Promoting Inclusive Education: The Role of Teachers' Competence and Attitudes

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Teachers are expected to accommodate an increasingly heterogeneous student population. However, teachers often feel ill prepared and, hence, may be apprehensive toward the inclusion of students with special education needs (SEN) in regular classrooms. This paper concerns factors associated with the successful implementation of inclusive education. More specifically, it considers teacher characteristics that may facilitate -or hinder- the inclusion of students with SEN. The paper first discusses teacher competencies concerning the accommodation of students with SEN in regular classrooms, not only as a determinant of effective inclusive practice, but also in relation to teacher attitudes toward inclusive education. Second, we investigate to what extent teacher' attitudes, both toward students with SEN and inclusive education, may affect teaching behaviors and (positive) action toward students with SEN. The paper further discusses (training) methods that could be applied to increase teacher competence and foster positive attitudes in an attempt to strive to a more equitable educational system.

Keywords: **Inclusive Education, Attitudes, Competence, Teacher Training**

Introduction

Since the early 1990's, there has been a worldwide drive toward the inclusion of all students in regular schools. For example, the Salamanca Statement and Framework for Action on Special Needs Education (UNESCO, 1994) urged governments to design educational systems that can respond to the diverse needs of a heterogeneous student population as to enable all students to attend regular classes. Furthermore, the Education for All movement (UNESCO, 2000) aimed to overcome inequalities in educational systems by 2015, whereas the UN convention on the Rights of Persons with Disabilities (2006) recognized the rights of all students to be included and receive the individual support they may require. Although equitability of education systems may now be promi-

1 Deceased 12 December 2017

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nent on political agendas, the successful implementation of inclusive practice is largely dependent on teachers. As teachers will have the main responsibility for implementing inclusion policy, teachers' characteristics are critical in ensuring the success of inclusive practice (Norwich, 1994; Shade & Stewart, 2001; World Health Organization, 2011).

Many factors may impact the extent to which inclusive practice can be successfully implemented. However, the European Agency for Development in Special Needs Education explicitly specifies that teachers need to have the appropriate skills, knowledge and understanding, but also certain values and attitudes to work effectively in inclusive settings (Borg, Hunter, Sigurjonsdottir, & D´Alessio, 2011), whereby teachers´ competence is related to their attitudes toward students with special educational needs (SEN) (Avramidis & Norwich, 2002; de Boer, Pijl, & Minnaert, 2011). Heterogeneous student populations pose significant challenges to teachers and teachers feel generally insufficiently prepared and hence less willing to accommodate students with SEN (Blanton, Pugach, & Florian, 2011). However, the alternative of excluding students with SEN may not only lead to reduced learning opportunities but also stigmatization and social exclusion (Gabel, Curcic, Powell, Khader, & Albee, 2009). Indeed, research has demonstrated clear benefits for both students with and without SEN to be educated in inclusive classes. For example, students with SEN taught in inclusive classes made better or comparable academic progress compared to students in segregated classrooms (Buysse & Bailey, 1993; Odom, Buysse, & Soukakou, 2012) and also fared better in regard to acceptance, interaction and peer relationships (Buysse, Goldman, & Skinner, 2002).

It is therefore important to understand the factors associated with teachers' ability and willingness to accommodate students with differing needs in their classrooms as to facilitate inclusive practice. Research has demonstrated that both teachers´ competence and attitudes have an impact on (inclusive) teaching, however few have studied the relationship between teachers´ competence and attitudes. To gain a better understanding of the relationship between teacher characteristics and inclusive practice, this paper will first provide an overview of the research on teachers' competence and attitudes, and their combined effect on the inclusion of students with SEN. Secondly, the paper considers which changes could be made to build teachers´ perceived competence and promote positive attitudes. Such changes could affect teachers' willingness toward and belief in a more equitable educational system. Finally, the paper will discuss how teacher training can profit from these insights.

