment, not excluding them despite their differences. Also, Ziyaev (2022) offers information about the origins of the term inclusive (Latin for inclusion and attraction) while introducing the addresses

of inclusive education. The paper mentioned that inclusive education is for students with disabilities. This may be because attempts to include students with disabilities in education have been made since the 1700s, and these attempts may have laid the foundation for inclusive education (Stainback and Smith, 2005).

Disability is circumstances that make it difficult for an individual to perform certain activities and interact with the world due to physical or mental impairment (Centers for Disease Control and Prevention [CDC], n.d.). Students with disabilities or suspected disabilities are evaluated in schools to determine whether they require special education services, and if they do, a study is conducted to determine which services might be beneficial. Based on an assessment of a student's disability level and type, it is determined whether they are eligible for inclusive education (Reschly, 1996). However, inclusive education is not just about identifying students with disabilities. In inclusive education, not labeling students, the teacher's efficacy, the student's type of disability, the teacher's special education knowledge, the effect of class numbers, and tailoring the curriculum to these students are issues that need to be addressed meticulously (Kauffman et al., 2022). Despite the challenges associated with inclusive education, its persistence is largely due to its positive outcomes. Research shows that students with disabilities and their peers in mainstream classrooms have positive attitudes toward inclusive education. Furthermore, students with disabilities report experiencing increased motivation, educational achievement, and social integration in inclusive settings (Dupuis et al., 2006). According to Oh-Young and Filler (2015), students who are more included in inclusive education are more successful academically and socially. Inclusive education can also have positive effects on students without SN. These effects include respecting differences, developing meaningful friendships, gaining social skills such as empathy and

patience, and improving their learning by benefiting from a collaborative environment (Roldán et al., 2021). Additionally, it should be noted that the principle of human rights is the fundamental justification for implementing inclusive education.

The reason for discussing what inclusive education is and who it encompasses is that education is a basic human right for all. Inclusive education stands in contrast to exclusion and isolation, segregating students with SN from mainstream classrooms and activities can send the students the message that they do not have a place in that class or even in the outside world (Rohner et al., 2012; Villa & Thousand, 2005). That is why the value and necessity of inclusive education should be understood through the lens of social justice and equity. Social justice means ensuring equal participation in social institutions, benefiting from equal rights, ensuring equal distribution of materials, and supporting the rights and needs of individuals (Bell, 2007). Social justice shapes individuals, culture, and society (Connell, 2012). Therefore, it is necessary to ensure that diverse students are accepted in classrooms and to create an inclusive culture (Rentzi, 2024).

In addition to social justice, equity in education must also be mentioned. Unlike the belief that treating everyone the same will ensure fairness, justice recognizes that individuals have different needs and circumstances and require special resources and opportunities to ensure that all students succeed. (Organisation for Economic Co-operation and Development [OECD], n.d.; Paul, 2019). Freire (1970) argues that education should serve to empower students, enabling them to develop their creative capacities and challenge systems of oppression rather than simply memorizing prescribed narratives. With this approach, education becomes a tool for liberation and transformative action. Similarly, inclusive education



emphasizes that education for free education should be the goal, creating school environments where differences are not a barrier. Inclusive education operationalizes equity by meeting learning needs through differentiated instruction, tailored materials, or collaborative practices (Fletcher & Artiles, 2005). Consequently, it ensures that education for all is not merely an ideal, but a practical reality where differences are embraced rather than viewed as obstacles.

### **Historical Background**

Benjamin Rush proposed the idea of educating disabled individuals in the 1700s. Following Rush, Rousseau suggested the idea that children with disabilities could be educated according to their own abilities and learning speed. However, an institute to provide this education was not established in the USA until almost 1900 (Bhatia, 2021; Villa & Thousand, 2005). The first school for disabled individuals in Europe was established in France in 1760 and in Germany in 1778. Although these schools initially provided education to the visually and hearing impaired, gradually, they also began to provide education to individuals with learning disabilities (Bhatia, 2021). There is a question mark as to how many students these schools reach and whether the needs of the students are met. For instance, in the USA (1900s), many students with disabilities were placed in regular classes because there were no quotas in special schools, and they were forced to leave these schools because they could not receive any support (Lewis & Doorlag, 1999).

The most significant and universal developments regarding inclusive education emerged after the 1940s. With the Education Act of 1944, the United Kingdom took a notable step toward integrating general and special education. This act marked a significant turning point by allowing students with SN to study alongside their peers in regular classes (Lindsay, 2003). After the United Kingdom,

the United Nations established the Universal Declaration of Human Rights (UDHR) in 1948. UDHR has 30 articles covering the right to life, independence, forbidding slavery, political freedom, and rights to education and health maintenance. Article 26 indicates that every individual has the right to education. Education should be free, mandatory, and accessible for everyone (Kisanji, 1999; United Nations, n.d.). In 1954, the US Supreme Court Decision caused another landmark. An African American father initiated a legal action against the Board of Education on the grounds of racism in schools. It read that it is doubtful to expect children who are rejected from an educational environment to be successful in their lives. *Brown v. Board of Education* was an influential civil society movement that brought the United States to prominence as the first country to develop a rights-oriented approach to inclusive education (Bondar, 2021; *Brown v. Board of Education*, 1954). The Elementary and Secondary Education Act (ESEA) was passed in 1965. ESEA advocated for equal access to quality education and included plans to improve educational outcomes and reduce educational disparities among students (Ingen et al., 2018; U.S. Department of Education, 2024).

The 1970s marked two breakthrough events for equitable and inclusive education. The first was the 1971 *Pennsylvania Association for Retarded Citizens (PARC) v. Commonwealth of Pennsylvania*, in which parents argued that their mentally retarded children were being labeled as uneducable and denied free public education. The court ruled against this unfair discrimination and ruled that students with mental disabilities could be educated in regular classrooms with students without SN in age-appropriate settings (Civil Rights Litigation Clearinghouse, 1971). Another watershed event was the passage of the Education for All Handicapped Children Act (EAHCA) in 1975. This law secures the educational rights of children

with disabilities and advocates that all children should receive education in the least restrictive environment appropriate to them. One of the goals of this law is to ensure that students with SN can receive special education services in public schools (U.S. Government Accountability Office [GAO], 1980). Following developments in the USA, an official report was prepared in the UK, under the leadership of Warnock in 1978. The report emphasized that students with disabilities should receive education in normal classes, introduced the concept of Special Educational Needs (SEN), underlined the need for IEPs, and advocated for equal rights in schools (Warnock, 1978). Education of the Handicapped Students Act Amendments (1986) law expanded the scope of special education in the US. Via this law, the importance of intervention at an early age was emphasized and special education programs were initiated, similar to the UK, IEPs were made mandatory, which allowed the spread of inclusive education by emphasizing that disabled children should be included in regular schools, the idea of social integration of disabled students was strengthened, and the need for training of special education personnel was emphasized (Education of the Handicapped Amendments, 1986).

In 1990, the Americans with Disabilities Act (ADA) and the Individuals with Disabilities Education Act (IDEA) were enacted. ADA is a law designed to protect the rights of individuals with disabilities and regulate their participation in society. While also addressing the physical access of children with disabilities to schools. IDEA aims to ensure that inclusive educational environments are suitable for special education, provide early intervention for children, and promote individualized education (ADA National Network, 2024; Congressional Research Service, 2024). In 1994, one of the universal documents regarding inclusive education was published. The Salamanca Statement and Framework for Action on Special Needs Education, a

conference declaration held by UNESCO in Spain, has deeply addressed the concept of inclusive education. It has established an international standard by touching on the necessity of inclusive education, the principle of respect and equality for people, the inclusiveness of special education, global education policies, and social awareness (UNESCO, 1994).

After all these efforts to make inclusive education a right, a law focused on equal education and improving educational performance was also passed in 2001. The No Child Left Behind Act (NCLB) focused on the success of students with SN who were able to be included in inclusive education by supporting standardized tests, interventions appropriate to student performance, annual school goals, competent teachers, and the rights of students to transfer to school with laws (No Child Left Behind Act, 2001). In 2015, Every Student Succeeds Act (ESSA) replaced the NCLB Act. ESSA reduced federal intervention in cases of underachievement, expanded assessment to include measures such as classroom participation and progress in addition to standardized tests, focused on supporting low-performing schools, emphasized professional development for teachers, and sought to fully embrace diversity by involving families in ensuring equal opportunities in education (U.S. Department of Education, 2024).

The history of inclusive education has been shaped by significant turning points where the right to education for individuals with disabilities was increasingly recognized and secured by legal regulations. From Benjamin Rush's first suggestions in the 1700s to important court decisions such as *Brown v. Board of Education* and *PARC* cases, many developments have defended the right to equal education and led to legal regulations. Laws such as EAHCA adopted in 1975, IDEA and ADA in 1990, have laid the foundations for the inclusion of students with disabilities in

inclusive education, and international texts have also made significant contributions to this process. NCLB and ESSA, adopted in 2001 and 2015, have provided additional steps to increase student success and have contributed to the establishment of a system in which inclusive education offers equal opportunities for all students. The law also emphasizes that the factors affecting the success of inclusive education are social acceptance and teacher competence. Inclusive education is still an area open to support and development.

## **Challenges and Opportunities of Inclusive Education**

### ***Challenges of Inclusive Education***

Inclusive education is a fundamental human right that supports all diverse learners and aims to eliminate social segregation (Ainscow & Miles, 2008). It is a concept that brings democracy to education and benefits individuals and society. Inclusive settings are valuable for students with SN, families, and society because students with SN who are educated in regular classes with their peers develop cognitively, physically, emotionally, and socially. This development and education in regular schools prepare students with SN for their societal roles and help them acquire new skills (Odarich et al., 2021). Similarly, inclusive education brings together students with SN and students without SN, teaching children to embrace diversity and empathy and breaking down social barriers. Furthermore, students with disabilities can achieve success and self-actualize (Pradhan & Naik, 2024). However, despite its numerous benefits, such as promoting social justice in schools, reducing stigma, improving the achievement of students with SN, and enhancing social cohesion, there are also challenges in implementing inclusive education. This section will elaborate on the obstacles encountered in adopting inclusive education practices and discuss ways to overcome these obstacles.

When inclusive education is mentioned, one of the first things that comes to mind is the implementers of this education. Teachers are the primary executors of inclusive education and have a central role in establishing contact with students with SN. These situations where teachers feel unsupported, and incompetent pose a significant challenge (Ainscow & Miles, 2008). Research has shown that teachers often feel inadequate in terms of experience, education, and knowledge about disabilities and that there is insufficient collaboration. Studies also suggest that this sense of inadequacy leads teachers to develop negative attitudes toward inclusive education (Mouchritsa et al., 2022; Mudhar et al., 2024; Pov et al., 2024).

Considering that teacher attitudes have a significant relationship with teacher effectiveness and success in inclusive education, the fact that these attitudes are negative creates an obstacle during implementation. Low self-efficacy affects teachers' ability to implement, collaborate, and manage effectively (Avramidis et al., 2019; Vogiatzi et al., 2023). Considering that teacher competence impacts student success, factors influencing teachers' attitudes, and their efficacy should be improved to help students with SN reach their full potential (Guskey, 1987).

Another problem is that the physical environment is not arranged in a way that is suitable for inclusive education. According to Ackah-Jnr and Danso (2019), it was revealed that many schools do not have an accessible physical environment and that students with disabilities may have difficulty performing physical activities. This accessibility problem is seen not only in classrooms, but also at the school entrance, school buildings, and offices. This situation creates an obstacle to equal educational opportunities, especially when considering students with physical disabilities (Debele, 2016). Since the inclusive education model brings students with and without SN together, some difficulties may arise in the classroom environment.

While students without SN participate more in activities, students with SN engage more with teachers and participate less in peer activities (Eriksson & Granlund, 2004). Tamayo et al. (2017) suggested that the differences were attributed not only to students but also to regions. It was found that there were significant differences in integration between rural and urban schools. These differences were attributed to the lack of special education materials and resources, sign language interpreting services, and inclusive strategies in rural schools, which were discussed as negatively affecting students with SN.

Schools that successfully implement inclusive education and inclusivity as a culture also include parents as stakeholders in their systems (Ainscow & Sandill, 2010). However, some problems may arise in parents' approach and involvement in inclusive education. Wong et al. (2015) revealed in their research on parental involvement that parents who do not have a general understanding of disability and have limited knowledge about the type of disability their child has, determine their academic expectations based on their norms rather than their child's abilities and tend to take private lessons. Even if parents are aware and society supports inclusive education, the path to inclusive success is through legislation and funding. If the framework for inclusive education is not set by legislation and regulation, if the necessary resources are not provided, and if support is not provided to schools and teachers, teachers' support for inclusion may be negatively affected (Pijl & Meijer, 1997).

### ***Opportunities of Inclusive Education***

Inclusive education can have different positive effects on students with disabilities. One of these effects is students' social-emotional learning (SEL). SEL encompasses the ability to recognize and handle emotions, resolve issues, and foster

healthy relationships. Therefore, it focuses on cognitive, behavioral, and emotional components (Zins & Elias, 2007). As students learn to cope with the tangible challenges of daily life, they may have difficulty recognizing and managing their emotions. This is especially true for students with SN, who may face additional challenges in developing emotional skills. Integrating SEL into schools and providing this instruction with peers offers a beneficial approach as both a compensatory and interventional method (Poedubick et al., 2006). In addition to SEL, teaching students with and without disabilities together in inclusive classrooms helped students establish meaningful social relationships, increasing social inclusion and academic success (Pinto & Baines, 2019). Inclusive education, carefully tailored to needs, contributes to the social and emotional development of students, while encouraging confidence and peer acceptance. Learning in an equitable and collaborative environment influences students in terms of cultivating significant connections and improving social aptitude while promoting social harmony (Council of Europe, 2015). According to Stavrianos and Pratt-Adams (2023), inclusive education improves education by offering a holistic approach. Learning environments adorned with differences have led to child-centered curricula and educational practices that are open to discovery and enhanced social awareness.

While segregated education hinders the academic and social development of students with SN, educating students with different needs in the same environment creates an inclusive and rich learning environment (Reganick, 1995). Ekeh and Oladayo (2013) found that the academic achievement of students with disabilities in inclusive education was higher than students in non-inclusive education. This is supported by research showing that students with SN who are educated in more inclusive classrooms are more successful (Oh-Young & Filler, 2015). Similarly,



Hehir et al. (2016) explain the educational effect, that students with SN in inclusive environments may develop strong reading and math skills, increase attendance, and exhibit fewer disruptive behaviors than non-inclusive students. Teachers have the most important role in implementing and achieving inclusive education. They try to increase the effectiveness of inclusive education by improving their practices through teacher training, collaboration, and implementation techniques (Lindsay, 2007). Since they will need new information and practices in inclusive education, they develop professionally by learning new skill sets and inclusion practices (Vansteenkiste et al., 2020). Considering that each student's needs are different and unique, teachers work in a student-centered manner in inclusive education. By using inclusive pedagogy, teachers use needs-oriented personalized teaching techniques instead of comparing students with each other (Rowe et al., 2012)

The indirect contributions of inclusive education are not limited to professional development; they also have economic benefits. Tompa et al. (2022) revealed that disabled students who have access to the necessary skills and social competence thanks to inclusive education contribute to the economy with jobs where they can use their qualifications. The state, which provides both social acceptance and does not spend on separate education with inclusive education, gains economic power by reducing discrimination. Considering the significant relationship between economic poverty and disability, the importance of inclusive education for employment can be understood (Banks et al., 2017). As a result, inclusive education nurtures students with disabilities in terms of academic and social-emotional development, while also providing them with the opportunity to be socially accepted. Inclusive education improves and develops not only students with disabilities, but also teachers, society, and the economy. Accepting these students, who are

considered different, into mainstream schools causes significant changes in every area.

### **Teachers' Attitudes Toward Inclusive Education**

Teachers' attitudes are one of the fundamental factors that determine the success of inclusive education. Attitudes reflect how the teachers implement and shape the nature of inclusive education in classrooms. According to the study of Kuyini and Desai (2007), attitudes toward inclusive education, knowledge, and the principal's expectation are the variables that build effective teaching practices. As a result of five different instruments applied to 128 participants, researchers found that attitudes and behaviors were significant for effective teaching in inclusive education. As a result, positive attitudes and increased awareness about inclusive education can be predictors of effective inclusive teaching methods.

Although teachers' attitudes have been proven to be associated with the success of inclusive education, many teachers -who have students with SN in their classrooms- have negative attitudes. Hammond and Ingalls (2003) conducted two scales on elementary school teachers to analyze their attitudes and discuss concerns and successful inclusive education. The findings revealed that even though the schools offer inclusion programs, teachers had negative attitudes or uncertainty toward these programs. Elements like training, instruction time, and money/time contributed to teachers' unsupportiveness. It should be discussed that a system with negative attitudes of teachers and a lack of commitment can be successful.

Also, Woodcock and Woolfson (2019) analyzed Canadian teachers' reflections into four themes (systemic support, specialist resources, managing class learning, and attitudes). Although the comments were mostly negative, the most criticized theme was attitudes. Under this theme, teachers criticized the attitudes of

other teachers and reflected that some teachers did not embrace inclusion and saw students with SN as a barrier. Considering most children start to notice that adults act differently to them from their peers at about the age of eight (Ryan, 2009), Such negative attitudes will determine the success of inclusive education and the perceptions of students with SN towards themselves.

### **Positive and Negative Attitudes**

Researchers have reported different findings regarding teachers' attitudes toward inclusive education. While one study reports that teachers welcome students with SN in their classroom, another researcher shows that teachers are resistant to inclusive education. Since the results of the studies differ according to time and environment researchers tried to reveal which factors influence the attitudes of teachers adversely and focus on several components (such as gender, year of experience, training, resources, and educational needs). Tuncay and Kizilaslan (2022) found that pre-service teachers from different departments have positive attitudes toward inclusion. However, the level of positivity and concern varies according to the demographics. While gender slightly impacts attitudes, the degree of interaction between teachers and students with SN is directly proportional. Besides, special education training and the amount of information available in disabilities are other factors that influence teachers' attitudes favorably and decrease concerns. The main reason for this can be explained by self-confidence. Training and sufficient knowledge about disabilities reduce the worries of pre-service teachers by providing skills and confidence.

Similar results regarding positive attitudes and gender were found in the meta-analysis of Van Steen and Wilson (2020). Of the 62 studies conducted between 1994 and 2019, only 47 included male teachers. When these studies are examined, it

is seen that male teachers have more negative attitudes than female teachers. An influencing factor not mentioned in the previous study that Steen and Wilson found is year of experience. Although it differs as regards the factors examined, and there are exceptions, teachers became more positive toward inclusive education over the years.

The correlation between self-efficacy, gender, year of experience, and teachers' attitudes was the center of Yada and Savolainen's (2017) research. The findings revealed that teachers have a neutral attitude toward inclusion, and their attitudes are highly correlated with self-efficacy. Unlike the previous studies, Yada and Savolainen did not find any relationship between teachers' genders and their attitudes toward inclusive education. Similarly, years of experience influence teachers adversely since they face challenges and build concern about students with disabilities. Analyzing pre-service teachers' attitudes toward people with disabilities and inclusive education separately is essential to understand these terms' relatedness. While student teachers have negative attitudes toward people with disabilities, they have solely positive attitudes toward pupils with social needs (Thaver & Lim, 2014). Educators have unfavorable attitudes when pupils have physical or behavioral needs and are diagnosed with SLD. In addition, no factors other than the amount of contact with people with disabilities (such as gender, age, and educational status) were linked with the participants' attitudes.

It is not enough to divide teachers into those with positive and negative attitudes to inclusion. Parey (2021) realized this and interviewed primary and secondary school teachers after the attitude measurement. The researcher observed a similar thought pattern for primary and secondary school teachers with respect to their attitudes. These attributes are humanism, identification of benefits for positive

attitudes and school environment, and support system for negative attitudes. Parey (2021) found that teachers with positive attitudes believe that pupils with SEN have the right to learn in mainstream education to develop the same skills as their peers and fulfill their needs like every individual in the community. Although teachers with negative attitudes also believed that students with disabilities have the right to be part of general classrooms; they shared that these students may not adapt to the school environment and might be bullied by peers without disabilities. This belief might be related to teachers' lack of resources and collaboration needs and personal experiences. With school counselors' and special educators' collaboration, teachers might feel more competent and positive toward inclusive education.

### **The Impact of Teachers' Attitudes on Inclusive Education**

One of the main reasons that teachers' attitudes are notable is their relationship with students' behaviors. There are many reasons why it is important to consider teachers' attitudes toward inclusive education. Their attitudes can influence how inclusive education is conducted or implemented in the actual classroom. Several studies (Damianidou & Phtiaka, 2018; Leatherman & Niemeyer, 2005) have investigated positive and negative attitudes and how they influence education. It was revealed that behavioral motives (enthusiasm to work with students with SEN) in inclusion are related to teachers' beliefs, emotions, and personal norms (MacFarlane & Woolfson, 2013). Researchers explained that teachers who have positive attitudes to inclusion are involved with inclusive implementations efficiently. Conversely, Pijl (2010) stated that negative attitudes toward inclusive education are caused by faltering in taking responsibility and insufficient knowledge. These elements determine educators' negative attitudes and decrease their self-efficacy by affecting their implementations. A study published eleven years later also supports the studies

mentioned. Nagase et al. (2021) discussed the teachers' attitudes, types of efficacies, and Integrated Classroom Management (ICM). Among many valuable findings, it was intriguing that attitudes are related to ICM and educators' beliefs toward the benefits of integration. Positive attitudes toward the advantages of integration help educators improve efficacy in classroom management and apply inclusive education.

Monsen et al. (2014) studied the teachers and students in their classes in inclusive settings. According to questionnaire results of pupils, the classroom environment of teachers with positive attitudes is highly satisfactory and cohesive and causes less conflict and competition. It shows that educators' demeanors (regardless of how positive or negative the attitude is) impress their administrative skills in the class and designate the success of inclusive education. In the recently published research by Falla et al. (2022), how teachers' attitudes impact academic engagement and training were analyzed. The analysis is meaningful since engagement and attitudes were not frequently studied together in inclusion. Researchers found that teachers with positive attitudes toward students with SEN are more academically engaged and have inclusion training. It is also mentioned that since positive attitude teachers are more excited and willing to teach, it can increase academic engagement.