Teacher Characteristics: Competence and Attitudes

Teachers´ Competence

Competencies are the skills and knowledge that enable a teacher to be successful. The importance of teachers´ competence for inclusive practice is evident in its effect on student learning. In general, research has indicated that specific cognitive abilities and personality characteristics determine to what extent teachers can be effective in delivering high quality instruction, which, in turn, fosters student learning. For example, Stronge and colleagues (2007) found that teachers that were rated higher in the domains of instruction, student assessment, classroom management, and personal qualities, were most effective in terms of student outcomes. In general, teachers´ pedagogical content knowledge positively affects student outcomes (Kunter et al., 2013) and hence, it is not surprising that measures of teacher preparation and certification, as indicators of teachers´ knowledge and skills, were the strongest predictors of student achievement in reading and mathematics (Darling-Hammond, 2000). The multidimensional model of teacher competence (Kunter et al., 2011, 2013) reflects that teacher competence not only includes cognitive aspects, such as skills and knowledge, but also beliefs related to learning, motivation and self-regulation. That is, teachers´ professional competence involves skills and knowledge as well as beliefs and motivation, which, in interplay, will determine the extent to which a teacher can successfully master the situation (Klieme, Hartig, & Rauch, 2008). Similarly, Bandura (1990) suggests that competence not only involves knowledge and skills, but also the ability to use these successfully in different situations and under diverse circumstances, many of which contain unpredictable and stressful elements. To this extent, research has indicated that teachers´ beliefs in their ability to positively affect student learning has been associated to better student achievement (Tschannen-Moran, Hoy, & Hoy, 1998).

Therefore, such beliefs are considered an integral part of teachers´ competence and are similar to what Bandura (2001) describes as efficacy. According to Bandura (1986, 2001), efficacy not only reflects perceived ability but also affects an individual's motivation. More specifically, when an individual´s feelings of task proficiency increase, (s)he will be more motivated to perform such tasks (Bandura, 1986). Teachers efficacy and motivation have been associated with more positive teaching behavior (Tschannen-Moran et al., 1998), which in turn affects student engagement (Allinder, 1994) and learning outcomes (Hines & Kritsonis, 2010). Competence and efficacy are also important when considering inclusive education. More specifically, authors have concluded that more teaching qualifications increase student achievement (for a review see Darling-Hammond & Youngs, 2002), whereas Billingsley (2004) stated that lower levels of perceived competence may reduce the educational opportunities for students

with SEN and hence negatively impact students' educational pathways and outcomes. Such insights are supported by empirical research. For example, American teachers´ efficacy beliefs were positively related to their perceived success in teaching students with SEN in regular classes (Brownell & Pajares, 1999). In the US and Europe, it is generally stated that effective inclusive practice requires teachers to be able to deliver specialized instructional practices geared toward the individualized needs of all students (Odom et al., 2012; Watkins, 2012). More specifically, rather than providing general curriculum teaching, inclusive practice requires individualized educational planning to facilitate learning and achievement of all students. Furthermore, teachers should value learner diversity and be willing to support all learners (European Agency for Development in Special Needs Education, 2011). To this extent, differentiation and learner involvement have been identified as key elements of teacher competence (Perrenoud, 2008). In addition, inclusive practice often requires inter- and intra-professional collaboration, which is as yet not systematically reflected in teacher training or school practice (Lütje-Klose & Urban, 2014).

Although teachers are increasingly confronted with the reality of more heterogeneous classrooms and may generally support inclusive practice, research shows that they often feel unprepared and concerned about their ability to cope and are hence less willing to accommodate students with SEN (Blanton et al., 2011; Lambe & Bones, 2006). For example, results of an American study indicated that general education teachers felt less competent and less efficacious in supporting students with SEN than special education teachers (Buell, Hallam, Gamel-Mccormick, & Scheer, 1999). The lack of specific knowledge and training on inclusive methodologies discouraged general education teachers from supporting children with SEN in their classroom in Sri Lanka (Hettiarachchi & Das, 2014). Although the perceived level of specific knowledge and skills needed to support students with SEN may distinguish general teachers from special education teachers, competence level alone may not be sufficient to facilitate inclusive practice. For example, most special education teachers are trained to take an individual approach in the teaching and learning of students with SEN and such approach may not be easily transferred to mainstream classes. In this context, it would not be surprising if both general and special education teachers may still consider special schools/classes as the preferred environment to support the development of (some) students with SEN. Therefore, one of the greatest challenges in teachers´ preparation for inclusive practice, apart from providing teachers with skills, knowledge and understanding, is to ensure the development of positive attitudes toward students with SEN and their inclusion in regular classrooms (Forlin, 2010).

Teachers´ Attitudes

Attitudes are dispositions to respond to or to evaluate an attitude object. Attitude objects may refer to a person or a group of people, which can be evaluated favorably or unfavorably, on the continuum like-dislike (Eagly & Chaiken, 1993). Attitudes may contain cognitive, affective and behavioral components, and often influence judgments or guide social behavior. Such influence can result from a relatively spontaneous process associated with the automatic activation of the attitude upon encountering the attitude object, or a more deliberate process involving careful consideration of all available information and consequences of certain judgments or behaviors (Fazio, 1990). The spontaneous process involves automatic evaluations that come into mind whenever the attitude object is present. These implicit attitudes determine how information is interpreted and processed (Fazio, 2001; Schuette & Fazio, 1995) and guide automatic behavior (Gawronski & Bodenhausen, 2006; Olson & Fazio, 2009). In contrast, the more deliberate process reflects a thoughtful consideration of both the attributes of the attitude object and the consequences of possible behavioral actions (see Ajzen & Fishbein, 1980). These explicit attitudes are defined as evaluations that can be deliberately reflected, retrieved from memory, and verbally reported (Gawronski & Bodenhausen, 2006) and depend on the respondent's ability to engage in these cognitive processes (Fazio, 1990).