### **Key Influences on Teachers' Attitudes**

It is known that teachers' positive attitudes towards inclusive education led to success (Engelbrecht et al., 2015). However, their challenges can also lead to negative attitudes (UNESCO, 2009). When the successful implementation of inclusive education is directly related to teacher attitudes, the importance of determining the factors affecting these attitudes becomes apparent. One element influencing educators' attitudes is demographic variables. In the study conducted by

Galaterou and Antoniou (2017), it was discovered that gender, one of the demographic variables, was not influential, but age was an impactful factor. According to this study, teachers under 30 had a more positive attitude, while teachers over 40 had a more negative attitude. In contrast, Van Steen and Wilson's (2020) meta-analysis revealed that male teachers' attitudes toward inclusive education are increasingly unfavorable than females. Also, pre-service teachers have more favorable attitudes toward inclusive education than primary school teachers. Koliqi and Zabeli (2022) similarly found that the attitudes of female teachers and teachers under 30 were more favorable, while the attitudes of teachers with less than 15 years of working experience and those who had completed a master's degree were also more positive. Another study also found that years of experience were associated with positive attitudes, but attitudes became more negative as experience increased. It was also found that elementary school teachers, secondary school teachers, and those with the highest diploma had a more positive attitude than others (Charitaki et al., 2022).

Apart from grade level, the type of school is also essential. Special education teachers' attitudes are more desirable than the attitudes of primary school teachers (Ekşi, 2010). The region where the school is located is also seen as a factor that can affect teachers' attitudes. Chepel et al. (2016) stated that rural schoolteachers held more positive attitudes toward inclusive education, which may be attributed to unity and social cohesion in rural areas. Conversely, Singh et al. (2020) and Thangam et al. (2024) explored those urban pre-service teachers who had the most favorable attitudes. The researchers attribute this to more education, seminars, and access to resources. Education and knowledge about disability are other key elements affecting inclusive education. According to Dapudong (2014), 34.6% of teachers do not have

any training in special education. Moreover, Loreman et al. (2007) explained that 90% of teachers had not taken training. Previous training, experience, knowledge, and efficacy are highly related to educators' attitudes toward inclusive education. Dapudong (2014) stated that teachers' attitudes toward inclusive education vary. Training and state-organized education programs are needed to improve attitudes and knowledge.

Besides education, other elements related to the educational context are resources and collaboration. Saloviita (2022) stated that getting help from other teachers was an important resource need that influenced teacher attitudes. Another study similarly discovered that teachers viewed resources as a need for effective inclusive education (Vanderpuye et al., 2020). Savolainen et al. (2012) investigated the relationship between attitudes, collaboration, and self-efficacy. The results show that collaboration has a profound influence on attitudes, with successful collaboration being the best indicator of teachers' self-efficacy and attitudes. Another research asserted that teachers who have positive attitudes have also optimistic attitudes toward collaboration, high self-efficacy, and favorable attitudes toward the school environment (Abegglen & Hessels, 2018). Damasco (2013) underlined that teachers' attitudes towards collaboration and self-efficacy relationship are quite significant for the success of inclusive education. According to the researcher, the reason why teacher attitudes and self-efficacy are decisive for inclusive education is that they determine collaboration effectiveness and the teaching atmosphere by creating a psychological state. In addition, it can be said that self-efficacy determines the success of inclusive education by affecting it in terms of classroom management, confidence in teaching, managing stressful events, and nurturing skills. (Huang, 2023; Mudhar et al., 2024).



## **Efficacy of the Teachers**

### **Self-Efficacy**

Zulkosky (2009) stated that the term self-efficacy was introduced by Bandura in 1977 in concept analysis and emerged from social learning theory. Bandura (1989) defined the essential traits of self-efficacy as cognitive, motivational, and effective. As the author suggests, behaviors are shaped by cognized goals. Individuals with high self-efficacy set high goals, produce creative solutions to problems, manage their attention, and create strategies successfully. In addition, these individuals have high motivation and ambitious goals they are determined to achieve. These individuals can also manage their emotional reactions and control stress. Maddux (2016) explains self-efficacy as the belief that an individual can do something. According to the author, self-efficacy can affect personality traits and is related to diligence, sociability, and emotional stability. Consistent with Bandura (1989), Maddux and Gosselin (2012) demonstrated the effects of self-efficacy on self-management and well-being. Accordingly, strong self-efficacy affects individuals' ambitions for their goals, the effort they put into them, their willingness to deal with challenges, how effectively they solve problems, their reactions to stress, and their physical responses.

Bong and Hocevar (2002) explained that there are various techniques to measure self-efficacy. One of the measurement techniques is focused on academia. In this technique, students score their self-confidence in overcoming given problems (Schunk, 1982). Another assessment method also includes problem statements and indicates to what extent the individual will perform successfully in these situations (Shell et al., 1995). A further evaluation approach is to examine how effectively you operate in an area without focusing on a specific problem (Pintrich & De Groot,

1990). However, at the core of all these techniques is Bandura's (2006) scale, in which participants are assessed by answering yes or no to a question about their ability to perform determined tasks. In summary, self-efficacy, which has its roots in Bandura's social learning theory, serves as a fundamental construct for understanding teachers' beliefs about their own abilities and has important effects on their motivation, classroom behavior, and professional effectiveness.

### **Teacher Efficacy**

Teacher efficacy is the belief that teachers can structure and implement course content in a way that will produce the desired results. The roots of this term lie in psychology and Bandura's (1978) self-efficacy (Tschannen-Moran et al., 1998). In addition, in the 1970s, the RAND organization conducted a study analyzing the success of reading programs and found that teacher efficacy significantly impacted scores. Another study by the organization found that teacher efficacy was related to student achievement and achievement of set project goals (Berman et al., 1977). Hebert et al. (1998) states that teacher efficacy is often confused with teacher effectiveness, but teacher efficacy is a concept in which beliefs about teacher efficacy affect teaching effectiveness.

Teacher efficacy is usually measured as a Likert-type self-report. Scale items address teaching tasks and situations. Although teacher efficacy is viewed as a continuous variable, teachers are often classified into two groups: those with "positive or high" and those with "low or less" teacher efficacy (Wheatley, 2005). Tschannen-Moran and Hoy (2001) presented three studies that provided 24- and 12-item forms measuring teacher efficacy and teaching strategies, classroom organization efficacy, and student participation factors. They noted that the teacher efficacy scale needed more research. Duffin et al. (2012) evaluated the internal

construct validity of Tschannen-Moran and Hoy's (2001) Teachers' Sense of Self-Efficacy Scale (TSES). The researchers constructed a one-factor and a three-factor competition model to determine whether teacher effectiveness was a single- or multidimensional concept. Their findings suggested that the single-factor model fit better and that preservice teachers did not discriminate among the different dimensions of teaching measured by the TSES. Ho and Hau (2004) examined teacher efficacy from a cultural perspective and examined Australian and Chinese teachers' efficacy in practice, regulation, guidance, and perceptions of external influences. The study found that cultural factors affect teacher efficacy. Martin and Sass (2010) say that teacher efficacy can be affected by the individual and the environment. Similarly, teachers' behavior and instructional management approaches can also be differentiated depending on the situation and context. The Behavior and Instructional Management Scale (BIMS) used in the study, developed to assess teachers' beliefs about classroom control, is indirectly related to teacher efficacy. Besides that, Tschannen-Moran and Barr (2004) found a positive relationship between collective teacher efficacy and the success of students. Pupils' math, writing, and English test results are affected by the teacher's efficacy and students' socioeconomic status (SES). Teacher efficacy emerges as a dynamic construct influenced by individual and environmental factors. It has a crucial role in shaping teaching effectiveness, classroom management, and student achievement. Investigating how teacher efficacy develops and identifying strategies to improve it can contribute significantly to both teacher development and the success of education.

### **The Effect of Efficacy on Inclusive Education**

According to Ainscow et al. (2011), the factors affecting inclusive education and equitable school environments are not the students but the different factors in the

education system. Instead of students with disabilities being adapted to the mainstream classroom environment, the learning environment and teaching strategies should be tailored to students with SN. UNESCO (2009) stated that inclusive education can only be constructed if regular classes embrace inclusiveness. Moreover, Parveen and Qounsar (2018) presented the failure to create an inclusive environment, insufficient resources, teacher efficacy, and public perception of disability as some of the elements that hinder the success of inclusive education. Considering this information, inclusive education is implemented by teachers according to student needs.

Teachers with high efficacy (confident in their ability to teach and feel confident in managing classroom dynamics) are more likely to have positive attitudes toward integrating modern teaching approaches such as mastery learning. Fundamentally, there is a strong relationship between teachers' self-efficacy and their openness to implementing teaching innovations (Guskey, 1988). A study examining student success and teacher efficacy in an adolescent literacy program in the United States revealed that teacher efficacy plays a significant role in student reading performance (Cantrell et al., 2013). Consistent with Kiel et al. (2020), they found that self-efficacy should be acknowledged as it affects the implementation of inclusion through adapting teaching instructions to different needs, learning approaches, student achievement, collaboration, and developing an inclusive school environment. Sharma (2011) stated that teacher education programs at universities do not teach adequate skillsets to work with students with diverse needs and do not adequately prepare teachers for inclusive education implementations. Skills that teachers need to teach effectively in inclusive classes are specialized knowledge, collaboration, classroom control, planning goals, resource coordination, teaching

methods, and personalized instruction (Das et al., 2013). Teachers who do not have these skills may have low self-efficacy, have difficulty implementing inclusive education practices, and may negatively affect the success of inclusive education.

### **The Relationship Between Teachers' Attitudes Toward Inclusive Education and Efficacy**

Many studies in the literature have investigated the relationship between teachers' attitudes toward inclusive education and teacher efficacy and found a positive relationship (San Martin et al., 2021; Savolainen et al., 2022; Werner et al., 2021). Desombre et al. (2019) found that French teachers with less favorable attitudes toward inclusive education have lower self-efficacy. Similarly, a study conducted in Indonesia found a positive relationship between teachers' attitudes and self-efficacy in an inclusive environment (Meidrina et al., 2017). In their research conducted in Egypt, Emam and Mohamed (2011) uncovered that pre-school and primary school teachers' attitudes towards inclusive education determine their self-efficacy. While Alnahdi and Schwab (2021) demonstrated the relationship between teacher attitude and self-efficacy in their study on Saudi Arabian teachers, they also reported that the attitudes of teachers who have a disabled relative are more optimistic. Weber and Greiner (2019) discovered that in addition to the relationship between positive teacher attitudes and high self-efficacy, teaching practices in the first inclusive education were positive. It was also reported that these experiences were more influential in terms of self-efficacy and that teacher attitudes were less affected.

A study by Sokal and Sharma (2014) on Canadian teachers' concerns, self-efficacy, and attitudes toward inclusive teaching found positive relationships between these factors. However, the researchers discouraged concluding cause and

effect, such as whether self-efficacy influences attitudes. The researchers suggested that longitudinal studies are needed to gain a clearer understanding of how self-efficacy is linked to attitudes. In addition, teacher attitudes and self-efficacy during inclusive education may be influenced by several factors, such as frequent and challenging experiences with students with disabilities, the school's focus on performance rather than process, and the type of disability (Hutzler et al., 2019). Alongside these influential factors, social support also plays a critical role in shaping teachers' attitudes and self-efficacy. Elwakil (2024), in his research conducted in Egypt, found that social support significantly impacts teacher attitudes and efficacy, ultimately affecting the overall effectiveness of inclusive education.

## **CHAPTER 3: METHOD**

### **Introduction**

As the number of students with SN increases, the implementation of inclusive education has become more widespread, reflecting this growing demand for inclusivity (Cakiroglu & Melekoglu, 2014; Hornby 2014). However, this raises an important question: Is simply including students with SN in mainstream classrooms sufficient for achieving successful inclusive education? While inclusive practices have been expanded in the Turkish context, their effectiveness has not been thoroughly investigated. Given the increasing significance of inclusion, it is essential to determine whether teachers demonstrate the confidence and competence necessary to implement inclusive practices effectively (Cologon et al., 2011; Mudhar et al., 2024). Therefore, to advance inclusive education and ensure its success, we need to understand the dynamics of teachers' attitudes toward inclusive education and their self-efficacy. Although previous studies in Türkiye have explored teachers' attitudes toward inclusive education and their efficacy, none have integrated existing research to establish a holistic understanding of how these factors interact.

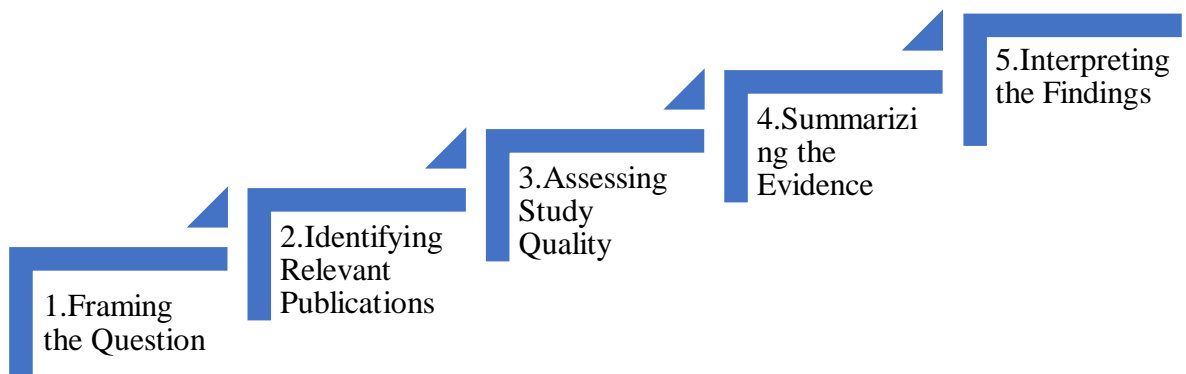
The purpose of this chapter is to describe the methodology used to conduct systematic literature review. It begins with research design and its relationship to the study's objectives. The research context is then described, followed by the description of the sample and selection criteria. Data collection methods and the search strategy are explained in detail. Finally, data analysis procedures are discussed, along with the validity and reliability of the study.

## **Research Design**

The research method used in this study was a systematic literature review. This is a method of discovering, assessing, and integrating all the research conducted on the subject under investigation (Kitchenham & Chartes, 2007). This approach allows for a meticulous and rigorous examination of a theme, with a focus on specific criteria that can uncover factors that may have been overlooked. In doing so, it provides both the researcher and the reader with an in-depth perspective on the subject. According to Ghajarzadeh and Fitzgerald (2024), a systematic review has several positive aspects. With this research method, accuracy increases as large samples are reached, objectivity is ensured as different authors and different articles are studied, opposing ideas become clear, and gaps in the literature are discovered. Through this process, a systematic review not only provides a comprehensive assessment of the existing body of knowledge but also reveals existing gaps and contradictions in literature. Therefore, by examining these gaps, assessing the effects of relevant factors, identifying inconsistencies, and guiding future research, it has proven to be a highly suitable research method.

In this systematic literature review, qualitative content analysis can be used. This methodological approach has a balanced position between qualitative and quantitative analysis. It includes steps of both types of analysis and is a mixed method (Mayring, 2022). In analyses performed with qualitative content analysis, quantitative data (such as category frequencies) can also be analyzed, and these data can be included in the coding and interpretation process. To better understand the systematic review and the steps followed in the research, we can examine the widely cited article by Khan et al. (2003). The researchers argued that the systematic review application is implemented in five steps. The steps can be seen in Figure 1.



**Figure 1***Five Steps to Conducting a Systematic Review*

*Note.* From “Five steps to conducting a systematic review,” by K. S. Khan, R. Kunz, J. Kleijnen and G. Antes, 2003, *Journal of the Royal Society of Medicine*, 96(3), 118-121 <https://doi.org/10.1177/014107680309600304>. 2003 by SAGE Publications

According to the authors (Khan et al., 2003), the first step in conducting a systematic review is to define the problem. The problem selected should be specific, clear, and understandable. In this way, research details and determination of the delay are provided. If new information or needs emerge during the research process (only when necessary), this framework can be relaxed as needed. Changes should be made if a new diagnosis is needed in the sample, research design, or results. The second step is to identify the relevant studies. Access should be provided to a wide range of sources, the research should proceed following the questions and criteria established at the outset, and the selection process should be comprehensive, systematic, and transparent.

The third step is to examine the standard, quality, and effectiveness of the studies accessed. Studies that do not meet the questions and criteria determined at the beginning of the research should be eliminated. The quality of the selected studies

and their suitability for the systematic review process should be carefully evaluated, and the validity and reliability levels of the inferences obtained should be analyzed. The fourth step is to present the main findings. At this stage, the data should be organized with tables, research differences should be examined, preliminary research should be done to understand the reasons for these differences, and when many research articles are examined together, such as a systematic review, their effects on subgroups should be noticed. The fifth and last step is to analyze the results. In the final stage, the first four steps should be checked, and publication bias should be investigated to ensure objectivity. The source of differences between studies should be found and their strengths should be used when making recommendations.

### **Sample**

The sample of this study consists of articles that focus on the relationship between teachers' attitudes toward inclusion and their self-efficacy. To identify relevant studies, a search was conducted using specific keywords in the Web of Science and Scopus databases. These keywords were "teacher attitudes," "inclusion," "inclusive education," "self-efficacy," "teacher efficacy," "demographic factors," "special education," "educational context," and related terms. The selection of studies for this systematic review is limited to studies published in the last decade (January 2014 and November 2024). This period was chosen for several methodological and theoretical reasons. The aim was to examine research conducted in an educational policy and pedagogical environment that is relatively consistent with inclusive education policies, the United Nations Sustainable Development Goals, national education reforms, and the prominence of equity in education (Bokova, 2017; Howard, 2024). In addition, the most frequently used realistic and valid measurement tools for teacher attitudes and their efficacy (e.g., SACIE-R,

MATIES, TAIS) have been created and widely used in the last fifteen years (Ewing, et al., 2018). Since a broader time, frame may use different conceptualizations of teacher attitudes and their efficacy and considering the proper management of limited time and resources, studies published in the last decade were selected, and the literature was comprehensively reviewed methodologically. In addition to the limited time, the search was limited to studies published in English, and articles published in peer-reviewed journals were selected to maintain the quality and reliability of the findings. At the start of the search, a total number of 162 scholarly articles from Scopus, and 206 articles from the Web of Science database were found using the designated search string in November 2024.

Additionally, certain exclusion criteria were applied in this study. Articles addressing populations other than teachers, such as students (other than Educational Science), nurses and parents, were excluded. Studies addressing topics outside the scope of inclusive education, teachers' attitudes and their efficacy, such as studies addressing self-efficacy without addressing inclusive education or attitudes were not considered. In addition, research contexts outside formal education settings, such as community programs or informal learning environments, were excluded. Finally, studies not included in the inclusion criteria, such as conference proceedings and book chapters, were eliminated during the screening process. After removing the research articles that did not meet the research criteria and duplicated research articles, a total of 95 articles remained to be reviewed.

### **Instrumentation**

This study used a Microsoft Excel spreadsheet to systematically organize and analyze the articles selected within the inclusion criteria. The spreadsheet served as a tool to classify and document relevant features of the articles and provided an

efficient approach to the systematic literature review. The spreadsheet is organized according to specific headings to classify the articles. The following headings are included in the article: title, publication year, country of study, author(s), journal name, research methodology, data collection tools, sample characteristics, general results of the study, attitude results (positive, neutral or negative), efficacy results (efficacy type, high or low efficacy, influential factors). Demographic characteristics, experience, knowledge, resources are categories added to answer the research questions. This spreadsheet provides transparent, consistent, and systematic data collection and analysis about teachers' attitudes toward inclusive education and their levels of self-efficacy.

### **Method of Data Collection**

In this study, 95 articles were selected according to predefined keywords and inclusion/exclusion criteria. The articles were obtained through a comprehensive search of Web of Science and Scopus databases since they cover peer-reviewed academic literature. To ensure the inclusion of current research on teachers' attitudes and their efficacy in inclusive education, the search was limited to articles published between January 2014 and November 2024. The initial search was conducted on November 12, 2024, of the 368 articles accessed, 95 were found to meet the research criteria.

Following the initial research, the researcher refined the selection process by focusing on studies that specifically addressed the evolution of teachers' attitudes towards inclusive education and their efficacy over the last decade and the demographic, occupational, and contextual factors that influence these attitudes and efficacy levels. A systematic search was conducted using keywords appropriate to the research questions; "teachers' attitudes towards inclusive education", "self-

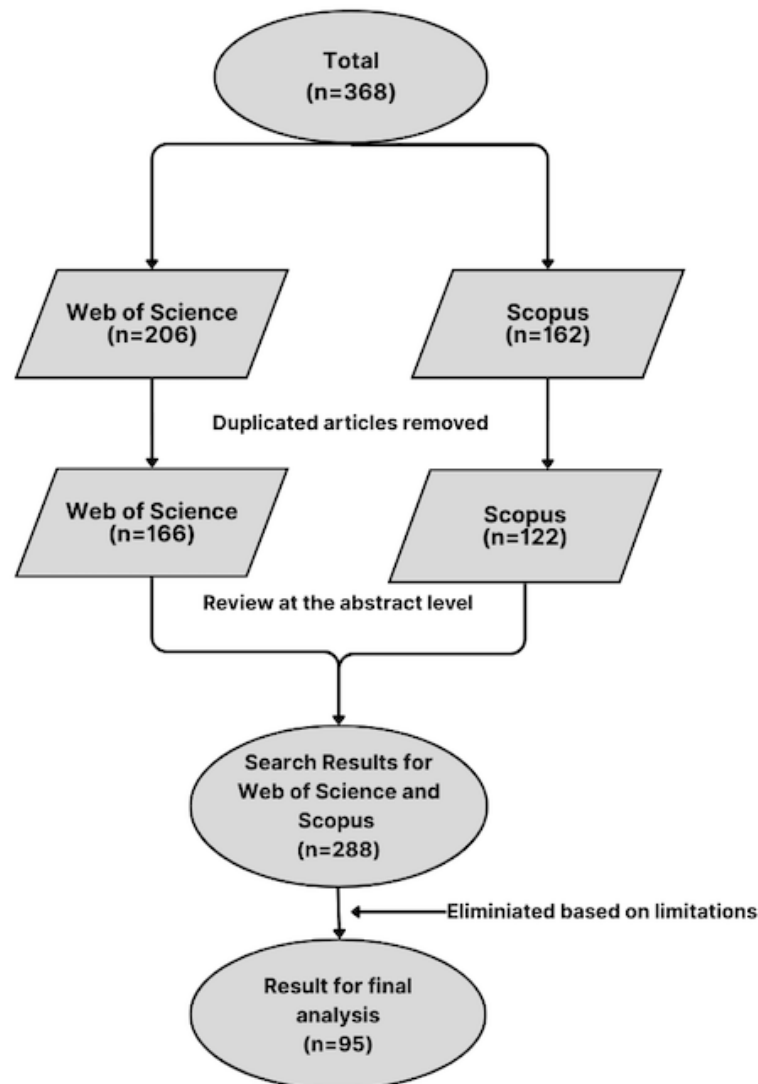
efficacy”, “teacher efficacy”, “professional development”, “training in inclusive education”, “knowledge of special education”, “prior experiences with disabilities”, “resources and support for inclusive education” and “demographic influences on teacher attitudes”. These keywords were used to identify relevant studies in the titles, abstracts, and keyword sections of the retrieved articles.

As shown in Figure 2, 288 articles remained after removing the duplicate articles. The duplicate studies were removed using a reference management tool to ensure methodological rigor. Titles and abstracts of the remaining articles were systematically screened to assess their relevance to the research objectives. Articles were reviewed according to predefined inclusion and exclusion criteria, ensuring that selected studies: were published in peer-reviewed journals, were written in English, examined teacher attitudes and their efficacy related to inclusive education, used quantitative, qualitative, or mixed-methods approaches, and presented empirical findings rather than theoretical discussions or literature reviews. Articles were excluded if they only explored student perspectives, discussed general education attitudes without a clear link to inclusivity, or were conference proceedings, book chapters, or theses. To examine the selected articles in detail, a Microsoft Excel spreadsheet was created and categorized according to the following headings: article title, publication year, authors, country of the study, journal name, research type, data collection tools, sample characteristics (e.g., sample size, demographic data, grade level), general results, attitude results, efficacy results, highlights of the research. Demographic and methodological characteristics of the selected articles were assessed and presented in tables for easy reference in Chapter 4. These tables provide a summary of the basic characteristics, frequency, and distribution of systematically reviewed articles. As part of the final analysis, the

results and discussion sections of each article were evaluated according to the research questions, summarized in a spreadsheet, and analyzed.

**Figure 2**

*Research Article Selection Procedure*



### Methods of Data Analysis

Data analysis of this systematic literature review was conducted through qualitative content analysis. Mayring (2022) states that the deductive category assignment method is used when a study is conducted with pre-determined

theoretical themes and research questions and explains how it is used in content analysis. According to Mayring (2022), the data analysis process includes the stages of determining initial codes by reading the entire text, revising the categories and coding instructions, reprocessing the data if necessary, and determining the final categories. Finally, analysis is made and interpreted based on category frequencies and relationships.

Zhang and Wildemuth (2009) say that in the deductive approach since there are structural existing categories, a list is started. These categories should be as homogeneous as possible. They also state that the same categories are followed in the details. Hsieh and Shannon (2005) suggest that the qualitative content analysis steps involve reading the text and highlighting sections of the text that appear to relate to predetermined codes from previous theories or research findings. These highlighted sections are then coded with the (predetermined) codes. During the analysis process, the researcher should return to the text and reanalyze after the initial coding. The data collected in the previous steps were evaluated and analyzed considering the research questions. The data analysis process included the stages of determining initial codes by reading the entire text and revising the categories. In the analysis and interpretation part of the systematic literature review, the categories and findings defined are thought through in depth. Critical analysis is made on the boundaries of the categories. The findings are related both within themselves and to different cases. Finally, the findings are reconciled with the literature, and their relationships with existing studies are revealed.

### **Validity and Reliability**

To ensure the validity and reliability of this research, several strategies were employed. Since the systematic literature review aims to eliminate studies according

to inclusion criteria and create a framework with the results of these studies, validity and reliability are two significant aspects of the study (Shaheen et al., 2023). To enhance validity, multiple strategies are implemented. Construct validity was ensured by accessing articles published in peer-reviewed journals using widely recognized, respected, and reliable databases such as Web of Science and Scopus. Secondly, inclusion/exclusion criteria and coding were defined to ensure repeatability. Thus, the selection and analysis processes were guaranteed to be repeatable in future studies. Finally, triangulation was applied by including multiple perspectives and theoretical frameworks in analyzing the selected studies. Data triangulation was performed by researching the same topic in different databases, investigator triangulation was performed by sharing selected articles with another researcher, and independent coding was performed (Gough et al., 2017).

To strengthen reliability, various techniques were conducted. Collier and Mahoney's (1996) technique highlight detailed inclusion and exclusion criteria which are used during the elimination of the articles. Another strategy is inter-coding or cross-checking. This method was chosen to confirm that the coding process accurately reflected the themes within the research articles. A second researcher, a teacher and master's student in psychological counseling, was engaged to independently analyze a subset of the articles using the same coding framework. This researcher was instructed to follow the coding manual developed for the review to ensure consistency in the analysis.

As suggested by Miles and Huberman (1994) reliability was measured by calculating the percentage of agreement between two coders. A random sample of 10% of the articles was selected for cross-checking. Inter-coder reliability was found to be 90%. This result indicated a high level of consistency between coders.



Inconsistencies in coding were discussed to ensure that the final coding reflected the most accurate interpretation of the data.



## **CHAPTER 4: RESULTS**

### **Introduction**

This chapter aims to provide answers to the research questions stated in the previous chapters by discussing the characteristics, findings and key elements of the study in more detail. In order to shed light on the research, questions identified in the previous sections, the results of the review of the studies are discussed in detail. In addition, the possible effects of these findings on inclusive education practices and teachers' professional development will be discussed. The section aims to evaluate the meaning and significance of the data obtained within a broader educational framework.

### **Findings of the Study**

This section presents 95 studies that meet the criteria and are demographically classified into categories (See Appendix B). The studies are organized according to the title of the article, year of publication, country of research took place, author(s), journal name, research methods, data collection tools, sample characteristics, general results, attitude results and efficacy results. To provide answers to the research questions, the relationship between behavioral attitudes and efficacy, the role of attitudes, and educational context will be discussed. In addition, independent proposals will remain under the leadership of the proposals to provide answers to the last research question.

## Demographic and Methodological Characteristics of the Study Samples on Teachers' Attitudes Toward Inclusive Education and Their Efficacy

### Year of the Publications

Table 1 and Figure 3 show the distribution of research articles by year. The selected time period for the research criterion is between January 2014 and November 2024.

**Table 1**

*Number of Research Articles by Years*

Years	<i>f</i>
2024	25
2023	15
2022	13
2021	6
2020	11
2019	8
2018	6
2017	1
2016	4
2015	4
2014	2

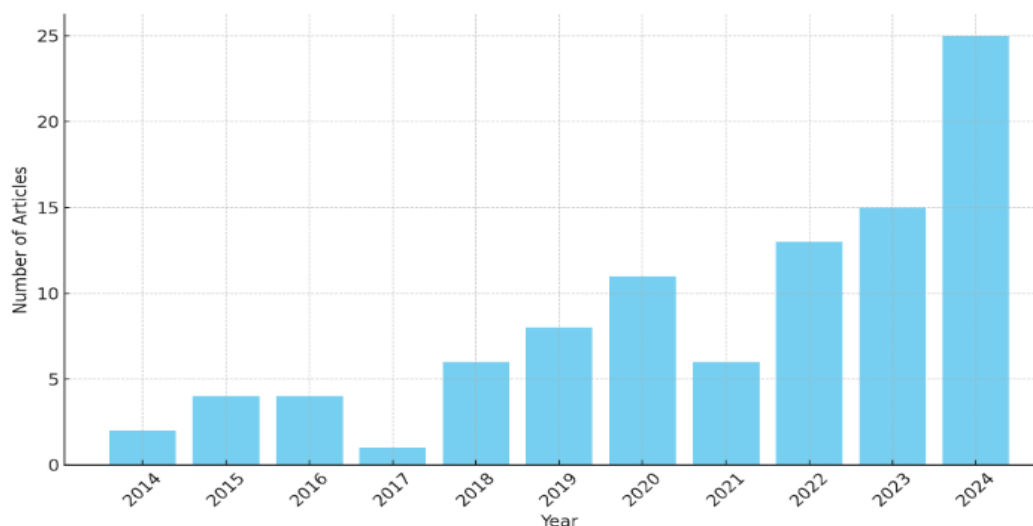
**Figure 3***Yearly Distribution of Research Articles*

Table 1 and Figure 3 shows that most research was conducted in 2024 (n= 25). The second highest number of research belongs to 2023 (n= 15). Considering this situation, it can be said that there has been an increase in the studies in the field of teachers' attitudes and efficacy in the last two years. However, it should also be taken into account that the fourth highest amount of research was conducted in 2020 (n= 11) and that the research did not show a regular increase by the year. The reason for this may be that although teacher attitudes towards inclusive education have been investigated, efficacy has not been studied together.

### **Geographical Distribution of Studies**

Figure 4 and Table 2 show the number of articles published by region as classified by the United Nations.

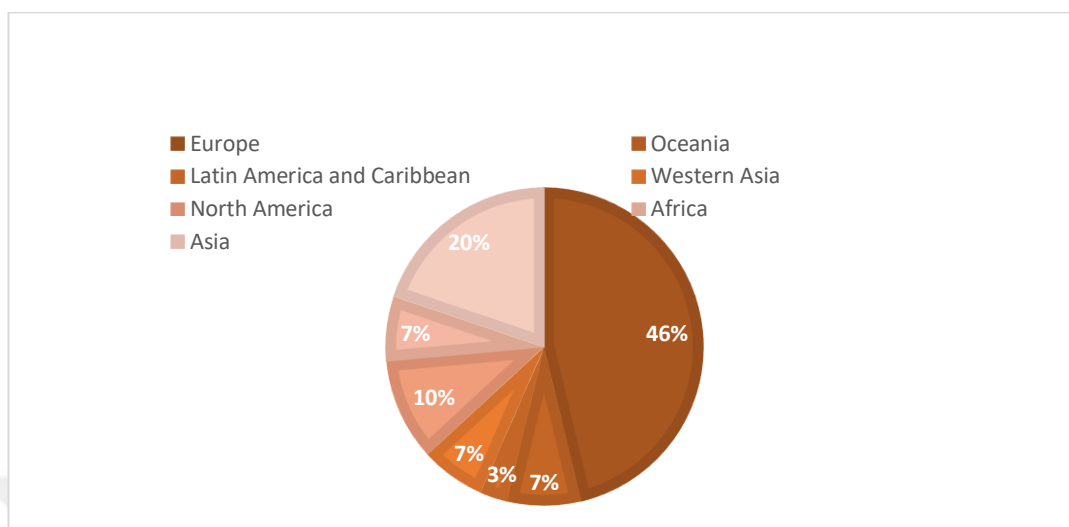
**Figure 4***Distributions of Articles by Region*

Figure 4 shows the distribution of articles examined in the systematic review by region. According to the data, 46.2% of the articles were published in Europe, 19.8% in Asia, 10.4% in North America, 7.5% in Oceania, 6.6% in Africa, 6.6% in West Asia, and 2.8% in Latin America. This distribution shows that certain regions are more represented in academic literature. Table 2 lists the five countries that have published the most research on teachers' attitudes and their efficacy towards inclusive education, based on the studies included in this research.

**Table 2***The Five Leading Countries in Published Studies*

Country	<i>f</i>
Germany	14
China/ Hong Kong	8
Australia	7
Canada	6
Finland	6

The studies included in this systematic literature review represent a variety of countries across many regions. A total of 39 countries from around the world were included in the study. In Africa, three studies were conducted in Ghana, while additional studies were conducted in Kenya, South Africa, Egypt, and Zimbabwe (one each). In Asia, China contributed the most articles (8), followed by Japan (5), Pakistan (3), Indonesia, Bangladesh, the Philippines, Thailand, and Korea (one each). Europe was the most represented region, with Germany producing the largest number of studies (14). Other European countries included Finland (6), Greece (4), Switzerland (3), Spain (3), Kosovo (3), the United Kingdom (2), Italy (2), France (2), Portugal (2), Austria (2), Norway (1), Romania (1), Bulgaria (1), Belgium (1), and Sweden (1). Australia contributed seven studies in Oceania, while the Solomon Islands contributed one study. In Latin America and the Caribbean, Chile (2) and Trinidad and Tobago (1) were represented. In Western Asia, which includes Türkiye, four studies originated in Saudi Arabia, two in Israel, and one in Türkiye. Finally, in North America, six studies were conducted in Canada and five in the United States. The total number of articles here is 106. The reason for this is that 12 of the articles are cross-national articles.

### **Research Methodologies**

Table 3 shows the research methodologies used in the research articles. These are classified as quantitative, mixed, and qualitative.

**Table 3**

#### *Research Methodologies of the Research Articles*

Methods	<i>f</i>
Qualitative	1
Mixed	5

Methods	<i>f</i>
Quantitative	89

Table 3 indicates that the most preferred employed research methodologies were quantitative, mixed, and qualitative, respectively. Each research article explicitly identified the methodology utilized.

### **Data Collection Instruments**

Table 4 shows the data collection instruments used in research articles. These are classified as questionnaires, scales, surveys, tests, and interview, self-report.

**Table 4**

*Instruments Distributions of the Research Articles*

Methods	<i>f</i>
Scales	92
Questionnaires	20
Surveys	7
Interview	5
Inventory, self-report, tests,	6

Scale design type was used in ninety-two articles and was the most chosen research type. Seventy-six different scale types were used in these articles. Some of the scales were developed by the authors for the research. Scales were also used in the studies to examine different factors (such as intentions, concerns, perspectives, and interaction with the disabled) as well as teacher attitudes and their efficacy.

Questionnaires (n= 20) were the second most preferred data collection tool.

Questionnaires (n=6) were used in both quantitative and mixed-method studies.

Interviews (n= 5) were used in one qualitative and four quantitative studies. While they were used to collect quantitative data in four studies, they were used to collect qualitative data in two studies. The last data collection group included the titles inventory, tests, and self-report. In all research articles, data were collected using three inventories, two tests, and one self-report. In some studies, more than one measurement tool was used. Cases where scales and questionnaires were used together were noteworthy. Therefore, the total number of measurement tools used was greater than the number of studies examined.

**Table 5**

*Distribution of the Most Frequently Used Scales in Research Articles*

Scales	<i>f</i>
TEIP	39
TSES	18
AIS	14
SACIE-R	12
CIES	12

Table 5 shows the five most frequently used scales in research articles. A total of 69 scales were used in the 95 research articles evaluated within the scope of the systematic literature review, and the five most preferred scales are discussed below.

The Teacher Efficacy for Inclusive Practices (TEIP) Scale was developed by Sharma, Loreman, and Forlin (2012) and measures teachers' efficacy in using inclusive education practices, managing student behavior, and collaborating. The reliability of the scale is high, and the Cronbach Alpha value is reported as .85. The



Teacher Sense of Self-Efficacy Scale (TSES) was developed by Tschannen-Moran and Hoy (2001). Unlike the TEIP scale, it also assesses the dimension of student participation. In the articles reviewed, this scale was used 18 times, and its internal consistency coefficient was found to be above .90.

Sharma and Jacobs (2016) developed Attitudes to Inclusion Scale (AIS) in 2001, which was revised in 2016. According to the research findings, it is one of the most widely used scales for measuring teachers' attitudes towards inclusive education. The Cronbach Alpha value was reported as .82. The Sentiments, Attitudes, and Concerns about Inclusive Education-Revised (SACIE-R) Scale was developed by Forlin, Earle, Loreman, and Sharma (2011). Unlike other scales, it addresses both attitudes and concerns. This scale has been used 12 times in articles, and Cronbach's alpha value is reported as .78. Finally, the Concerns about Inclusive Education Scale (CIES) was adapted by Sharma and Desai (2002) and assesses teachers' concerns about inclusive education practices. The CIES has also been used in 12 studies, and its reliability coefficient is reported as around .80. However, these scales have been applied in different geographical contexts. For example, the TEIP and SACIE-R scales have been applied in countries with different educational systems and cultures, such as Germany, Australia, and the Philippines. This makes it difficult to answer whether the scales work in the same way.

### **The Sample of the Study**

The sample characteristics of the study consist of three categories. These are pre-service teachers, in-service teachers, and pre-service and in-service teachers. The reason for dividing the articles into these categories may be that they aim to examine the effects of teacher education, experience, and school environment on attitudes and efficacy.

**Table 6***Sample Type Distribution of the Research Articles*

Sample	<i>f</i>
Pre-service teachers	24
In-service teachers	63
Pre-service and in-service teachers	8

As presented in Table 6, twenty-four research articles included pre-service teachers as participants. These participants were bachelor's degree candidates selected from the Department of Education. Five studies focused on master's degree candidates. In-service teachers comprised the sample in sixty-two studies. Additionally, ten studies included both pre-service and in-service teachers.

**Participants' Specializations and Grade Level They Taught**

Research articles predominantly provided information on the sample's grade level and working area rather than specifying the teachers' subject areas. Solely one study indicated that the teachers were employed at the university level. Fifteen studies did not specify the sample's grade level or field of study ( $n = 4$  pre-service teachers,  $n = 9$  in-service teachers,  $n = 2$  pre-service and in-service teachers). Among these, five articles did not provide information on either subject area or grade level but stated that the participants were mainstream education teachers working in K-12 settings.

Based on the available data ( $n = 10$  unspecified grade level,  $n = 1$  higher education), it can be inferred that 84 teachers were engaged in K-12 grade levels. Furthermore, some of the 95 studies ( $n = 20$ ) focused on teachers working in a single

field, whereas the majority (n = 75) collected data from teachers working across multiple fields.

**Table 7**

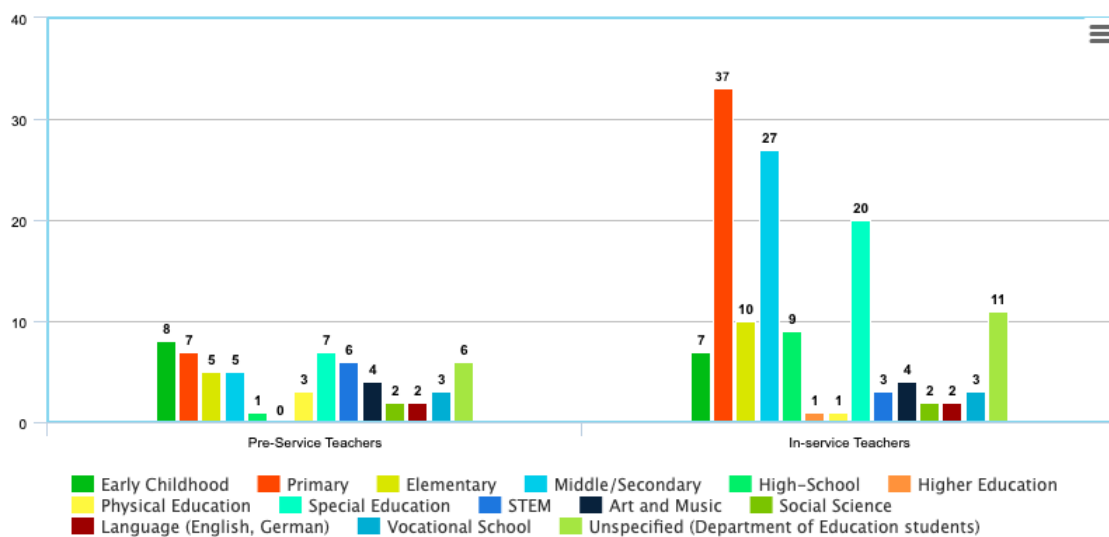
*Distribution of Teachers by Their Specialization and Grade Level Taught*

Grade Level Taught/ Specializations	<i>f</i>
Pre-service Teachers	
Early Childhood	8
Primary	7
Elementary	5
Middle/Secondary	5
High-School	1
Higher Education	none
Physical Education	3
Special Education	7
STEM	6
Art and Music	4
Social Science	2
Language (English, German)	2
Vocational School	3
Unspecified (Department of Education students)	6
In-service Teachers	
Early Childhood	7
Primary	37

Grade Level Taught/ Specializations	<i>f</i>
Elementary	10
Middle/Secondary	27
High-School	9
Higher Education	1
Physical Education	1
Special Education	20
STEM	3
Art and Music	4
Social Science	2
Language (English, German)	2
Vocational School	3
Unspecified (Department of Education students)	11

**Figure 5**

*Representation of Teacher Specializations and Grade Level They Taught*



In-service primary school teachers participated in the research the most, as shown in Table 7 and Figure 5. This is followed by in-service middle/secondary school teachers. The reason why middle and secondary school teachers are considered together is because middle schools are generally considered secondary or low secondary in studies conducted in Europe. The third highest sample belongs to in-service special education teachers. It is important to note that the sample of studies that included both pre-service and in-service teachers (n=10) was evaluated in both groups. In many studies, teacher samples include individuals who teach at more than one grade level and subject area. Therefore, the total distribution of teachers by grade level and subject area exceeds the number of included articles. Each teacher sample was categorized under the relevant grade level they taught and specialization, leading to this discrepancy between the total number and the number of studies.

### **Sample Sizes**

The sample sizes of the research articles are presented in Table 8.

**Table 8**

*Sample Sizes Distribution of the Research Articles*

Sample Size	<i>F</i>
Less than 200	34
201–400	21
401–600	16
601–1000	11
1001–2000	10
2001–3000	2
3001 and more	1

The sample sizes of the studies vary between 8-4567. The most preferred sample size was 8-200 with 35%. One qualitative research and three of the five mixed research types selected this sample size. The second most preferred was the 201-400 sample range with 22.11%. The highest sample size, 4567, is the only study in the range 3001-4567. This is a quantitative study of primary school teachers in Finland.

### **Teachers' Attitudes Toward Inclusive Education and Their Efficacy**

In this section, the results of the research articles are analyzed with a focus on teachers' attitudes toward inclusive education and their efficacy. Specifically, the findings are categorized into key themes, with an emphasis on the prominent results and factors influencing teachers' attitudes and efficacy in inclusive education settings

#### **Teachers' Attitudes Toward Inclusive Education**

##### **General Trends in Attitudes Toward Inclusive Education**

Teachers' attitudes toward inclusive education were analyzed in 95 research articles. In most studies, attitudes were stated as positive, negative, and neutral. When the studies are reviewed in general, it is seen that teachers' attitudes are mostly neutral and slightly positive (Avramidis et al., 2019; Alnahdi & Schwab, 2021; Carvalho et al., 2024; Sahli Lozano et al., 2024). As revealed by Savolainen et al. (2022), there has been no significant change in teacher attitudes over the years. For this reason, a significant difference was sought by comparing the countries where the research was conducted and the attitudes of teachers toward inclusive education. For this reason, in the first stage, the results of fifteen research articles collecting data from two countries were considered.

Miesera and Gebhardt (2018) collected data from universities in Germany and Canada to examine the attitudes of vocational pre-service teachers. The results of

the research showed that Canadian pre-service teachers' attitudes toward inclusion were slightly more positive than the German group. However, Saade et al. (2024) collected data from universities in Canada and the United States and examined the attitudes of pre-service teachers, revealing that United States pre-service teachers had more positive attitudes. Another study with pre-service students found that Canadian student teachers were more negative than Australian student teachers about including students with disabilities in mainstream classrooms (Sharma & Sokal, 2015). In the Australian context, there are another research. This time, in the research conducted with secondary in-service teachers, the attitudes of Australian prospective teachers towards inclusive education were found to be more favorable than those of Swiss teachers. In contrast, Sharma et al.'s (2018) study with Australian and Italian K-12 in-service teachers revealed that Italian teachers had more positive attitudes. A new study conducted in 2024 took in-service teachers working at various grade levels from Italy and Switzerland as samples and found that attitudes were quite high in both countries; however, Italian teachers had higher attitudes and beliefs about inclusion (Sahli Lozano et al., 2024).

Japan also emerged as a focal point in examining cross-cultural differences in teacher attitudes toward inclusive education. Japanese in-service teachers were compared with teachers from three other countries. The first comparison with Korean in-service teachers revealed that both countries' teachers were slightly above the midpoint. In the second comparison, Finnish in-service teachers were included; however, this study primarily explored factors influencing attitudes, leaving the results inconclusive. The last study compared the attitudes of Saudi Arabians and Japanese teachers and found that they were slightly above the midpoint, parallel to the first result (Song, 2016; Yada & Alnahdi, 2024; Yada et al., 2018).

Cultural context shapes teacher attitudes and the implementation of inclusive education. Educational policies, teacher education curricula, and societal expectations can culturally influence education. However, various factors affect teacher attitudes and are discussed more than the cultural context in research articles. These factors are demographic characteristics (gender, age, level of education), teachers' fields of work, years of teaching experience, prior experience and interaction with disabled individuals, special education training and knowledge, and resource and support. The factors affecting teacher attitudes will be discussed in depth in the next subheading.

### **The Role of Demographic Characteristics**

The factors affecting teachers' attitudes towards inclusive education are discussed under this heading. When the research articles were examined, it was seen that demographic characteristics were frequently examined as a factor. In the studies, demographic factors were considered as gender, age, and education level. For this reason, the effects of these variables will be examined first.

Only six out of 95 research articles found that gender had a significant association with attitudes. The results mostly prove that female teachers have more positive attitudes than male teachers (Arias-Pastor et al., 2024., Arias-Pastor, 2023; Röhm et al., 2018; Saloviita, 2020; Sharma et al., 2015a; Vaz et al., 2015). The studies investigated teacher attitudes toward inclusive education in Australia, Finland, Germany, Pakistan, and Spain. Arias-Pastor et al. (2023) and Arias-Pastor (2024) are two different studies conducted in Spain. It was consistently found that female teachers exhibited more positive attitudes compared to male teachers across all countries. This suggests that the influence of cultural context on gender roles regarding attitudes toward inclusive education is not significant. In a study



comparing attitudes across countries, teachers in the United Kingdom were found to exhibit more positive attitudes. While the author suggested that this result might be attributed to a higher proportion of males in the sample and the possibility that male teachers hold more positive attitudes, this inference could not be substantiated within the study (Kourti et al., 2023).

A limited number of studies (n=7) identified a significant relationship between teachers' attitudes toward inclusive settings and their age. In research articles, it has been found that the attitudes of young teachers are mostly more favorable (Carvalho et al., 2024; Frumos, 2018; Saloviita, 2020; San Martin et al., 2021; Vaz et al., 2015). Similarly, Avramidis et al. (2019) revealed that while young teachers rated their attitudes toward inclusive education as the most positive, middle-aged teachers reported having the most negative attitudes. Opoku et al. (2023) asserted that older teachers exhibit more positive attitudes; however, it is crucial to highlight that this study was conducted with pre-service teachers (with age ranges of 18-25 and 26 and more).

The relationship of teachers' level of education on their attitudes has been explored in a limited number of studies (n=3). These studies are divided on whether a higher level of education positively or negatively influences attitudes. Frumos (2018) discovered that teachers with a master's degree had more negative attitudes towards inclusive education. However, de Oliveira et al. (2024) revealed in their study that teachers with a Licentiate degree had more unfavorable attitudes than teachers with a master's degree. In a separate study, Latorre-Coscolluela et al. (2022) found that teachers with postgraduate and doctoral education exhibited more favorable attitudes. Three additional studies examined the effects of level of education, but these focused on the effects on teachers' beliefs, awareness, and

concerns about the success of inclusive education. Studies found that teachers' level of education increases their belief and awareness that students with disabilities can be successful in inclusive classrooms and reduces their anxiety about implementing inclusive education (Kourti et al., 2023; Kuyini et al., 2020; Sharma & Sokal, 2015).

### **The Impact of Teachers' Specializations and Grade Level They Taught**

Some of the studies (n=12) conducted by considering teachers' fields of study and grade levels found a significant difference in teachers' attitudes towards inclusive education. These studies compared the attitudes of early childhood, primary, secondary, high school, and special education teachers. The most common conclusion is that the attitudes of special education teachers toward inclusive education are more positive than general teachers (K-12) (Avramidis et al., 2019; Desombre et al., 2019; de Oliveira et al., 2024; Miesera et al., 2019; Sharma et al., 2015b). A study conducted only in Japan and Korea found that being a special education teacher affected the attitudes of Korean teachers but not Japanese teachers. The author explained that this may be related to Korea's special education university program (Song, 2016).

When examining general teachers, it becomes evident that primary school teachers emerge as the most prominent group. It has been discovered that the attitudes of primary school teachers are higher than all other general teachers (Desombre et al., 2019; Nagase et al., 2020). More in-depth examinations have indicated that the attitudes of primary school teachers are more favorable than secondary school teachers (Parey, 2019). San Martin et al. (2021) found that the attitudes of primary school, high school, and special education teachers were more positive compared to those of other general teachers. In contrast, Gigante and Gilmore (2020) reported that early childhood educators exhibited more favorable

attitudes than secondary school teachers. Another study indicated that secondary school teachers had more positive attitudes than primary school teachers because the number of students with SN per class was lower (Gentile et al., 2023).

While research articles find the attitudes of primary school teachers towards inclusive education more positive, some authors attribute this situation to the knowledge of special education teachers about implementing inclusive education techniques and the fact that primary school education is not academically challenging (de Oliveira et al., 2024; Parey, 2019). However, considering that the number of studies on primary school teachers is higher than other teacher groups in the literature, it should be kept in mind that this situation may have an impact on the results.

### **The Impact of Teaching Experience**

Research articles have also addressed this factor, considering that the years of teaching experience of the teachers in the sample may have an impact on attitudes. Five studies conducted in various parts of the world concluded that there is a significant relationship between the number of years in the teaching profession and attitudes. D'Agostino and Horton (2024) and Kuyini et al. (2020) suggested that teachers with more experience have more positive attitudes towards inclusive education. However, some studies indicate that teaching experience may have a negative impact on attitudes. Chow (2024) argued that greater teaching experience is associated with more negative attitudes, attributing this to a lack of sufficient awareness of inclusion among older teachers and those who graduated earlier, during their university education. Yada et al. (2018) observed that increased years of school experience positively affected the attitudes of Japanese teachers, whereas it negatively affected the attitudes of Finnish teachers. The researcher argued that the

reason for this may be the relationship between cultural context and attitudes and efficacy.

### **The Impact of Prior Experience and Interaction with Individuals with Disabilities**

Having a relative with a disability or previous experiences with individuals with disabilities (such as teaching or sharing a social environment) may be factors that affect teachers' attitudes toward inclusive education. This factor, which is frequently emphasized in research articles, needs to be examined in detail. Kunz et al. (2021) defined positive contact with individuals with disabilities as family, leisure, and study, and revealed that this contact also improves teachers' attitudes toward inclusive education. Correspondingly, it has been proven in different studies that the attitude of teachers who have family members with disabilities towards inclusive education is more favorable (Alnahdi & Schwab, 2021; Sokal & Sharma, 2017). Educators who teach in inclusive classrooms also reported that their attitudes were more positive, and that prior experience had a positive impact (Alhumaid et al., 2020; Antala et al., 2022; Braksiek, 2022; Chow, 2024; Pozas & Letzel-Alt, 2023; Wittwer et al., 2024).

Studies that did not restrict the type of interaction and focused only on teachers' attitudes towards inclusive environments regarding their contact with individuals with disabilities also found a significant relationship. These findings suggest that positive contact with individuals with SN, whether they are family members or students, can increase teachers' attitudes toward inclusion (Arias-Pastor et al., 2023; Arias-Pastor et al., 2024; Ismailos et al., 2022; Kuyini et al., 2020; Yada et al., 2018). In their experimental research, Sharma and Nuttal (2016) found that the attitudes of pre-service teachers who had previous experience with disabled

individuals improved more after special education training than those who did not have prior experience.

### **The of Special Education Training and Knowledge**

Inclusive education challenges teachers and creates a need for training due to a lack of resources, workload, and inadequate training in dealing with the needs of students with disabilities (Kamran et al., 2023). Training is important to cope with the behavioral problems of students with SN and to increase teacher attitudes (Vogiatzi et al., 2023). In parallel, research articles also show that teachers' attitudes towards inclusive education are significantly affected by the training element. In two studies, a special education course was administered to a sample of teachers holding bachelor's and master's degrees, and their attitudes were compared before and after the training. The findings indicated that the training resulted in a more positive shift in attitudes. A study conducted during the semester of pre-service teachers revealed that the attitudes of prospective teachers increased significantly and positively after the inclusive education course (Kunz et al., 2021). In-service training has an influential role in teachers' attitudes towards inclusive education (Xie et al., 2024).

The positive effect of training on teacher attitudes has been proven in different articles (Braksiek, 2022; Carvalho et al., 2024; Frumos, 2018; Scanlon et al., 2022; Vaz et al., 2015; Vieira et al., 2024; Werner et al., 2021). While attitudes toward nutrition are also found to be positive in Italy and Switzerland, it is stated that this situation is progressing in quality education and special education training (Sahli Lozano et al., 2024). In addition, Parey (2019) found that the attitudes of primary school teachers were more favorable in the study, attributing this to the fact that the sample of primary school teachers had received training focused on more inclusive education. The level of training can also affect teachers' attitudes, with some studies

suggesting that receiving more inclusive education is associated with more positive attitudes (Chow, 2024; Sokal & Sharma, 2017). Likewise, Alharbi and Iqtadar (2024) found that inadequate training negatively affects teacher attitudes.

Training is also related to teachers' knowledge about inclusive education. It is said that the knowledge of inclusive education that increases with training has a positive effect on teachers' attitudes (Alsarawi & Sukonthaman, 2023; Kamran et al., 2023; Kisbu-Sakarya & Doeniyas, 2021). A study conducted with samples from different grade levels showed that the attitudes of early childhood teacher candidates who were more knowledgeable about inclusive education were more positive than other candidates (Opoku et al., 2023). Grade level is not always effective; when examining attitudes towards students with autism spectrum disorder, it was found that knowing about autism was the most important factor affecting attitudes in all prospective teachers (Lu et al., 2020). In addition to the nature of inclusive education and the type of disability, even having knowledge about inclusive education laws significantly positively affects teachers' attitudes (Carvalho et al., 2024; Gigante & Gilmore, 2020). Besides that, knowledge about inclusive practice is also a strong predictor of teachers' attitudes (Engelbrecht & Savolainen, 2018).

### **The Impact of Resource and Support**

Resource and support are two other factors that affect teachers' attitudes towards inclusive education. The reason why these factors are discussed under one heading is that they are discussed together in some of the research articles and have similar effects. It has been found that support and adequate resources can help teachers overcome their challenges and improve their attitudes (D'Agostino & Horton, 2024). The increase in resources (human and educational resources) for inclusive education enables teachers to have a positive attitude (Parey, 2019; Kamran

et al., 2023). However, it has also been discovered that having online resources is insufficient to increase teacher attitudes because guidance on how to use them is not provided (Nührenbörger et al., 2024).

When the support factor is examined, it is seen that each research article addressing this topic addresses different dimensions of support. While perceived social support positively affects teachers' attitudes toward inclusive education, administrators' support also serves as an effective factor in predicting teachers' attitudes (Elwakil, 2024; Xie et al., 2024). Although support determines teachers' attitudes toward inclusive settings, teachers believe that they do not receive enough support from their schools (Opoku et al., 2022). A positive school environment where adequate support is provided can positively affect teacher attitudes (Fu et al., 2023).

### **Teacher Efficacy**

In this section, teacher efficacy, self-efficacy, and teacher efficacy were included. Both concepts were used to define and measure the extent to which teachers are self-confident in implementing inclusive education. In most of the articles, efficacy was found to be high, and a positive relationship was found between teachers and inclusive education (Alnahdi & Schwab, 2021; Braksiek, 2022; Carvalho et al., 2024; Chow, 2023; Chow, 2024; Desombre et al., 2019; Huang, 2023; Latorre-Coscolluela et al., 2022; Li & Cheung, 2021; Mudhar et al., 2024; Opoku et al., 2023; Soeharto et al., 2024; Vieira et al., 2024; Wächter et al., 2024; Wittver et al., 2024). Efficacy was not only associated with teachers' attitudes towards inclusive education but could also predict attitudes (Alnahdi & Schwab, 2021). In addition, high self-efficacy in inclusive instruction also significantly affected teachers' attitudes (Li & Cheung, 2021). Several studies indicated that the

relationship between efficacy and attitude was not strongly correlated but demonstrated a weaker association (Koliqi et al., 2023; Saloviita & Amulla, 2024; Weber & Greiner, 2019).

High self-efficacy is associated with teachers' use of differentiated practices in the inclusive classroom environment (Pozas & Letzel-Alt, 2023). Self-efficacy and teaching efficacy determine how teachers include students with disabilities in the classroom (Röhm et al., 2022). Teachers with high self-efficacy can implement both guided and independent practices, as well as employing diverse instructional strategies in their classrooms (Arias-Pastor et al., 2024; Kuyini et al., 2020; Schwab & Alnahdi, 2020). In addition to self-efficacy, teaching, and teacher efficacy are also associated with the implementation of inclusive instruction, classroom management, and the ability to teach students with SN (Frumos, 2018; Nagase et al., 2020; Uusimaki et al., 2020). In some research studies, efficacy and confidence are often used interchangeably. As a result, it can be concluded that high confidence also affects the implementation of inclusive teaching strategies and classroom management advantageously (Arias-Pastor et al., 2023; Fu et al., 2023; Saloviita and Amulla, 2024). While dealing with physically aggressive students may reduce teachers' self-esteem, it is important to note that high efficacy alleviates emotional distress by encouraging cooperation and improving behavior management (Nagase et al., 2020; Park et al., 2024).

### **Factors Affecting Teachers' Efficacy**

Factors that affect teachers' efficacy and are highlighted in research articles are presented under this heading. Training, knowledge, prior experience, and interaction with individuals with disabilities will be discussed as factors that lead to increased efficacy.



As with attitudes, there have been some studies showing that training increases teachers' self-efficacy (Alharbi & Iqtadar, 2024; Kisbu-Sakarya & Doeniyas, 2021; Opoku et al., 2022; Saade et al., 2024; Vieira et al., 2024; Vogiatzi et al., 2023). In the two of the tests in which the researchers intervened and conducted the samples before and after receiving training or a course, efficacy was increased, while in the other, a moderate effect was found (Forlin et al., 2014; Nührenbörger et al., 2024; Sharma & Nuttal, 2016). Although it has been suggested that training alone, without practical experience, may not be sufficient to increase effectiveness, research has shown that work experience does not significantly affect self-efficacy (Saade et al., 20224; Sokal & Sharma, 2017).

Like training, knowledge has been shown to enhance efficacy. This impact is not limited to knowledge about inclusive education but extends to a comprehensive understanding of inclusive education policies, both of which are closely linked to higher levels of teacher efficacy (Alsarawi & Sukonthaman, 2023; Chow, 2024; Gigante & Gilmore, 2020; Opoku et al., 2023). Moreover, teachers' understanding of the specific disabilities of their students with SN has been found to influence self-efficacy positively (Lu et al., 2020). Prior experience and interaction with individuals with disabilities is also one of the factors that improve efficacy. While some studies suggest that previous contact with individuals with disabilities is sufficient for high efficacy, other studies argue that this experience can be effective if it is positive (Alhumaid et al., 2020; Antala et al., 2022; Ismailos et al., 2022; Kunz et al., 2021; Kuyini et al., 2020). Having previously taught students with SN may also be an important experience that strengthens self-efficacy (Yada et al., 2018).

## **CHAPTER 5: DISCUSSION**

### **Introduction**

This chapter will provide a comprehensive overview of the research, detail key findings, and discuss recommendations for future practice.

### **Overview of the Study**

This research focuses on teachers' attitudes towards inclusive education and their efficacy. The 95 research articles published in Web of Science and Scopus databases between 2014-2024 were selected, and answers to the research questions were sought with a systematic literature review methodology. The demographic characteristics of the articles are outlined; year of the study, research methodologies, instruments used for data collection, sample size, sample characteristics, and grade levels or subject areas of the sample. Data related to demographic characteristics, attitudes, and efficacy were categorized and recorded using a Microsoft Excel spreadsheet.

The articles were examined in the context of teachers' attitudes and effectiveness toward inclusive education, and the findings are included in this chapter. This systematic literature review is mostly based on Mayring's (2022) content analysis framework. Teachers' attitudes towards inclusive education and their efficacy were examined by considering factors such as demographic characteristics, experience, knowledge, and resources that affect attitudes and factors that may affect the type and level of efficacy.

### Research Article Characteristics

To examine teachers' attitudes toward inclusive education and their efficacy, this systematic review focused on studies published between January 2014 and November 2024. This period was chosen to ensure alignment with contemporary educational policies, the United Nations Sustainable Development Goals, national education reforms, and the increasing emphasis on equity in education (Howard, 2024; UNESCO, 2015). Additionally, widely recognized and frequently used measurement tools for assessing teacher attitudes and efficacy (e.g., SACIE-R, MATIES, TAIS) have been developed and extensively utilized in the last fifteen years (Ewing et al., 2018). Since broader time frames might involve varying conceptualizations of teacher attitudes and efficacy, and given the constraints of time and resources, the last decade was selected for a comprehensive and methodologically consistent literature review.

A total of 162 articles from Scopus and 206 from Web of Science were identified in November 2024. Duplicate studies were removed using a reference management tool, and the remaining articles were screened based on predefined inclusion and exclusion criteria. The final selection comprised 95 articles that met the criteria of being published in peer-reviewed journals, written in English, utilizing empirical methods, and presenting original findings. To enhance methodological rigor, triangulation was applied by incorporating multiple perspectives and theoretical frameworks. Data triangulation was ensured through searches in multiple databases, investigator triangulation was conducted by sharing selected articles with another researcher, and independent coding was performed to minimize bias (Gough et al., 2017).

The selected studies encompass research from various regions worldwide. The majority of studies (46%) were conducted in Europe, with Germany being the country with the highest number of published articles.

The highest number of selected articles were published in 2024, followed by 2023. The most frequently used research methodology was quantitative methods, likely due to the availability of various instruments designed to measure teachers' attitudes toward inclusive education and their efficacy. Accordingly, scales were the most commonly used measurement tools, as they facilitate the quantification of research variables and the establishment of categories (Anjana & Prasad, 2021; Stevens, 1946).

The study sample included both pre-service and in-service teachers to examine the attitudes and efficacy of those actively involved in inclusive education. While teachers were categorized by grade level (K-12 and university), the review primarily focused on university-level samples. Some studies provided grade-level information instead of specifying subject areas. Among pre-service teachers, the most common sample groups were early childhood education and STEM and Special Education subject areas. Among in-service teachers, primary and middle/secondary school levels were the most studied, with Special Education being the most frequently examined subject area.

Sample sizes varied from 8 to 4567 participants. The smallest sample size belonged to a qualitative study, while the largest sample size was in a quantitative study. Most studies preferred small-scale research (8–200 participants), while large-scale studies (3001–4567 participants) were the least common, appearing only once in the dataset.

### **Discussion of Major Findings**

Inclusive education aims to change the education system and adopt an equability approach, not the student with SN. It is quite significant for students with SN to have a healthy relationship with their peers and to meet their right to education to break down barriers in education (Sadikovna & Azimjon 2023). Inclusive education can help students without SN respect differences, understand social diversity, and increase the social acceptance and academic success of students with SN (Pinto & Baines, 2019; Qian & Rong, 2023). Teachers have a key role in inclusive education because teacher attitudes determine how they implement inclusive education and the classroom environment. Teaching efficacy and self-efficacy affect teachers' behaviors and educational strategies (Bandura, 1989; Kuyini & Desai, 2007; Tschannen-Moran et al., 1998). Considering that teachers' attitudes and efficacy have such an impact on inclusive education, these two factors have been the subject of much research over the years and have been addressed together.

Studies examining both attitude and efficacy over the past decade have revealed that teachers' attitudes are predominantly neutral to slightly positive. Various factors influencing these attitudes were categorized and analyzed. After reviewing the characteristics of the research articles, an in-depth examination of attitudes began through cross-national research to understand the effects of cultural context. It was determined that cultural context is influential, but this is not solely due to individuals' social expectations and cultural roles; educational policies and curricula implemented in different countries also play a significant role. Among the 95 articles examined, the country with the highest number of published studies is Germany. Studies conducted in Germany reveal that teachers' attitudes are generally positive and that teachers' self-efficacy levels are high. This situation can be

explained by the importance given to special education issues by teacher training programs in Germany. Indeed, Resch et al. (2023) argue that teacher training programs in Germany train competent teachers in special education, but teachers are not competent in tasks outside of education (e.g., in administrative and social support areas).

The region where the second highest number of published studies is China/Hong Kong. Studies in this region show that teachers' attitudes and perceptions of efficacy are more neutral. China has started to implement a more inclusive education system in recent years, and it faces significant challenges such as teacher training and resource shortages during this transformation process (Ji, 2024). In an experimental study conducted in Hong Kong by Forlin et al. (2014), a moderate change was observed in teachers' attitudes and their efficacy after receiving training on inclusive education. This shows that education is effective but does not create as much transformation as expected. These findings show that differences between countries are directly related not only to cultural context but also to education policies, teacher training processes, and available education resources.

Demographic characteristics of the participants were also identified as factors potentially influencing attitudes, and these were incorporated into the research questions. When the gender of the participants was considered, some studies found that gender was not an effective factor, while others found that the attitudes of female teachers were more positive. Only one study conducted in the United Kingdom found that the number of male teachers was associated with positive attitudes (Kourti et al., 2023). This result was because the researcher had previously found that male teachers had more positive attitudes because of a study conducted by Klassen and Chiu (2010). Regarding age, research rarely identified significant

differences. The attitude of older teachers toward inclusive education may be more negative, possibly because special education courses were not as widespread when older teachers received their university education, and awareness of inclusive education has only more recently become a prominent issue (Carvalho et al., 2024; Frumos, 2018; Saloviita, 2020; San Martin et al., 2021; Vaz et al., 2015). Teachers' education levels were not found to have a significant association with attitudes. Although it was found that anxiety toward inclusive education decreases as the education level increases, no significant result proving this was found in this systematic literature review (Kuyini et al., 2020; Kourti et al., 2023; Sharma and Sokal, 2015).

Teachers' specializations and grade level they taught were often analyzed together due to a lack of detailed data in existing studies. Findings indicated that special education teachers tend to hold the most positive attitudes. It was stated that the reason for this was that special education teachers could differ in terms of their abilities, support, and attitudes due to their training in inclusive education, and it was emphasized that the training of general education teachers should be improved (Shade and Stewart, 2001). When grade levels are considered, the most positive attitudes are seen to belong to primary school teachers. This is reported to be because the primary school curriculum is not academically challenging (de Oliveira et al., 2024; Parey, 2019). In addition, studies have focused mainly on in-service primary school teachers. This may be because students are usually diagnosed in primary school, or that early diagnosis has become more common in recent years. Another striking finding is the paucity of research on higher education educators. Only one study was identified in this area. This lack of research may indicate that students with SN face difficulties in continuing their education at the higher education level.

Mutanga (2018) and Cavaliere (n.d.) emphasized the difficulties these students face in accessing learning environments, following teaching techniques, transitioning to higher education, and adapting to social life. They also noted that universities are not proactive enough in addressing these challenges.

The factor of years of teaching experience has also been discussed in limited research articles, and different effects have been shown. Since many years of teaching experience also means older teachers, the age factor has been included here, and the negative changes in the attitudes of elderly teachers toward inclusive education due to low nutrition have been discussed (Chow, 2024). A cross-national study also discovered that years of experience were associated with different attitudes in two countries and explained this situation with the cultural context (Yada et al., 2018). It has been found that teachers' previous experiences with individuals with disabilities, especially whether they have a relative with a disability, can affect their attitudes toward inclusive education. Teachers who have had positive interactions exhibit more positive attitudes, which stands out as a significant factor in improving education policies and teachers' experiences (Alnahdi and Schwab, 2021; Sharma and Nuttal, 2016; Wittwer et al., 2024).

Inclusive education challenges teachers due to a lack of knowledge, resources, and inadequate training (Kamran et al., 2023). Comparisons of teachers' attitudes before and after training consistently revealed significant improvements, underscoring the critical role of professional development (Kunz et al., 2021). This situation shows that inadequate training negatively affects teacher attitudes. It can also be said that teachers who are knowledgeable about inclusive education and inclusive laws have more positive attitudes (Opoku et al., 2023). Support and resources are also elements that affect attitudes toward inclusive education. Teachers



do not believe that they receive enough support. This situation can also explain why social support and human and educational support affect teacher attitudes (Kamran et al., 2023; Opoku et al., 2022; Parey, 2019).

Articles have reported high levels of efficacy among teachers, which are positively associated with attitudes toward inclusive education (Alnahdi & Schwab, 2021; Carvalho et al., 2024; Vieira et al., 2024). The findings highlight that self-efficacy and teacher efficacy are critical in shaping teachers' confidence and effectiveness in implementing inclusive education. In particular, high self-efficacy has been found to predict positive attitudes, increase the use of differentiated practices in inclusive classrooms, and improve classroom management and implementation of inclusive teaching strategies (Pozas & Letzel-Alt, 2023; Röhm et al., 2022). The findings emphasize the critical role of teachers' efficacy (self-efficacy and teacher efficacy) in inclusive education. Teachers with high efficacy implement differentiated instruction and possess a broader range of strategies to include students with SN in the classroom environment (Pozas & Letzel-Alt, 2023; Röhm et al., 2022). These teachers also demonstrate a greater ability to manage the classroom environment and employ inclusive instructional practices (Frumos, 2018; Nagase et al., 2020). This may be because teachers who believe in their teaching capabilities are more likely to engage in inclusive teaching practices (Uusimäki et al., 2020). Training, knowledge, and prior experience emerged as key factors affecting effectiveness. Education, while helpful, was found to be more effective when combined with practical application (Forlin et al., 2014; Sharma and Nuttal, 2016). Inclusive education policies and knowledge of specific disabilities positively affected effectiveness, as did positive interactions with individuals with disabilities, such as teaching students with SN (Lu et al., 2020; Yada et al., 2018).

### **Implications for Practice**

In line with the findings obtained from the reviewed research articles, the following practice recommendations are presented. This research reveals that teachers' self-efficacy levels play a critical role in effectively implementing inclusive education. In this context, teacher attitudes and factors affecting efficacy should be examined in detail and improved.

First, the most widespread and perhaps most frequently mentioned training element affecting teachers' attitudes and efficacy should be addressed. In the 21st century, where the concepts of inclusive education, equality, and equity in education are frequently discussed, and the concept of inclusive education has also expanded, teacher education and special education courses need certain development. Teacher education should provide information about different types of disabilities and empower teachers about inclusive education laws and practices. The research results show that teachers with high attitudes and efficacy have received training or have knowledge about inclusive education. Teachers should be equipped with skills in preparing IEPs, inclusive classroom practices, and classroom management. Regular training programs for teachers who did not have access to sufficient information during university and to follow updated inclusive education practices can also provide a positive change.

Secondly, it was found that the attitudes and efficacy of teachers who had contact with individuals with disabilities were positive. This contact does not only define teachers who have a disabled individual among their family members but also defines teachers who have taught students with SN and shared a social environment with individuals with disabilities. This situation shows that teachers' attitudes can change, and they can gain self-confidence through the environment they share with

students with SN. For teachers to gain this positive perspective, they should be encouraged to do internships in inclusive classes and visit special education classes.

Third, teachers state that they do not receive sufficient support regarding inclusive education. Teachers' lack of confidence in inclusive education can lead to negative attitudes. Therefore, teachers should create professional networks and platforms where they can collaborate. Collaborations, where they can consult each other, give feedback, and share their experiences, can help them feel more supported. The administration also needs to support teachers more socially and financially. The lack of special education teachers and support staff in inclusive classrooms increases teachers' workload and causes negative attitudes. The administration needs to provide support for inclusive teaching strategies and technological tools that are tailored to students' individual needs, as well as the government.

### **Implications for Further Research**

This study was conducted to shed light on the research conducted on teachers' attitudes towards inclusive education and their effectiveness in the last decade. Inferences are needed for more detailed preparation of future studies. Limiting the time period to a narrower period, such as five years, can increase the depth of the research. In this way, the comparison of the data obtained from the selected sources can become more consistent and meaningful.

The coding book used in the study contains eleven categories (Appendix A). The eleventh category is reserved for the specific results of the study. Future studies can expand their scope when categorizing the study results. Adding more categories can allow the discovery of under-examined factors. Web of Science and Scopus databases were selected to collect data within the scope of this study. The most frequently used method among research articles is the quantitative method. Teachers'

attitudes and their efficacy can be addressed through more qualitative studies that will provide more detailed results about teachers' experiences. Although attitudes and effectiveness can be measured quantitatively, qualitative studies can help analyze related factors. In addition, in most of the studies, the sample was categorized according to grade level or subject area. The addition of studies that address both elements will strengthen the conclusions drawn about teachers' attitudes and effectiveness towards inclusive education.

### **Limitations**

The scope of this review is limited to articles retrieved from the Web of Science and Scopus databases. While these are two of the most comprehensive academic databases, relevant studies indexed in other databases may have been excluded. The time frame for inclusion spans from January 2014 to November 2024, with an additional search conducted in December 2024; however, relevant studies published after this period may not be represented. Another limitation is the variability in the countries represented in the reviewed articles, although the research includes diverse international contexts, representation is not evenly distributed across all countries. Additionally, the participant samples in the included studies lack homogeneity regarding teachers' specialization areas and the grade levels they teach, which may affect the generalizability of the findings. Finally, most of the studies included in this review employed quantitative methods, which may limit the depth of understanding regarding teachers' nuanced experiences and attitudes toward inclusive education.

## REFERENCES

- Abegglen, H., & Hessels, M. G. (2018). Measures of individual, collaborative and environmental characteristics predict Swiss school principals', teachers' and student teachers' attitudes towards inclusive education. *Psychoeducational Assessment, Intervention and Rehabilitation*, 1(1), 1-24.  
<https://doi.org/10.30436/PAIR18-01>
- Ackah-Jnr, F. R., & Danso, J. B. (2019). Examining the physical environment of Ghanaian inclusive schools: How accessible, suitable and appropriate is such environment for inclusive education? *International Journal of Inclusive Education*, 23(2), 188-208. <https://doi.org/10.1080/13603116.2018.1427808>
- ADA National Network. (2024, December). *What is the Americans with Disabilities Act (ADA)?* ADA National Network. <https://adata.org/learn-about-ada>
- Ainscow, M., Booth, T., Dyson, A., Farrell, P., Frankham, J., Gallannaugh, F., ... & Smith, R. (2006). *Improving schools, developing inclusion*. Routledge.
- Ainscow, M., & Miles, S. (2008). Making education for all inclusive: Where next? *Prospects*, 38(1), 15-34. <https://doi.org/10.1007/s11125-008-9055-0>
- Ainscow, M., & Sandill, A. (2010). Developing inclusive education systems: The role of organisational cultures and leadership. *International Journal of Inclusive Education*, 14(4), 401-416.  
<https://doi.org/10.1080/13603110802504903>
- Ainscow, M., Dyson, A., Goldrick, S., & West, M. (2011). The challenge of equity in education. M. Ainscow, A. Dyson, S. Goldrick, & M. West (Eds.), *Developing equitable education systems* (1st ed., pp. 1-16). Routledge.
- Akçamete, G. (1998). Özel eğitim [Special education]. In S. Eripek (Ed.), *Türkiye'de özel Eğitim* [Special education in Turkey] (pp. 197-201). Anadolu

Üniversitesi Yayınları.

Aktan, O. (2020). Determination of educational needs of teachers regarding the education of inclusive students with learning disability. *International Journal of Contemporary Educational Research*, 7(1), 149-164.

<https://doi.org/10.33200/ijcer.638362>

Anjana, B. S., & Prasad, A. K. (2021). *Scales of measurement in research* [Lecture notes]. Academia.edu.

[https://www.academia.edu/50907925/Scales\\_of\\_Measurement\\_in\\_Research](https://www.academia.edu/50907925/Scales_of_Measurement_in_Research)

Avramidis, E., Bayliss, P., & Burden, R. (2000). A survey into mainstream teachers' attitudes towards the inclusion of children with special educational needs in the ordinary school in one local education authority. *Educational Psychology*, 20(2), 191-211. <https://doi.org/10.1080/713663717>

Balcı, E. (2019). Disleksi hakkında öğretmen görüşleri ve karşılaştıkları sorunlar [Teacher opinions about dyslexia and the problems they face]. *Ege Eğitim Dergisi*, 20(1), 162-179. <https://doi.org/10.12984/egeefd.453922>

Bandura, A. (1978). Reflections on self-efficacy. *Advances in Behaviour Research and Therapy*, 1(4), 237-269. [https://doi.org/10.1016/0146-6402\(78\)90012-7](https://doi.org/10.1016/0146-6402(78)90012-7)

Bandura, A. (1989). Human agency in social cognitive theory. *American Psychologist*, 44(9), 1175-1184. <https://doi.org/10.1037/0003-066X.44.9.1175>

Bandura, A. (2006). Guide for constructing self-efficacy scales. In F. Pajares & T. C. Urdan (Eds.), *Adolescence and education: Self-efficacy beliefs of adolescents* (pp. 307-337). Information Age.

Banks, L. M., Kuper, H., & Polack, S. (2017). Poverty and disability in low-and middle- income countries: A systematic review. *PLOS One*, 13(9).

<https://doi.org/10.1371/journal.pone.0204881>

- Barni, D., Danioni, F., & Benevene, P. (2019). Teachers' self-efficacy: The role of personal values and motivations for teaching. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.01645>
- Battal, İ. (2007). *Sınıf öğretmenlerinin ve branş öğretmenlerinin kaynaştırma eğitime ilişkin yeterliliklerinin değerlendirilmesi* [Evaluation of the competencies of classroom teachers and branch teachers regarding inclusive education] [Doctoral dissertation, Kocatepe University]. YÖK Tez Merkezi.
- Bell, L. A. (2007). Theoretical foundations for social justice education. In M. Adams, L. A. Bell, & P. Griffin (Eds.), *Teaching for diversity and social justice* (2nd ed., pp. 1–14). Routledge/Taylor & Francis Group.
- Berman, P., McLaughlin, M., Bass, G., Pauly, E., & Zellman, G. (1977). *Federal programs supporting educational change, Vol III. Factors affecting implementation and continuation* (Report no. R-1589/7-HEW). Rand Corporation (ERIC Document Reproduction Service No. 140 432).
- Bethere, D., Pavitola, L., & Usca, S. (2021). Teachers' attitudes and its role in the implementation of sustainable inclusive education. *Turkish Journal of Computer and Mathematics Education*, 12(6), 1273-1281. <https://turcomat.org/index.php/turkbilmat/article/view/2467>
- Bhatia, R., & Singh, R. (2021). Inclusion: Historical perspectives, inclusive education and current status. *Elementary Education Online*, 20(1), 8587-8605. <https://ilkogretim-online.org/index.php/pub/article/view/491>
- Blankenship, C., & Lilly, S. (1981). *Mainstreaming students with learning and behavior problems*. Holt, Rinehart and Winston.
- Bokova, I. (2017). *Moving forward the 2030 agenda for sustainable development*. UNESCO. <https://unesdoc.unesco.org/ark:/48223/pf0000247785>

- Bondar, T. (2021). Historical overview of US inclusive education federal legislation. *Науковий вісник Ужгородського університету. Серія: Педагогіка. Соціальна робота*, 1(48), 39–43. <https://doi.org/10.24144/2524-0609.2021.48.39-43>
- Bong, M., & Hocevar, D. (2002). Measuring self-efficacy: Multitrait-multimethod comparison of scaling procedures. *Applied Measurement in Education*, 15(2), 143-171. [https://doi.org/10.1207/S15324818AME1502\\_02](https://doi.org/10.1207/S15324818AME1502_02)
- Borosan, B. (2017). Inclusive education: Lessons from history. *ASCD*, 74(7), 1-11. <https://ascd.org/el/articles/inclusive-education-lessons-from-history>
- Boyle, C., Scriven, B., Durning, S., & Downes, C. (2011). Facilitating the learning of all students: The professional positive of inclusive practice in Australian primary schools. *Support for Learning*, 26(2), 72-78. <https://doi.org/10.1111/j.1467-9604.2011.01480.x>
- Boyle, C., Anderson, J., & Allen, K. A. (2020). The importance of teacher attitudes to inclusive education. In C. Boyle, J. Anderson, A. Page, & S. Mavropoulou (Eds.), *Inclusive education: Global issues and controversies* (pp. 127-146). Brill. [https://doi.org/10.1163/9789004431171\\_008](https://doi.org/10.1163/9789004431171_008)
- Brown v. Board of Education, 347 U.S. 483 (1954, May 17). National Archives. <https://www.archives.gov/milestone-documents/brown-v-board-of-education>
- Cakiroglu, O., & Melekoglu, M. A. (2014). Statistical trends and developments within inclusive education in Turkey. *International Journal of Inclusive Education*, 18(8), 798-808. <https://doi.org/10.1080/13603116.2013.836573>
- Cambridge University Press. (n.d.). *Inclusion*. <https://dictionary.cambridge.org/dictionary/english/inclusion>
- Campbell, J., Gilmore, L., & Cuskelly, M. (2003). Changing student teachers'



- attitudes towards inclusion. *Journal of Intellectual and Developmental Disability*, 28, 369-379. <https://doi.org/10.1080/13668250310001616407>
- Cantrell, S. C., Almasi, J. F., Carter, J. C., & Rintamaa, M. (2013). Reading intervention in middle and high schools: Implementation fidelity, teacher efficacy, and student achievement. *Reading Psychology*, 34(1), 26-58. <https://doi.org/10.1080/02702711.2011.577695>
- Carroll, A., Forlin, C., & Jobling, A. (2003). The impact of teacher training in special education on the attitudes of Australian preservice general educators towards people with disabilities. *Teacher Education Quarterly*, 30, 65–79.
- Cavaliere, M. (n.d.). *How are students with special educational needs supported in accessing higher education?* [Unpublished Manuscript]. University of Warwick.
- Centers for Disease Control and Prevention. (n.d.). *Disability and health overview*. [https://www.cdc.gov/disability-and-health/about/?CDC\\_AAref\\_Val=https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html](https://www.cdc.gov/disability-and-health/about/?CDC_AAref_Val=https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html)
- Ch, H. A., Ahmad, S., & Batool, A. (2019). Relationship between teachers attitude and college students learning. *Research on Humanities and Social Science*, 9(3), 23-30. <https://doi.org/10.7176/RHSS/9-3-04>
- Charitaki, G., Kourti, I., Gregory, J. L., Ozturk, M., Ismail, Z., Alevriadou, A., ... & Demirel, C. (2022). Teachers' attitudes towards inclusive education: A cross-national exploration. *Trends in Psychology*, 32, 1-28. <https://doi.org/10.1007/s43076-022-00240-0>
- Chepel, T., Aubakirova, S., & Kulevtsova, T. (2016). The study of teachers' attitudes

- towards inclusive education practice: The case of Russia. *The New Educational Review*, 45, 235-246. <https://doi.org/10.15804/tner.2016.45.3.19>
- Civil Rights Litigation Clearinghouse. (1971, January 7). *Case: PARC v. Commonwealth of Pennsylvania*, 2:71-cv-00042. U.S. District Court for the Eastern District of Pennsylvania. <https://clearinghouse.net/case/11082/>
- Collier, D., & Mahoney, J. (1996). Insights and pitfalls: Selection bias in qualitative research. *World Politics*, 49(1), 56-91.  
<https://doi.org/10.1353/wp.1996.0023>[Opens in a new window]
- Cologon, K., Cupples, L., & Wyver, S. (2011). Effects of targeted reading instruction on phonological awareness and phonic decoding in children with Down syndrome. *American Journal on Intellectual and Developmental Disabilities*, 116(2), 111-129. <https://doi.org/10.1352/1944-7558-116.2.111>
- Congressional Research Service. (2024, August 20). *The Individuals with Disabilities Education Act (IDEA), Part B: Key statutory and regulatory provisions* (R41833). <https://crsreports.congress.gov/product/pdf/R/R41833>
- Connell, R. (2012). Just education. *Journal of Education Policy*, 27(5), 681-683.  
<https://doi.org/10.1080/02680939.2012.710022>
- Council of Europe. (2015, May 5). *Inclusive education vital for social cohesion in diverse societies*. <https://www.coe.int/el/web/commissioner/-/inclusive-education-vital-for-social-cohesion-in-diverse-societies>
- Damasco, J. P. (2013). *The relationship between teacher self-efficacy and attitude toward collaboration in an inclusion setting* (Publication No. 3553938) [Doctoral dissertation, Capella University]. ProQuest Dissertations Publishing.
- Damianidou, E., & Phtiaka, H. (2018). Implementing inclusion in disabling settings:

The role of teachers' attitudes and practices. *International Journal of Inclusive Education*, 22(10), 1078-1092.

<https://doi.org/10.1080/13603116.2017.1415381>

Dapudong, R. C. (2014). Teachers' knowledge and attitude towards inclusive education: Basis for an enhanced professional development program. *International Journal of Learning & Development*, 4(4), 1-24.

<https://doi.org/10.5296/ijld.v4i4.6116>

Das, A. K., Kuyini, A. B., & Desai, I. P. (2013). Inclusive education in India: Are the teachers prepared? *International Journal of Special Education*, 28(1), 27-36.

Debele, A. F. (2016). The study of accessibility of the physical environment of primary schools to implement inclusive education: The case of Addis Ababa, Ethiopia. *Imperial Journal of Interdisciplinary Research (IJIR)*, 2(1), 26-36.

Doğan, S. (2020). İsveç eğitim sistemi [Swedish education system]. *EYPO*, 1(1).

Duffin, L. C., French, B. F., & Patrick, H. (2012). The teachers' sense of efficacy scale: Confirming the factor structure with beginning pre-service teachers. *Teaching and Teacher Education*, 28(6), 827-834.

<https://doi.org/10.1016/j.tate.2012.03.004>

Dupuis, B., Barclay, J. W., Holmes, S. D., Platt, M., Shaha, S. H., & Lewis, V. K. (2006). Does inclusion help students: Perspectives from regular education and students with disabilities. *Journal of the American Academy of Special Education Professionals*, 74, 91.

Education of the Handicapped Amendments of 1986, S. 2294, 99th Cong. (1986).

<https://www.congress.gov/bill/99th-congress/senate-bill/2294>

Ekeh, P. U., & Oladayo, O. T. (2013). Academic achievement of regular and special

needs students in inclusive and non-inclusive classroom settings. *European Scientific Journal*, 9(8).

Ekşi, K. (2010). *Sınıf öğretmenleri ile özel eğitim öğretmenlerinin kaynaştırma eğitimi ile ilgili tutumlarının karşılaştırılması* [A comparison of classroom teachers' and special education teachers' attitudes towards inclusive education] (Publication No. 264090) [Master's thesis, Marmara University].  
YÖK Tez Merkezi.  
[https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=ecuMLwGIcv2TruHX-gA\\_Hw&no=CJ6PeuqkjZTdPf8uMIMDvQ](https://tez.yok.gov.tr/UlusalTezMerkezi/tezDetay.jsp?id=ecuMLwGIcv2TruHX-gA_Hw&no=CJ6PeuqkjZTdPf8uMIMDvQ)

Emam, M. M., & Mohamed, A. H. H. (2011). Preschool and primary school teachers' attitudes towards inclusive education in Egypt: The role of experience and self-efficacy. *Procedia-Social and Behavioral Sciences*, 29, 976-985. <https://doi.org/10.1016/j.sbspro.2011.11.331>

Engelbrecht, P., Nel, M., Nel, N., & Tlale, D. (2015). Enacting understanding of inclusion in complex contexts: Classroom practices of South African teachers. *South African Journal of Education*, 35(3).  
<https://doi.org/10.15700/saje.v35n3a1074>

Eriksson, L., & Granlund, M. (2004). Perceived participation. A comparison of students with disabilities and students without disabilities. *Scandinavian Journal of Disability Research*, 6(3), 206-224.  
<https://doi.org/10.1080/15017410409512653>

European Agency for Development in Special Needs Education. (2011). *Key principles for the development of inclusive education systems*.  
<https://www.european-agency.org/sites/default/files/Key-Principles-2011-EN.pdf>

- Ewing, D. L., Monsen, J. J., & Kielblock, S. (2018). Teachers' attitudes towards inclusive education: a critical review of published questionnaires. *Educational Psychology in Practice*, 34(2), 150-165.  
<https://doi.org/10.1080/02667363.2017.1417822>
- Falla, D., Alejandres Gómez, C., & Gil del Pino, C. (2022). Engagement in teacher training as a driver of inclusive attitudes. *Educación XXI*, 25(1), 251-271.  
<https://doi.org/10.5944/educXXI.30369>
- Fletcher, T., & Artiles, A. J. (2005). Inclusive education and equity in Latin America. In D. Mitchell (Ed.), *Contextualizing inclusive education* (1st ed., pp. 202-229). Routledge.
- Florian, L. (2014). What counts as evidence of inclusive education? *European Journal of Special Needs Education*, 29(3), 286-294.  
<https://doi.org/10.1080/08856257.2014.933551>
- Foreman, P. (2020). Historical and philosophical foundations of inclusive education. Oxford research encyclopedia of education.  
<https://doi.org/10.1093/acrefore/9780190264093.013.1197>
- Forlin, C., Loreman, T., Sharma, U., & Earle, C. (2009). Demographic differences in changing pre-service teachers' attitudes, sentiments and concerns about inclusive education. *International Journal of Inclusive Education*, 13(2), 195-209. <https://doi.org/10.1080/13603110701365356>
- Forlin, C., Earle, C., Loreman, T., & Sharma, U. (2011). The sentiments, attitudes, and concerns about inclusive education revised (SACIE-R) scale for measuring pre-service teachers' perceptions about inclusion. *Exceptionality Education International*, 21(3). <https://doi.org/10.5206/eei.v21i3.7682>
- Freire, P. (1970). The banking concept of education. *Pedagogy of the oppressed* (pp.

57-74). Herder and Herder.

- Gadagbui, B., Maier, A., Dourson, M., Parker, A., Willis, A., Christopher, J. P., ... & Roberts, S. M. (2010). Derived Reference Doses (RfDs) for the environmental degradates of the herbicides alachlor and acetochlor: Results of an independent expert panel deliberation. *Regulatory Toxicology and Pharmacology*, 57(2-3), 220-234. <https://doi.org/10.1016/j.yrtph.2010.02.010>
- Galaterou, J., & Antoniou, A. S. (2017). Teachers' attitudes towards inclusive education: The role of job stressors and demographic parameters. *International Journal of Special Education*, 32(4), 643-658.
- Gerschel, L. (2002). Equal opportunities and special educational needs: Equity and inclusion. *Promoting Inclusive Practice* (pp. 62-77). Routledge.
- Ghajarzadeh, M., Fitzgerald, K. C., Mowry, E. M., & Nourbakhsh, B. (2024). Association between demographics, socioeconomic, and disease-related factors and the perception of stigma in people with MS. *Multiple Sclerosis Journal*, 30(2), 238-246. <https://doi.org/10.1177/13524585231223057>
- Gough, D., Oliver, S., & Thomas, J. (2017). Introducing systematic reviews. In D. Gough, S. Oliver, & J. Thomas (Eds.), *An introduction to systematic reviews* (pp. 1–17). SAGE Publications.
- Göransson, K., & Nilholm, C. (2014). Conceptual diversities and empirical shortcomings—a critical analysis of research on inclusive education. *European Journal of Special Needs Education*, 29(3), 265-280. <https://doi.org/10.1080/08856257.2014.933545>
- Guskey, T. R. (1987). Context variables that affect measures of teacher efficacy. *The Journal of Educational Research*, 81(1), 41-47. <https://doi.org/10.1080/00220671.1987.10885795>

- Guskey, T. R. (1988). Teacher efficacy, self-concept, and attitudes toward the implementation of instructional innovation. *Teaching and Teacher Education*, 4(1), 63-69. [https://doi.org/10.1016/0742-051X\(88\)90025-X](https://doi.org/10.1016/0742-051X(88)90025-X)
- Gündüz, M. (2014). Osmanlı'dan Cumhuriyet'e engelli eğitimi üzerine gelişmeler [Developments in disability education from the Ottoman Empire to the Republic]. *Eğitime Bakış Dergisi*, 31(10), 1–14.
- Hammond, H., & Ingalls, L. (2003). Teachers' attitudes toward inclusion: Survey results from elementary school teachers in three southwestern rural school districts. *Rural Special Education Quarterly*, 22(2), 24-30. <https://doi.org/10.1177/875687050302200204>
- Halinen, I., & Järvinen, R. (2008). Towards inclusive education: The case of Finland. *Prospects*, 38(1), 77-97. <http://dx.doi.org/10.1007/s11125-008-9061-2>
- Hebert, E., Lee, A., & Williamson, L. (1998). Teachers' and teacher education students' sense of efficacy: Quantitative and qualitative comparisons. *Journal of Research and Development in Education*, 31, 214-225.
- Hehir, T., Grindal, T., Freeman, B., Lamoreau, R., Borquaye, Y., & Burke, S. (2016). *A summary of the evidence on inclusive education*. Abt Associates. <https://eric.ed.gov/?id=ED596134>
- Ho, I. T., & Hau, K. T. (2004). Australian and Chinese teacher efficacy: Similarities and differences in personal instruction, discipline, guidance efficacy and beliefs in external determinants. *Teaching and Teacher Education*, 20(3), 313-323. <https://doi.org/10.1016/j.tate.2003.09.009>
- Hornby, G. (2014). Inclusive special education: The need for a new theory. In

*Inclusive special education* (pp. 1-10). Springer. [https://doi.org/10.1007/978-1-4939-1483-8\\_1](https://doi.org/10.1007/978-1-4939-1483-8_1)

Howard, T. C. (2024). Equality vs. equity: Delineating definitions. In *Equity now: Justice, repair, and belonging in schools* (pp. 11–31). Corwin.

Hsieh, H. F., & Shannon, S. E. (2005). Three approaches to qualitative content analysis. *Qualitative Health Research*, 15(9), 1277-1288.  
<https://doi.org/10.1177/1049732305276687>

Hussain, M. S., Khan, S. A., & Bidar, M. C. (2022). Self-efficacy of teachers: A review of the literature. *Multi-Disciplinary Research Journal*, 10(1), 110-116.

Hutzler, Y., Meier, S., Reuker, S., & Zitomer, M. (2019). Attitudes and self-efficacy of physical education teachers toward inclusion of children with disabilities: A narrative review of international literature. *Physical Education and Sport Pedagogy*, 24(3), 249-266. <https://doi.org/10.1080/17408989.2019.1571183>

Ingen, S. V., Allsopp, D., Broughton, A. J., Simsek, O., Albritton, K., & White, A. (2018). How the commitment to inclusion has highlighted the need for greater collaboration in the United States. *Revista Brasileira de Educação Especial*, 24, 167-180. <https://doi.org/10.1590/S1413-65382418000400012>

Järvinen, R. (2007, June 14–16). *Current trends in inclusive education in Finland* [Conference presentation]. Regional Preparatory Workshop on Inclusive Education: Eastern and South Eastern Europe, Sinaia, Romania.

Ji, A. (2024). The study on the dilemma of teachers in inclusive education in China. *Transactions on Social Science, Education and Humanities Research*, 5, 340-346. <https://doi.org/10.62051/496d3g73>

Kargın, T. (2004). Kaynaştırma: Tanımı, gelişimi ve ilkeleri [Mainstreaming: Its definition, development, and principles]. *Ankara Üniversitesi Eğitim*



*Bilimleri Fakültesi Özel Eğitim Dergisi*, 5(02).

[https://doi.org/10.1501/Ozlegt\\_00000000080](https://doi.org/10.1501/Ozlegt_00000000080)

Kauffman, J. M., Anastasiou, D., Felder, M., Hornby, G., & Lopes, J. (2022). Recent debates in special and inclusive education. In *International encyclopedia of education* (4th ed., Vol. 9, pp. 269–283). Elsevier.

<https://doi.org/10.1016/B978-0-12-818630-5.12004-4>

Khan, K. S., Kunz, R., Kleijnen, J., & Antes, G., (2003). Five steps to conducting a systematic review. *Journal of the Royal Society of Medicine*, 96(3), 118-121.

<https://pmc.ncbi.nlm.nih.gov/articles/PMC539417/>

Kiel, E., Braun, A., Muckenthaler, M., Heimlich, U., & Weiss, S. (2020). Self-efficacy of teachers in inclusive classes. How do teachers with different self-efficacy beliefs differ in implementing inclusion? *European Journal of Special Needs Education*, 35(3), 333-349.

<https://doi.org/10.1080/08856257.2019.1683685>

Kisanji, J. (1999, March 24–25). *Historical and theoretical basis of inclusive education* [Keynote address]. Workshop on Inclusive Education in Namibia: The Challenge for Teacher Education, Rossing Foundation, Khomasdal, Windhoek, Namibia.

Kitchenham, B., & Charters, S. (2007). *Guidelines for performing systematic literature reviews in software engineering* (Report No. EBSE-2007-01). Keele University & Durham University.

Klassen, R. M., & Chiu, M. M. (2010). Effects on teachers' self-efficacy and job satisfaction: Teacher gender, years of experience, and job stress. *Journal of Educational Psychology*, 102(3), 741. Doi: 10.1037/a0019237

- Köşl     , B. (2019).   zel e itim tarih esi ve T rkiye’de   zel e itim [The history. of special education and special education in Turkey]. *Eri ilebilir   zmir*.  
<https://erisilebilirizmir.org/ozel-egitimin-tarihcesi-ve-turkiyede-ozel-egitim/>
- Kurniawati, F., Minnaert, A., Mangunsong, F., & Ahmed, W. (2012). Empirical study on primary school teachers’ attitudes towards inclusive education in Jakarta, Indonesia. *Procedia-Social and Behavioral Sciences*, 69, 1430-1436.  
<https://doi.org/10.1016/j.sbspro.2012.12.082>
- Kutay, V. (2018). Inclusive education in Turkey. *Studies in Educational Research and Development*, 2(2), 144-162.
- Ku   u, E., & G nday, R., (2020). Fransız i aret dilinde selamla ma ve tanı ma    retimi [Teaching greetings and introductions in French sign language]. *Pamukkale   niversitesi Sosyal Bilimler Enstit  s  Dergisi*, 1(39) 61-71.  
<https://doi.org/10.30794/pausbed.681863>
- Kuyini, A. B., & Desai, I. (2007). Principals’ and teachers’ attitudes and knowledge of inclusive education as predictors of effective teaching practices in Ghana. *Journal of Research in Special Educational Needs*, 7(2), 104-113.  
<https://doi.org/10.1111/j.1471-3802.2007.00086.x>
- Lame, G. (2019). Systematic literature reviews: An introduction. *Proceedings of the Design Society: International Conference on Engineering Design*, 1(1), 1633–1642. <https://doi.org/10.1017/dsi.2019.169>
- Lamport, M. A., Graves, L., & Ward, A. (2012). Special needs students in inclusive classrooms: The impact of social interaction on educational outcomes for learners with emotional and behavioral disabilities. *European Journal of Business and Social Sciences*, 1(5), 54-69.

- Lazarides, R., & Warner, L. M. (2020). Teacher self-efficacy. *Oxford research encyclopedia of education*, Article 1e22.  
[https://www.researchgate.net/publication/341820839\\_Teacher\\_Self-Efficacy](https://www.researchgate.net/publication/341820839_Teacher_Self-Efficacy)
- Leatherman, J. M., & Niemeyer, J. A. (2005). Teachers' attitudes toward inclusion: Factors influencing classroom practice. *Journal of Early Childhood Teacher Education*, 26(1), 23-36. <https://doi.org/10.1080/10901020590918979>
- Lewis, R. B., & Doorlag, H.D. (1999). *Teaching special students in general education classrooms*. Prentice Hall.
- Lindsay, G. (2003). Inclusive education: a critical perspective. *British Journal of Special Education*, 30(1), 3-12. <https://doi.org/10.1111/1467-8527.00275>
- Lindsay, G. (2007). Educational psychology and the effectiveness of inclusive education/mainstreaming. *British Journal of Educational Psychology*, 77(1), 1-24. <https://doi.org/10.1348/000709906X156881>
- Loreman, T., Earle, C., Sharma, U., & Forlin, C. (2007). The development of an instrument for measuring pre-service teachers' sentiments, attitudes, and concerns about inclusive education. *International Journal of Special Education*, 22(1), 150-159.
- Lu, M., Peng, T., Pang, F., Liu, L., & Tan, Y. (2024). Social dominance orientation hinders pre-service teachers' inclusive teaching intentions: The chain-mediating effect of intergroup anxiety and inclusive attitudes. *International Journal of Developmental Disabilities*, 1-13.  
<https://doi.org/10.1080/20473869.2024.2353453>
- MacFarlane, K. & Woolfson, L., M. (2013). Teacher attitudes and behavior toward the inclusion of children with social, emotional and behavioral difficulties in

mainstream schools: An application of the theory of planned behavior.

*Teaching and Teacher Education*, 29, 46-52.

<https://doi.org/10.1016/j.tate.2012.08.006>

Maddux, J. E., & Gosselin, J. T. (2012). Self-efficacy. In M. R. Leary & J. P. Tangney (Eds.), *Handbook of self and identity* (2nd ed., pp. 401-418). The Guilford Press.

Maddux, J. E. (2016). Self-efficacy. In S. Trusz & P. Babel (Eds.), *Interpersonal and intrapersonal expectancies* (pp. 41–46). Routledge/Taylor & Francis Group. <https://doi.org/10.4324/9781315652535-5>

Malinen, O. P., & Savolainen, H. (2012). The directions of Finnish teacher education in the era of the revised act on basic education. In C. Forlin (Ed.), *Future directions for inclusive teacher education* (1<sup>st</sup> ed., pp. 52-60). Routledge.

Martin, N. K., & Sass, D. A. (2010). Construct validation of the behavior and instructional management scale. *Teaching and Teacher Education*, 26(5), 1124-1135. <https://doi.org/10.1016/j.tate.2009.12.001>

Mayring, P. A. (2022). Qualitative content analysis. In J. A. Bell, R. N. Jones, & M. L. Anderson (Eds.), *International encyclopedia of education* (4th ed., pp. 314–322). Elsevier. <https://doi.org/10.1016/B978-0-12-818630-5.11031-0>

Meidrina, T., Mawaddah, S. N., Siahaan, F. M. M., & Widyasari, P. (2017). The relationship between teacher efficacy and attitude towards inclusive education in private elementary school: A study based on teaching experiences. *Journal of Advances in Humanities and Social Sciences*, 3(3), 124-134.

Mezzanotte, C. (2022). *The social and economic rationale of inclusive education: An overview of the outcomes in education for diverse groups of students* (OECD

Education Working Papers No. 263). OECD Publishing.

<https://doi.org/10.1787/bff7a85d-en>

Miles, M. B., & Huberman, A. M. (1994). Focusing and bounding the collection of data: Further design issues. *Qualitative data analysis: An expanded sourcebook* (pp. 56-74). SAGE Publications.

Ministry of National Education, Directorate General of Special Education, Guidance, and Counseling Services. (2008). *General letter on education through mainstreaming* [Kaynaştırma yoluyla eğitim uygulaması genelgesi]. Ministry of National Education.

Ministry of National Education, Directorate General of Special Education, Guidance, and Counseling Services. (2015). *General letter on the opening of support education rooms* [Destek eğitim odası açılması genelgesi]. Ministry of National Education.

Molina Roldán, S., Marauri, J., Aubert, A., & Flecha, R. (2021). How inclusive interactive learning environments benefit students without special needs. *Frontiers in Psychology, 12*, 661427.

<https://doi.org/10.3389/fpsyg.2021.661427>

Monsen, J. J., Ewing, D. L., & Kwoka, M. (2014). Teachers' attitudes towards inclusion, perceived adequacy of support and classroom learning environment. *Learning Environments Research, 17*, 113–126.

<https://doi.org/10.1007/s10984-013-9144-8>

Mouchritsa, M., Romero, A., Garay, U., & Kazanopoulos, S. (2022). Teachers' attitudes towards inclusive education at Greek secondary education schools. *Education Sciences, 12*(6), 404.

<https://doi.org/10.3390/educsci12060404>

- Mu, G. M., Hu, Y., & Wang, Y. (2017). Building resilience of students with disabilities in China: The role of inclusive education teachers. *Teaching and Teacher Education*, 67, 125-134.  
<https://doi.org/10.1016/j.tate.2017.06.004>
- Muntaner Guasp, J. J. (2000). La igualdad de oportunidades en la escuela de la diversidad. [Equal opportunities in the school of diversity.] *Profesorado, revista de currículum y formación del profesorado*, 4(1).
- Mutanga, O. (2018). Inclusion of students with disabilities in South African higher education. *International Journal of Disability, Development and Education*, 65(2), 229-242. <https://doi.org/10.1080/1034912X.2017.1368460>
- No Child Left Behind Act, Pub. L. No. 107-110, 115 Stat. 1425 (2001).  
<https://www.congress.gov/bill/107th-congress/house-bill/1>
- Norwich, B. (1994). The relationship between attitudes to the integration of children with special educational needs and wider socio-political views; a US-English comparison. *European Journal of Special Needs Education*, 9(1), 91-106.  
<https://doi.org/10.1080/0885625940090108>
- Odarich, I. N., Sofronov, R. P., & Shichiyakh, R. A. (2021). Principles of inclusive education and its importance in modern society. *Revista on line de Política e Gestão Educacional*, 853-862. <https://doi.org/10.22633/rpge.v25iesp.2.15271>
- Oh-Young, C., & Filler, J. (2015). A meta-analysis of the effects of placement on academic and social skill outcome measures of students with disabilities. *Research in Developmental Disabilities*, 47, 80-92.  
<https://doi.org/10.1016/j.ridd.2015.08.014>
- Okoli, C., & Schabram, K. (2015). A guide to conducting a systematic literature review of information systems research. *Sprouts*, 10-26.

Organisation for Economic Co-operation and Development. (n.d.). *Education equity*.

<https://www.oecd.org/en/topics/education-equity.html>

Osgood, R. L. (2005). *The history of inclusion in the United States*. Gallaudet University Press.

Parey, B. (2021). Exploring positive and negative teachers' attitudes towards inclusion of children with disabilities in schools in Trinidad: Implications for teacher education. *International Journal of Inclusive Education*.

<https://doi.org/10.1080/13603116.2021.1902004>

Parveen, A., & Qounsar, T. (2018). Inclusive education and the challenges. *National Journal of Multidisciplinary Research and Development*, 3(2), 64-68.

Paul, H. J. (2019). Equity vs equality: Facilitating equity in the classroom.

*International Journal of Research and Scientific Innovation*, 6(11), 216-219.

[https://www.researchgate.net/publication/337919224\\_Equity\\_Vs\\_Equality\\_Facilitating\\_Equity\\_in\\_the\\_Classroom](https://www.researchgate.net/publication/337919224_Equity_Vs_Equality_Facilitating_Equity_in_the_Classroom)

Pınar, E. S., (2006), Dünya'da ve Türkiye'de erken çocukluk özel eğitiminin gelişimi ve erken çocukluk özel eğitim uygulamaları [Development of early childhood special education in the world and in Turkey and early childhood special education practices]. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 7(2), 71-83. [https://doi.org/10.1501/Ozlegt\\_00000000098](https://doi.org/10.1501/Ozlegt_00000000098)

Pijl, S. J., & Meijer, C. J. W. (1997). Factors in inclusion: A framework. In S. J. Pijl, C. J. W. Meijer, & S. Hegarty (Eds.), *Inclusive education: A global agenda* (pp. 8-13). Routledge.

Pijl, S. J. (2010). Preparing teachers for inclusive education: some reflections from the Netherlands. *Journal of Research in Special Educational Needs*, 10(1), 197-201. <https://doi.org/10.1111/j.1471-3802.2010.01165.x>

- Pinto, C., Baines, E., & Bakopoulou, I. (2019). The peer relations of pupils with special educational needs in mainstream primary schools: The importance of meaningful contact and interaction with peers. *British Journal of Educational Psychology*, 89(4), 818-837. <https://doi.org/10.1111/bjep.12262>
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33-40.
- Pit-ten Cate, I. M., Markova, M., Krischler, M., & Krolak-Schwerdt, S. (2018). Promoting inclusive education: The role of teachers' competence and attitudes. *Insights into Learning Disabilities*, 15(1), 49-63.
- Poedubicky, V. A., Truene, L., & Sperlazza, J. (2006). Promoting social and emotional intelligence for students with special needs. In J. Pellitteri (Ed.), *Emotionally intelligent school counseling* (pp. 123-140). 1st ed. Springer.
- Pov, S., Kawai, N., & Nov, S. (2024). Preparing pre-service teachers to work in Cambodian inclusive classrooms: Knowledge, experience, and attitudes toward inclusion. *Teaching and Teacher Education*, 137, 104402. <https://doi.org/10.1016/j.tate.2023.104402>
- Pradhan, K. C., & Naik, M. S. (2024). Inclusive education: A foundation for equality and empowerment at the elementary stage. *International Journal of Multidisciplinary Research in Arts, Science and Technology*, 2(2), 1-8. <https://doi.org/10.61778/ijmrast.v2i2.36>
- Qian, W., & Rong, Y. (2023). A review study of inclusive education. *Lecture Notes in Education Psychology and Public Media*, 16, 188-193. Doi: 10.54254/2753-7048/16/20231143
- Rakap, S., & Kaczmarek, L. (2010). Teachers' attitudes towards inclusion in Turkey.



*European Journal of Special Needs Education*, 25(1), 59-75.

<https://doi.org/10.1080/08856250903450848>

Reganick, K. (1995). *Social and academic issues of inclusive education* (ED392176).

ERIC. <https://files.eric.ed.gov/fulltext/ED392176.pdf>

Rentzi, A. (2024). Social justice in education: creating an inclusive culture at schools through critical multicultural theory. *European Journal of Education and Pedagogy*, 5(1), 94–97. <https://doi.org/10.24018/ejedu.2024.5.1.802>

Resch, K., Hartmüller, E., Walczuch, S., & Marschall, S. (2023). Preparing German pre-service teachers in special needs education for school development—Can we do otherwise? *Journal of Research in Special Educational Needs*, 23(4), 290-299. <https://doi.org/10.1111/1471-3802.12600>

Reschly, D. J. (1996). Identification and assessment of students with disabilities. *The Future of Children*, 40-53. <https://doi.org/10.2307/1602493>

Rohner, R. P., Khaleque, A., & Cournoyer, D. E. (2012). Introduction to parental acceptance-rejection theory, methods, evidence, and implications. *Journal of Family Theory & Review*, 2(1), 73-87.

Rouse, M. (2008). Developing inclusive practice: A role for teachers and teacher education? *Education in the North*, 16(1), 1-20.

Rouse, M. (2010). Reforming initial teacher education: A necessary but not sufficient condition for developing inclusive practice. C. Forlin (Ed.), *Teacher education for inclusion* (1<sup>st</sup> ed., pp. 73-81). Routledge.

Rowe, N., Wilkin, A. & Wilson, R. (2012). *Mapping of seminal reports on good teaching (NFER research programme: Developing the education workforce)*. NFER.

Ryan, T.G. (2009). An analysis of pre-service teachers' perceptions of inclusion.

*Journal of Research in Special Education Needs*. 9(3), 180-187.

<https://doi.org/10.1111/j.1471-3802.2009.01134.x>

Sadikovna, R. K., & Azimjon o'g, O. J. X. (2023). The importance of inclusive education in solving the problem of equality in the education of children with special needs. *Open Access Repository*, 4(3), 757-764.

Sağlamtuñç, T. (2010). Görme engelliler ve kütüphanecilik hizmetleri [Visually impaired and library services]. *Bilgi Dünyası*, 11(1), 178-191.

<https://doi.org/10.15612/BD.2010.263>

Salman, U. A. (2020). *Beni kabul edecek bir okul bulabilecek miyiz?* [Will we be able to find a school that will accept me?] Eğitim reformu girişimi.

<https://www.egitimreformugirisimi.org/uzun-hikaye-beni-kabul-edecek-bir-okul-bulabilecek-miyiz/>

Saloviita, T. (2022). Teachers' changing attitudes and preferences around inclusive education. *International Journal of Disability, Development and Education*, 69(6), 1841-1858.

<https://doi.org/10.1080/1034912X.2020.1828569>

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 Needs Education*, 27(1), 51-68.

<https://doi.org/10.1080/08856257.2011.613603>

Schunk, D. H. (1982). Progress self-monitoring: Effects on children's self-efficacy and achievement. *The Journal of Experimental Education*, 51(2), 89-93.

<https://doi.org/10.1080/00220973.1982.11011845>

- Sharma, U., & Desai, I. (2002). Measuring concerns about integrated education. *Asia-Pacific Journal on Disability*, 5(1), 2-14.
- Sharma, U. (2011). Teaching in inclusive classrooms: Changing heart, head, and hands. *Bangladesh Education Journal*, 10(2), 7-18.
- Sharma, U., Loreman, T., & Forlin, C. (2012). Measuring teacher efficacy to implement inclusive practices. *Journal of research in special educational needs*, 12(1), 12-21. <https://doi.org/10.1111/j.1471-3802.2011.01200.x>
- Sharma, U., & George, S. (2016). Understanding teacher self-efficacy to teach in inclusive classrooms. Gravis, S., & Pendergast, D. (Eds.). *Asia-pacific perspectives on teacher self-efficacy* (pp. 37-51). SensePublishers. [https://link.springer.com/chapter/10.1007/978-94-6300-521-0\\_3](https://link.springer.com/chapter/10.1007/978-94-6300-521-0_3)
- Sharma, U., & Jacobs, D. K. (2016). Predicting in-service educators' intentions to teach in inclusive classrooms in India and Australia. *Teaching and Teacher Education*, 55, 13-23. <https://doi.org/10.1016/j.tate.2015.12.004>
- Shaheen, N., Shaheen, A., Ramadan, A., Hefnawy, M. T., Ramadan, A., Ibrahim, I. A., ... & Flouty, O. (2023). Appraising systematic reviews: A comprehensive guide to ensuring validity and reliability. *Frontiers in Research Metrics and Analytics*, 8. <https://doi.org/10.3389/frma.2023.1268045>
- Shell, D. F., Colvin, C., & Bruning, R. H. (1995). Self-efficacy, attribution, and outcome expectancy mechanisms in reading and writing achievement: Grade-level and achievement-level differences. *Journal of educational psychology*, 87(3), 386-398. <https://doi.org/10.1037/0022-0663.87.3.386>
- Sigmon, S. (1983). The history and future of educational segregation. *Journal of Special Educators*, 19(4), 1-13.
- Singh, S., Kumar, S., & Singh, R. K. (2020). A study of attitude of teachers towards

- inclusive education. *Shanlax International Journal of Education*, 9(1), 189-197. <https://doi.org/10.34293/education.v9i1.3511>
- Sucuoğlu, B., & Kargın, T. (2010). *İlköğretimde kaynaştırma uygulamaları*. [Mainstreaming practices in primary education]. Kök Yayınevi.
- Swedish National Agency for Education [SNAE]. (2011). *Curriculum for the preschool* (Lpfö 18).  
[http://www.ibe.unesco.org/curricula/sweden/sw\\_ppfw\\_2010\\_eng.pdf](http://www.ibe.unesco.org/curricula/sweden/sw_ppfw_2010_eng.pdf)
- Sokal, L., & Sharma, U. (2014) Canadian In-service teachers' concerns, efficacy, and attitudes about inclusive teaching. *Exceptionality Education International*, 23, 59-71. <https://doi.org/10.5206/eei.v23i1.7704>
- Stavrianos, A., & Pratt-Adams, S. (2023). Experience as the sought outcome: From foundational skills to inclusive and holistic learning. *Open Journal of Social Sciences*, 11(10), 19-35. <https://doi.org/10.4236/jss.2023.1110002>
- Stevens, S. S. (1946). On the theory of scales of measurement. *Science*, 103(2684), 677-680. DOI: [10.1126/science.103.2684.677](https://doi.org/10.1126/science.103.2684.677)
- Tamayo, M., Rebolledo, J., & Besoain-Saldaña, A. (2017). Monitoring inclusive education in Chile: Differences between urban and rural areas. *International Journal of Educational Development*, 53, 110-116.  
<https://doi.org/10.1016/j.ijedudev.2017.01.002>
- Thangam, A., Geetha, C., & Senthilkumar, T. (2024). A study on attitude of teachers towards inclusive education. *Machine Intelligence Research*, 18(1), 956-967.
- Thaver, T. & Lim, L. (2014). Attitudes of pre-service mainstream teachers in Singapore towards people with disabilities and inclusive education. *International Journal of Inclusive Education*, 18(10), 1038-1052.  
<https://doi.org/10.1080/13603116.2012.693399>

- Tompa, E., Mofidi, A., Jetha, A., Lahey, P., & Buettgen, A. (2022). Development and implementation of a framework for estimating the economic benefits of an accessible and inclusive society. *Equality, Diversity and Inclusion: An International Journal*, 41(3), 318-339. <https://doi.org/10.1108/EDI-07-2020-0186>
- Tschannen-Moran, M., Hoy, A. W., & Hoy, W. K. (1998). Teacher efficacy: Its meaning and measure. *Review of educational research*, 68(2), 202-248. <https://doi.org/10.3102/00346543068002202>
- Tschannen-Moran, M., & Hoy, A. W. (2001). Teacher efficacy: Capturing an elusive construct. *Teaching and Teacher Education*, 17(7), 783-805. [https://doi.org/10.1016/S0742-051X\(01\)00036-1](https://doi.org/10.1016/S0742-051X(01)00036-1)
- Tschannen-Moran, M., & Barr, M. (2004). Fostering student learning: The relationship of collective teacher efficacy and student achievement. *Leadership and policy in schools*, 3(3), 189-209. <https://doi.org/10.1080/15700760490503706>
- Tuncay, A. A., & Kizilaslan, A. (2022). Pre-service teachers' sentiments, attitudes and concerns about inclusive education in Turkey. *European Journal of Special Needs Education*, 37(2), 309-322. <https://doi.org/10.1080/08856257.2021.1873524>
- Uçar, A.,(2009), Özel eğitime muhtaç göçmen işçi çocuklarının sorunu [The problem of migrant workers' children in need of special education]. *Die Gaste* 1(7), 1-3.
- Uditsky, B. (1993). From integration to inclusion: The Canadian experience. In R. Slee (Ed.), *Is there a desk with my name on it? The politics of integration* (pp. 79-92). Routledge.

United Nations. (n.d.). *Universal declaration of human rights, Article 26.*

<https://www.un.org/en/about-us/universal-declaration-of-human-rights#:~:text=Article%2026,on%20the%20basis%20of%20merit>

United Nations. (1975, December 9). *Declaration on the rights of disabled persons,*

General Assembly resolution 3447. <https://www.ohchr.org/en/instruments-mechanisms/instruments/declaration-rights-disabled-persons>

United Nations. (1989, November 20). *Convention on the rights of the child,*

General Assembly resolution 44/25. <https://www.ohchr.org/en/instruments-mechanisms/instruments/convention-rights-child>

United Nations Educational, Scientific and Cultural Organizations. (1994, June 7-

10). *The Salamanca statement and framework for action on special needs education.* World Conference on Special Needs Education Access and Quality, Salamanca, Spain.

United Nations Educational, Scientific and Cultural Organizations. (2000, April 26-

28). *The Dakar framework for action: Education for all:*

*Meeting our collective commitments* (ED.2000/WS/27). UNESCO.

<https://unesdoc.unesco.org/ark:/48223/pf0000121147>

United Nations Educational, Scientific and Cultural Organizations. (2001). *The open*

*file on inclusive education.* UNESCO.

<https://unesdoc.unesco.org/ark:/48223/pf0000125237>

United Nations Educational, Scientific and Cultural Organizations. (2009). *Policy*

*guidelines on inclusion in education.*

<https://unesdoc.unesco.org/ark:/48223/pf0000177849>

U.S. Department of Education. (2024, October 7). *Individuals with disabilities*

education act (IDEA). <https://www.ed.gov/laws-and-policy/individuals-disabilities/idea>

U.S. Department of Education. (2024, November 15). *The elementary and secondary education act (ESEA)*. U.S. Department of Education. <https://www.ed.gov/laws-and-policy/laws-preschool-grade-12-education/esea>

U.S. Government Accountability Office. (1980, September 10). *The Education for all handicapped children act of 1975*. U.S. Government Accountability Office. <https://www.gao.gov/products/113316>

Uysal, A. (2003). Kaynaştırma uygulaması yapan öğretmenlerin kaynaştırmaya ilişkin görüşleri [Teachers' opinions on mainstreaming]. In A. Konrot (Ed.), *Özel eğitimden yansımalar 13 – Ulusal Özel Eğitim Kongresi* (pp. 121–135). Kök Yayınevi.

Vanderpuye, I., Obosu, G. K., & Nishimuko, M. (2020). Sustainability of inclusive education in Ghana: Teachers' attitude, perception of resources needed and perception of possible impact on pupils. *International Journal of Inclusive Education*, 24(14), 1527-1539.

Vansteenkiste, D., Swart, E., Van Avermaet, P., & Struyf, E. (2020). Professional development for inclusive education. In *Oxford research encyclopedia of education*. Oxford University Press. <https://doi.org/10.1093/acrefore/9780190264093.013.1013>

Van Steen, T., & Wilson, C. (2020). Individual and cultural factors in teachers' attitudes towards inclusion: A meta-analysis. *Teaching and Teacher Education*, 95, 103127. <https://doi.org/10.1016/j.tate.2020.103127>

Veisi, S., Azizifar, A., Gowhary, H., & Jamalinesari, A. (2015). The relationship between Iranian EFL teachers' empowerment and teachers' self-

efficacy. *Procedia-Social and Behavioral Sciences*, 185, 437-445.

<https://doi.org/10.1016/j.sbspro.2015.03.362>

Villa, R. A., & Thousand, J. S. (2005). The rationales for creating and maintaining inclusive schools. In R. A. Villa & J. S. Thousand (Eds.), *Creating an inclusive school* (pp. 123-145). ASCD.

Vogiatzi, C. A., Charitaki, G., Kourkoutas, E., & Forlin, C. (2022). The teacher efficacy for inclusive practices (TEIP) scale: Further evidence for construct validity in Greek-speaking teachers. *Prospects*, 52(3), 387-403.

<https://doi.org/10.1007/s11125-022-09605-w>

Warnock, H. M. (1978). *Report of the committee of enquiry into the education of handicapped children and young people* (Cmnd. 7212). Education in the UK.

<https://www.education-uk.org/documents/warnock/warnock1978.html>

Weicker, L. P., Jr. (1986, April 14). S.2294, 99th Congress. Education of the handicapped amendments of 1986. <https://www.congress.gov/bill/99th-congress/senate-bill/2294>

Wheatley, K. F. (2005). The case for reconceptualizing teacher efficacy research. *Teaching and Teacher Education*, 21(7), 747-766.

<https://doi.org/10.1016/j.tate.2005.05.009>

Wong, M. E., Poon, K. K., Kaur, S., & Ng, Z. J. (2015). Parental perspectives and challenges in inclusive education in Singapore. *Asia Pacific Journal of Education*, 35(1), 85-97. <https://doi.org/10.1080/02188791.2013.878309>

Woodcock, S., & Woolfson, L. M. (2019). Are leaders leading the way with inclusion? Teachers' perceptions of systemic support and barriers towards inclusion. *International Journal of Educational Research*, 93, 232-242.

<https://doi.org/10.1016/j.ijer.2018.11.004>



- Woodcock, S., Sharma, U., Subban, P., & Hitches, E. (2022). Teacher self-efficacy and inclusive education practices: Rethinking teachers' engagement with inclusive practices. *Teaching and Teacher Education*, 117, 103802. <https://doi.org/10.1016/j.tate.2022.103802>
- Yada, A., & Savolainen, H. (2017). Japanese in-service teachers' attitudes toward inclusive education and self-efficacy for inclusive practices. *Teaching and Teacher Education*, 64(1), 222-229. <https://doi.org/10.1016/j.tate.2017.02.005>
- Yada, A., Leskinen, M., Savolainen, H., & Schwab, S. (2022). Meta-analysis of the relationship between teachers' self-efficacy and attitudes toward inclusive education. *Teaching and Teacher Education*, 109, 103521. <https://doi.org/10.1016/j.tate.2021.103521>
- Zhang, X., Admiraal, W., & Saab, N. (2024). Factors affecting teachers' self-efficacy in teaching in primary education. *Teachers and Teaching*, 1-13. <https://doi.org/10.1080/13540602.2024.2389384>
- Zhang, Y., & Wildemuth, B. M. (2009). Qualitative analysis of content. In B. M. Wildemuth (Ed.), *Applications of social research methods to questions in information and library science* (2nd ed., pp. 135-147). Libraries Unlimited.
- Zins, J. E., & Elias, M. J. (2007). Social and emotional learning: Promoting the development of all students. *Journal of Educational and Psychological consultation*, 17(2-3), 233-255. <https://doi.org/10.1080/10474410701413152>
- Ziyaev, A. (2022). Basic concepts and principles of inclusive education. *International Journal of Advance Scientific Research*, 2(04), 51-55. <https://doi.org/10.37547/ijasr-02-04-09>
- Zulkosky, K. (2009). Self-efficacy: a concept analysis. *Nursing Forum*, 44(2), 93-

102. Blackwell Publishing Inc. <https://doi.org/10.1111/j.1744-6198.2009.00132.x>



## Appendix A

### List of Articles

- Ahmmed, M., Sharma, U., & Deppeler, J. (2014). Variables affecting teachers' intentions to include students with disabilities in regular primary schools in Bangladesh. *Disability & Society*, 29(2), 317-331.  
<https://doi.org/10.1080/09687599.2013.796878>
- Alharbi, H., & Iqtadar, S. (2024). 'I never feel like I am prepared enough': Teachers' self-efficacy, challenges and experiences teaching students with disabilities. *Journal of Research in Special Educational Needs*, 24(3), 758–770.  
<https://doi.org/10.1111/1471-3802.12666>
- Alhumaid, M. M., Khoo, S., & Bastos, T. (2020). Self-efficacy of pre-service physical education teachers toward inclusion in Saudi Arabia. *Sustainability*, 12(9). <https://doi.org/10.3390/su12093898>
- Alhumaid, M. M. (2023). Enhancing graduate students' attitudes and self-efficacy towards inclusively teaching children with disabilities using an inclusivity-based physical activity program. *International Journal of Human Movement and Sports Sciences*, 11(5), 1158-1167.  
[https://www.hrpub.org/journals/article\\_info.php?aid=13524](https://www.hrpub.org/journals/article_info.php?aid=13524)
- Alnahdi, G. H., & Schwab, S. (2021). Special education major or attitudes to predict teachers' self-efficacy for teaching in inclusive education. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.680909>
- Alsarawi, A., & Sukonthaman, R. (2023). Preservice teachers' attitudes, knowledge, and self-efficacy of inclusive teaching practices. *International Journal of Disability, Development and Education*, 70(5), 705-721.  
<https://doi.org/10.1080/1034912X.2021.1922992>

- Antala, B., Průžek, M., & Popluhárová, M. (2022). Self-efficacy and attitudes of physical education teachers towards inclusion of pupils with disabilities. *Sustainability*, 14(20), Article 13292.  
<https://doi.org/10.3390/su142013292>
- Arias-Pastor, M., Van Vaerenbergh, S., Fernández-Solana, J., & González-Bernal, J. J. (2023). Perceptions and preparedness of secondary teacher trainees to foster inclusive schools for all. *Frontiers in Education*, 8, Article 1242623.  
<https://doi.org/10.3389/fpsyg.2023.1280352>
- Arias-Pastor, M., Van Vaerenbergh, S., González-Bernal, J. J., & González-Santos, J. (2024). Analysis of teacher self-efficacy and its impact on sustainable well-being at work. *Behavioral Sciences*, 14(7), Article 563.  
<https://doi.org/10.3390/bs14070563>
- Avramidis, E., Toulia, A., Tsihouridis, C., & Strogilos, V. (2019). Teachers' attitudes towards inclusion and their self-efficacy for inclusive practices as predictors of willingness to implement peer tutoring. *Journal of Research in Special Educational Needs*, 19, 49-59. <https://doi.org/10.1111/1471-3802.12477>
- Azizi, T. (2022). Teachers' attitudes towards inclusive education in Kosovo and the role of efficacy. *Pedagogika*, 145(1), 81-93.  
<https://doi.org/10.15823/p.2022.145.5>
- Braksiek, M. (2022). Pre-service physical education teachers' attitude toward, and self-efficacy in, inclusive physical education: Measurement invariance and influence factors. *Teaching and Teacher Education*, 109, Article 103547.  
<https://doi.org/10.1016/j.tate.2021.103547>

- Carew, M. T., Deluca, M., Groce, N., & Kett, M. (2019). The impact of an inclusive education intervention on teacher preparedness to educate children with disabilities within the Lakes Region of Kenya. *International Journal of Inclusive Education*, 23(3), 229-244. [10.1080/13603116.2018.1430181](https://doi.org/10.1080/13603116.2018.1430181)
- Carvalho, M., Simó-Pinatella, D., Azevedo, H., & Adam Alcocer, A. L. (2024). Inclusive education in Portugal: Exploring sentiments, concerns and attitudes of teachers. *Journal of Research in Special Educational Needs*, 24(3), 729–741. <https://doi.org/10.1111/1471-3802.12663>
- Chitiyo, J., Simone, K., Muresherwa, E., Chitiyo, G., & Chitiyo, M. (2024). Inclusive education in Zimbabwe: An assessment of teachers' self-efficacy and attitudes in Masvingo. *Journal of Research in Special Educational Needs*. <https://doi.org/10.1111/1471-3802.12716>
- Chow, W. S. E. (2023). Examining factors influencing teachers' intentions in implementing inclusive practices in Hong Kong classrooms. *Journal of Research in Special Educational Needs*, 24(2), 376–388. <https://doi.org/10.1111/1471-3802.12632>
- Chow, W. S. E. (2024). Exploring in-service teachers' attitudes, teacher self-efficacy, and influential factors for implementing inclusive practices in Hong Kong classroom. *Educational Psychology*, 436-454. <https://doi.org/10.1080/01443410.2024.2361280>
- D'Agostino, S. R., & Horton, E. (2024). Examining inclusive preschool teachers' perspectives and practices: A mixed-methods investigation. *Journal of Early Intervention*, 46(4), 487-508. <https://doi.org/10.1177/10538151231190627>
- de Oliveira, R. B., Bidarra, G., Rebelo, P. V., & Alferes, V. (2024). Attitudes and perceptions of teacher self-efficacy and collaborative practices in the context

- of inclusive education for students with special educational needs in Portuguese schools. *European Journal of Special Needs Education*, 39(5), 659-674. <https://doi.org/10.1080/08856257.2023.2275407>
- Desombre, C., Lamotte, M., & Jury, M. (2019). French teachers' general attitude toward inclusion: The indirect effect of teacher efficacy. *Educational Psychology*, 39(1), 38-50. <https://doi.org/10.1080/01443410.2018.1472219>
- Didaskalou, E., Stavroussi, P., & Green, J. G. (2024). Does primary school teachers' perceived efficacy in classroom management/discipline predict their perceptions of inclusive education? *Pastoral Care in Education*, 42(4), 430-447. <https://doi.org/10.1080/02643944.2023.2287215>
- Elwakil, F. R. (2024). The effect of social support on attitudes towards inclusive education and self-efficacy among pre-service special education teachers in Egypt. *Journal of Research in Special Educational Needs*, 24(3), 612–626. <https://doi.org/10.1111/1471-3802.12658>
- Emmers, E., Baeyens, D., & Petry, K. (2020). Attitudes and self-efficacy of teachers towards inclusion in higher education. *European Journal of Special Needs Education*, 35(2), 139-153. <https://doi.org/10.1080/08856257.2019.1628337>
- Engelbrecht, P., & Savolainen, H. (2018). A mixed-methods approach to developing an understanding of teachers' attitudes and their enactment of inclusive education. *European Journal of Special Needs Education*, 33(5), 660-676. <https://doi.org/10.1080/08856257.2017.1410327>
- Forlin, C., Loreman, T., & Sharma, U. (2014). A system-wide professional learning approach about inclusion for teachers in Hong Kong. *Asia-Pacific Journal of Teacher Education*, 42(3), 247-260. <https://doi.org/10.1080/1359866X.2014.906564>

- Frumos, L. (2018). Attitudes and self-efficacy of Romanian primary school teachers towards including children with special educational needs in regular classrooms. *Revista Românească Pentru Educație Multidimensională*, 10(4), 118-135. <https://doi.org/10.18662/rrem/77>
- Fu, W., He, X., Sun, Y., Wang, C., Wang, J., & Dong, Y. (2023). The relationship between school climate and general teachers' attitude toward inclusion in China: The mediation effect of teachers' efficacy. *International Journal of Developmental Disabilities*, 69(4), 602-610.  
[10.1080/20473869.2021.1985919](https://doi.org/10.1080/20473869.2021.1985919)
- Gentile, A., Giustino, V., Rodriguez-Ferrán, O., La Marca, A., Compagno, G., Bianco, A., ... & Alesi, M. (2023). Inclusive physical activity games at school: The role of teachers' attitude toward inclusion. *Frontiers in Psychology*, 14, Article 1158082.  
<https://doi.org/10.3389/fpsyg.2023.1158082>
- Gigante, J., & Gilmore, L. (2020). Australian preservice teachers' attitudes and perceived efficacy for teaching in inclusive classrooms. *International Journal of Inclusive Education*, 24(14), 1568-1577.  
<https://doi.org/10.1080/13603116.2018.1545875>
- Gilor, O., & Katz, M. (2019). Pre-service teachers' willingness to engage in inclusive teaching: An explanatory model. *Journal of International Special Needs Education*, 22(2), 77-89. <https://eric.ed.gov/?id=EJ1234928>
- Grimminger-Seidensticker, E., & Seyda, M. (2022). Enhancing attitudes and self-efficacy toward inclusive teaching in physical education pre-service teachers: Results of a quasi-experimental study in physical education teacher

education. *Frontiers in Education*, 7, Article 909255.

<https://doi.org/10.3389/feduc.2022.909255>

Gülsün, İ., Malinen, O., Yada, A., & Savolainen, H. (2023). Exploring the role of teachers' attitudes towards inclusive education, their self-efficacy, and collective efficacy in behaviour management in teacher behaviour. *Teaching and Teacher Education*, 132, Article 104228.

<https://doi.org/10.1016/j.tate.2023.104228>

Hellmich, F., Löper, M. F., & Görel, G. (2019). The role of primary school teachers' attitudes and self-efficacy beliefs for everyday practices in inclusive classrooms—a study on the verification of the 'Theory of Planned Behaviour'. *Journal of Research in Special Educational Needs*, 19, 36-48.

<https://doi.org/10.1111/1471-3802.12476>

Huang, F. (2023). The relationship between trait mindfulness and inclusive education attitudes of primary school teachers: A multiple mediating model. *Frontiers in Psychology*, 14, Article 1280352.

<https://doi.org/10.3389/fpsyg.2023.1280352>

Ismailos, L., Gallagher, T., Bennett, S., & Li, X. (2022). Pre-service and in-service teachers' attitudes and self-efficacy beliefs with regards to inclusive education. *International Journal of Inclusive Education*, 26(2), 175-191.

<https://doi.org/10.1080/13603116.2019.1642402>

Kamran, M., Siddiqui, S., & Adil, M. S. (2023). Breaking barriers: The influence of teachers' attitudes on inclusive education for students with mild learning disabilities (MLDs). *Education Sciences*, 13(6), Article 606.

<https://doi.org/10.3390/educsci13060606>



- Kazmi, A. B., Kamran, M., & Siddiqui, S. (2023). The effect of teacher's attitudes in supporting inclusive education by catering to diverse learners. *Frontiers in Education*, 8, Article 1083963. <https://doi.org/10.3389/feduc.2023.1083963>
- Kisbu-Sakarya, Y., & Doenyas, C. (2021). Can school teachers' willingness to teach ASD-inclusion classes be increased via special education training? Uncovering mediating mechanisms. *Research in Developmental Disabilities*, 113, Article 103941. <https://doi.org/10.1016/j.ridd.2021.103941>
- Koliki, D., & Zabeli, N. (2022). Variables affecting the attitudes of teachers' towards inclusive education in Kosovo. *Cogent Education*, 9(1), Article 2143629. <https://doi.org/10.1080/2331186X.2022.2143629>
- Koliki, D., Koliki, K., & Zabeli, N. (2023). Pre-service teachers' attitudes and the factors influencing their formation regarding inclusive education in Kosovo. *British Journal of Special Education*, 50(3), 379–393. <https://doi.org/10.1111/1467-8578.12463>
- Kourti, I., Charitaki, G., & Kypriotaki, M. (2023). The critical role of personal and professional characteristics on teachers' efficacy and attitudes towards inclusion: A comparative study between Greece and the UK. *Trends in Psychology*, 1-24. <https://doi.org/10.1007/s43076-023-00322-7>
- Kunz, A., Luder, R., & Kassis, W. (2021). Beliefs and attitudes toward inclusion of student teachers and their contact with people with disabilities. *Frontiers in Education*, 6, Article 650236. <https://doi.org/10.3389/feduc.2021.650236>
- Kuyini, A. B., Desai, I. (Ishwar), & Sharma, U. (2020). Teachers' self-efficacy beliefs, attitudes and concerns about implementing inclusive education in Ghana. *International Journal of Inclusive Education*, 24(14), 1509–1526. <https://doi.org/10.1080/13603116.2018.1544298>

- Latorre-Coscolluela, C., Liesa-Orus, M., & Rivera-Torres, P. (2022). Opportunities to learn for children with autism spectrum disorders: Effects of the perceived efficacy of teacher practices and drivers of inclusion. *Focus on Autism and Other Developmental Disabilities*, 37(2), 108-119.  
<https://doi.org/10.1177/10883576211073692>
- Lautenbach, F., Korte, J., Möhwald, A., Heyder, A., & Grimminger-Seidensticker, E. (2020). A 14-week intervention study on changing preservice teachers' psychological perspectives on inclusion: Explicit and implicit attitudes, self-efficacy, and stress perception toward inclusion. *Frontiers in Education*, 5, Article 478053. <https://doi.org/10.3389/feduc.2020.00007>
- Li, K. M., & Cheung, R. Y. (2021). Pre-service teachers' self-efficacy in implementing inclusive education in Hong Kong: The roles of attitudes, sentiments, and concerns. *International Journal of Disability, Development and Education*, 68(2), 259-269.  
<https://doi.org/10.1080/1034912X.2019.1678743>
- Lu, M., Zou, Y., Chen, X., Chen, J., He, W., & Pang, F. (2020). Knowledge, attitude and professional self-efficacy of Chinese mainstream primary school teachers regarding children with autism spectrum disorder. *Research in Autism Spectrum Disorders*, 72, Article 101513.  
<https://doi.org/10.1016/j.rasd.2020.101513>
- Martin, C. S., Calvo, R., Sharma, U., Ramírez, C., & Muñoz, Y. (2024). Attitudes, self-efficacy, and intention to teach in inclusive classrooms of in-service teachers in Chile: Validating scales. *Revista Brasileira de Educação Especial*, 30, Article e0101. <https://doi.org/10.1590/1980-54702024v30e0101>

Massé, L., Nadeau, M. F., Gaudreau, N., Nadeau, S., Gauthier, C., & Lessard, A.

(2022). Pre-service teachers' attitudes toward students with behavioral difficulties: Associations with individual and education program characteristics. *Frontiers in Education*, 7, Article 846223.

<https://doi.org/10.3389/feduc.2022.846223>

Mentel, H., Förster, N., Forthmann, B., & Souvignier, E. (2024). Predictors of teachers' behavioral intentions in inclusive education and their changes over time: A competitive test of hypotheses. *Teaching and Teacher Education*, 141, Article 104509.

<https://doi.org/10.1016/j.tate.2024.104509>

Miesera, S., & Gebhardt, M. (2018). Inclusive vocational schools in Canada and Germany. A comparison of vocational pre-service teachers' attitudes, self-efficacy and experiences towards inclusive education. *European Journal of Special Needs Education*, 33(5), 707-722.

<https://doi.org/10.1080/08856257.2017.1421599>

Miesera, S., DeVries, J. M., Jungjohann, J., & Gebhardt, M. (2019). Correlation between attitudes, concerns, self-efficacy and teaching intentions in inclusive education evidence from German pre-service teachers using international scales. *Journal of Research in Special Educational Needs*, 19(2), 103-114.

<https://doi.org/10.1111/1471-3802.12432>

Mudhar, G., Ertesvåg, S. K., & Pakarinen, E. (2024). Patterns of teachers' self-efficacy and attitudes toward inclusive education associated with teacher emotional support, collective teacher efficacy, and collegial collaboration. *European Journal of Special Needs Education*, 39(3), 446-462.

<https://doi.org/10.1080/08856257.2023.2233297>

- Nagase, K., Tsunoda, K., & Fujita, K. (2020). The effect of teachers' attitudes and teacher efficacy for inclusive education on emotional distress in primary school teachers in Japan. *Frontiers in Education*, 5, Article 570988. <https://doi.org/10.3389/feduc.2020.570988>
- Nagase, K., Tsunoda, K., & Fujita, K. (2021). Effects of teacher efficacy and attitudes toward inclusive education for children with disabilities on the emotional distress of middle school teachers in Japan. *Cogent Education*, 8(1), Article 2007572. <https://doi.org/10.1080/2331186X.2021.2007572>
- Nührenbörger, M., Wember, F. B., Wollenweber, T., Frischmeier, D., Korten, L., & Selter, C. (2024). Development of teachers' attitudes and self-efficacy expectations for inclusive mathematics instruction: effects of online and blended learning programs. *Journal of Mathematics Teacher Education*, 1-27. <https://doi.org/10.1007/s10857-024-09624-8>
- Opoku, M., Cuskelly, M., Rayner, C., & Pedersen, S. (2022). The impact of teacher attributes on intentions to practice inclusive education in secondary schools in Ghana. *International Journal of Disability, Development and Education*, 69(2), 382-398. <https://doi.org/10.1080/1034912X.2020.1731434>
- Opoku, M. P., Nketsia, W., Amponteng, M., Mprah, W. K., & Kumi, E. O. (2023). Attitudes and self-efficacy of preservice teachers toward teaching gifted and talented students. *Journal for the Education of the Gifted*, 46(2), 167-193. <https://doi.org/10.1177/01623532231162673>
- Parey, B. (2019). Understanding teachers' attitudes towards the inclusion of children with disabilities in inclusive schools using mixed methods: The case of

Trinidad. *Teaching and Teacher Education*, 83, 199-211.

<https://doi.org/10.1016/j.tate.2019.04.007>

Park, E., McKay, L., Carrington, S., & Harper-Hill, K. (2024). Using hope theory to understand changes from professional learning in inclusive education. *British Educational Research Journal*. <https://doi.org/10.1002/berj.4076>

Pozas, M., & Letzel-Alt, V. (2023). Teacher collaboration, inclusive education and differentiated instruction: A matter of exchange, co-construction, or synchronization? *Cogent Education*, 10(2), Article 2240941.

<https://doi.org/10.1080/2331186X.2023.2240941>

Raguindin, P. Z. J., Ping, L. Y., Duereh, F., & Lising, R. L. S. (2020). Inclusive practices of in-service teachers: A quantitative exploration of a Southeast Asian Context. *European Journal of Educational Research*, 9(2), 787-797.

<https://doi.org/10.12973/eu-jer.9.2.787>

Röhm, A., Schnöring, A., & Hastall, M. R. (2018). Impact of single-case pupil descriptions on student teacher attitudes towards inclusive education. *Learning Disabilities: A Contemporary Journal*, 16(1), 37-58.

Röhm, A., Grengel, M., Möhring, M., Zensen-Möhring, J., Nellen, C., & Hastall, M. R. (2022). Applying the mixed-blessings model and labeling theory to stigma in inclusive education: An experimental study of student and trainee teachers' perceptions of pupils with ADHD, DLD, and intellectual disability. *Frontiers in psychology*, 13, Article 910702. <https://doi.org/10.3389/fpsyg.2022.910702>

Saade, S., Bean, Y. F., Gillespie-Lynch, K., Poirier, N., & Harrison, A. J. (2024). Can participation in an online ASD training enhance attitudes toward inclusion, teaching self-efficacy and ASD knowledge among preservice

educators in diverse cultural contexts? *International Journal of Inclusive Education*, 28(2), 161-176. <https://doi.org/10.1080/13603116.2021.1931716>

Sahli Lozano, C., Sharma, U., & Wüthrich, S. (2024). A comparison of Australian and Swiss secondary school teachers' attitudes, concerns, self-efficacy, and intentions to teach in inclusive classrooms: Does the context matter? *International Journal of Inclusive Education*, 28(7), 1205-1223. <https://doi.org/10.1080/13603116.2021.1988158>

Sahli Lozano, C., Wüthrich, S., Setz, F., Romano, A., & Petruccioli, R. (2024). A look across the borders: Swiss vs. Italian future special education teachers' perspectives on inclusive education. *Journal of Research in Special Educational Needs*. <https://doi.org/10.1111/1471-3802.12734>

Saloviita, T. (2020). Teacher attitudes towards the inclusion of students with support needs. *Journal of Research in Special Educational Needs*, 20(1), 64-73. <https://doi.org/10.1111/1471-3802.12466>

Saloviita, T., & Almulla, A. A. (2024). Self-efficacy among classroom, subject and special education teachers. *Journal of Ecohumanism*, 3(4). <https://doi.org/10.62754/joe.v3i4.3695>

San Martin, C., Ramirez, C., Calvo, R., Muñoz-Martínez, Y., & Sharma, U. (2021). Chilean teachers' attitudes towards inclusive education, intention, and self-efficacy to implement inclusive practices. *Sustainability*, 13(4), Article 2300. <https://doi.org/10.3390/su13042300>

Savolainen, H., Malinen, O. P., & Schwab, S. (2022). Teacher efficacy predicts teachers' attitudes towards inclusion—a longitudinal cross-lagged analysis. *International Journal of Inclusive Education*, 26(9), 958-972. <https://doi.org/10.1080/13603116.2020.1752826>

Scanlon, G., Radeva, S., Pitsia, V., Maguire, C., & Nikolaeva, S. (2022). Attitudes of teachers in Bulgarian kindergartens towards inclusive education. *Teaching and Teacher Education*, 112, Article 103650.

<https://doi.org/10.1016/j.tate.2022.103650>

Schwab, S., & H Alnahdi, G. (2020). Do they practise what they preach? Factors associated with teachers' use of inclusive teaching practices among in-service teachers. *Journal of Research in Special Educational Needs*, 20(4), 321-330.

<https://doi.org/10.1111/1471-3802.12492>

Schwab, S., & Alnahdi, G. H. (2024). Does the same teacher's attitude fit all students? Uncovering student-specific variance of teachers' attitudes towards all of their students. *International Journal of Inclusive Education*, 28(14), 3502-3517. [10.1080/13603116.2023.2221235](https://doi.org/10.1080/13603116.2023.2221235)

Sharma, U., Shaukat, S., & Furlonger, B. (2015a). Attitudes and self-efficacy of pre-service teachers towards inclusion in Pakistan. *Journal of Research in Special Educational Needs*, 15(2), 97-105. <https://doi.org/10.1111/1471-3802.12071>

Sharma, U., Simi, J., & Forlin, C. (2015b). Preparedness of pre-service teachers for inclusive education in the Solomon Islands. *Australian Journal of Teacher Education*, 40(5), 103-116. <https://eric.ed.gov/?id=EJ1060341>

Sharma, U., & Sokal, L. (2015). The impact of a teacher education course on pre-service teachers' beliefs about inclusion: an international comparison. *Journal of Research in Special Educational Needs*, 15(4), 276-284.

<https://doi.org/10.1111/1471-3802.12043>

Sharma, U., & Nuttal, A. (2016). The impact of training on pre-service teacher attitudes, concerns, and efficacy towards inclusion. *Asia-Pacific Journal of*

*Teacher Education*, 44(2), 142-155.

<https://doi.org/10.1080/1359866X.2015.1081672>

Sharma, U., Aiello, P., Pace, E. M., Round, P., & Subban, P. (2018). In-service teachers' attitudes, concerns, efficacy and intentions to teach in inclusive classrooms: An international comparison of Australian and Italian teachers. *European Journal of Special Needs Education*, 33(3), 437-446.

<https://doi.org/10.1080/08856257.2017.1361139>

Soeharto, S., Subasi Singh, S., & Afriyanti, F. (2024). Associations between attitudes toward inclusive education and teaching for creativity for Indonesian pre-service teachers. *Thinking Skills and Creativity*, 51, Article 101469.

<https://doi.org/10.1016/j.tsc.2024.101469>

Sokal, L., & Sharma, U. (2017). Do I really need a course to learn to teach students with disabilities? I've been doing it for years. *Canadian Journal of Education/Revue Canadienne De L'éducation*, 40(4), 739-760.

<https://www.jstor.org/stable/90018386>

Song, J. (2016). Inclusive education in Japan and Korea—Japanese and Korean teachers' self-efficacy and attitudes towards inclusive education. *Journal of Research in Special Educational Needs*, 16, 643-648.

<https://doi.org/10.1111/1471-3802.12324>

Tournaki, N., & Samuels, W. E. (2016). Do graduate teacher education programs change teachers' attitudes toward inclusion and efficacy beliefs? *Action in Teacher Education*, 38(4), 384-398.

<https://doi.org/10.1080/01626620.2016.1226200>

Uusimaki, L., Garvis, S., & Sharma, U. (2020). Swedish final year early childhood preservice teachers' attitudes, concerns and intentions towards



inclusion. *Journal of International Special Needs Education*, 23(1), 23-32.

<https://doi.org/10.9782/JISNE-D-17-00034>

Vaz, S., Wilson, N., Falkmer, M., Sim, A., Scott, M., Cordier, R., & Falkmer, T.

(2015). Factors associated with primary school teachers' attitudes towards the inclusion of students with disabilities. *PLOS One*, 10(8), Article e0137002.

<https://doi.org/10.1371/journal.pone.0137002>

Vieira, L., Rohmer, O., Jury, M., Desombre, C., Delaval, M., Doignon-Camus, N.,

Chaillou, A., Goulet, C., & Popa-Roch, M. (2024). Attitudes and self-efficacy as buffers against burnout in inclusive settings: Impact of a training

programme in pre-service teachers. *Teaching and Teacher Education*, 144,

Article 104569. <https://doi.org/10.1016/j.tate.2024.104569>

Vogiatzi, XA., Charitaki, G. & Kourkoutas, E. (2023). Assessing psychometric

properties of the sentiments, attitudes and concerns about inclusive education scale in a Greek-speaking sample of in-service teachers. *Tech Know*

*Learn* 28, 207–223. <https://doi.org/10.1007/s10758-021-09554-x>

Wächter, T., Gorges, J., Apresjan, S., & Lütje-Klose, B. (2024). How can inclusion

succeed for all? Children's well-being in inclusive schools and the role of teachers' inclusion-related attitudes and self-efficacy. *Teaching and Teacher*

*Education*, 139, Article 104411. <https://doi.org/10.1016/j.tate.2023.104411>

Weber, K. E., & Greiner, F. (2019). Development of pre-service teachers' self-

efficacy beliefs and attitudes towards inclusive education through first

teaching experiences. *Journal of Research in Special Educational Needs*, 19, 73-84. <https://doi.org/10.1111/1471-3802.12479>

Werner, S., Gumpel, T. P., Koller, J., Wiesenthal, V., & Weintraub, N. (2021). Can

self-efficacy mediate between knowledge of policy, school support and

teacher attitudes towards inclusive education? *PLOS One*, 16(9), Article e0257657. <https://doi.org/10.1371/journal.pone.0262625>

Wilson, C., Woolfson, L. M., & Durkin, K. (2022). The impact of explicit and implicit teacher beliefs on reports of inclusive teaching practices in Scotland. *International Journal of Inclusive Education*, 26(4), 378-396. <https://doi.org/10.1080/13603116.2019.1658813>

Wittwer, J., Hans, S., & Voss, T. (2024). Inclusion of autistic students in schools: Knowledge, self-efficacy, and attitude of teachers in Germany. *Autism*, 28(8), 2040-2052. <https://doi.org/10.1177/13623613231220210>

Xie, Z., Li, M., & Wang, Y. (2024). A multilevel analysis of attitudes towards inclusive education among teachers of students with developmental disabilities in China: School factors matter. *Journal of Autism and Developmental Disorders*, 1-13. <https://doi.org/10.1007/s10803-024-06660-4>

Yada, A., & Alnahdi, G. H. (2024). A comparative study on Saudi and Japanese in-service teachers' attitudes towards inclusive education and self-efficacy in inclusive practices. *Educational Studies*, 50(4), 539-557. <https://doi.org/10.1080/03055698.2021.1969646>

Yada, A., Tolvanen, A., & Savolainen, H. (2018). Teachers' attitudes and self-efficacy on implementing inclusive education in Japan and Finland: A comparative study using multi-group structural equation modelling. *Teaching and Teacher Education*, 75, 343-355. <https://doi.org/10.1016/j.tate.2018.07.011>

## Code Book

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