Explicit Attitudes

Several studies conducted in the US, Europe and Australia have investigated teachers' explicit attitudes toward the inclusion of students with SEN (Avramidis, Bayliss, & Burden, 2000; Beacham & Rouse, 2012; Elhoweris & Alsheikh, 2006; Gebhardt et al., 2011; Shade & Stewart, 2001). These studies have highlighted the role of teachers' explicit attitudes toward inclusion of students as predictors of successful inclusion efforts (for a review see Avramidis & Norwich, 2002). More specifically, teachers´ attitudes toward inclusion were associated with positive or negative expectations and behaviors, which in turn promoted or limited effective inclusive practice (Bender, Vail, & Scott, 1995; Villa, Thousand, Meyers, & Nevin, 1996). In their review, Avramidis & Norwich (2002) found some evidence of positive attitudes toward integration but concluded that most teachers rejected the idea of total inclusion. In a more recent review, de Boer and colleagues (2011) concluded that research indicates that the majority of the teachers hold neutral or negative attitudes toward the (total) inclusion of students with SEN, whereas no studies evidenced positive attitudes. In contrast to in-service teachers, several studies have shown that pre-service teachers' explicit attitudes toward inclusive education or inclusion of students with SEN were predominantly positive (Beacham & Rouse, 2012; Costello & Boyle, 2013; Kessels, Erbring, & Heierman, 2014).

These latter findings support the notion that explicit attitudes toward inclusive education might vary as a function of general teaching experience or experience with inclusive practice. Avramidis and Norwich (2002) and de Boer and colleagues (2011) reported that teachers' attitudes are also influenced by the nature and type of SEN, whereby teachers' attitudes toward the inclusion of students with mild SEN were more positive than toward the inclusion of students with more complex needs. Additionally, studies showed that teachers' explicit attitudes toward students with learning or intellectual difficulties were generally more positive than toward students with behavioral problems (Hastings & Oakford, 2003; Levins, Bornholt, & Lennon, 2005). Besides, more positive or negative explicit attitudes toward students with SEN were associated with intentions to act positively or negatively toward them, respectively (Levins et al., 2005).

It should be noted that measures of explicit attitudes allow for deliberation and reflection. As a result, responses may be affected by social norms and values, which may be associated with the social context in which the research is conducted (Lüke & Grosche, 2018). Social desirable responding decreases the validity of the findings and hence causes a significant problem. The influence of social desirability on responses may be most prevalent in studies concerning socially sensitive issues (De Houwer, 2006). Hence, explicit attitudes toward inclusion may reflect social norms rather than participants' actual attitudes (Fazio, Jackson, Dunton, & Williams, 1995). Therefore, implicit attitude measures, which are based on automated processes and hence, less prone to social desirability effects, could complement the assessment of explicit attitudes, to gain a better understanding of teachers´ perceptions and beliefs.

Implicit attitudes

Only few studies concerning the implicit attitudes toward inclusion or toward students with SEN could be identified. These, mainly European, studies showed that although pre-service teachers had neutral (Lüke & Grosche, 2017) to positive (Kessels et al., 2014) implicit attitudes toward inclusion, students with SEN are more negatively evaluated than other students (Enea-Drapeau, Carlier, & Huguet, 2012; Hornstra, Denessen, Bakker, van den Bergh, & Voeten, 2010; Kelly & Barnes-Holmes, 2013; Levins et al., 2005). The association between implicit attitudes and behavioral intentions is less clear. For example, Levins and colleagues (2005) did not find associations between implicit attitudes and behavioral intentions, whereas Hornstra and colleagues (2010) found that teachers' implicit attitudes toward students with dyslexia were associated with teacher ratings of student achievement, whereby teachers with more negative attitudes provided significant lower writing achievement ratings.

Relationships between competence and attitudes

Research concerning the inclusion of students with SEN shows clear relationships between teacher attitudes, teacher training and experience (for a

review see Avramidis & Norwich, 2002; de Boer et al., 2011). For example, in the US special education teachers (i.e., teachers that have received special training in regard to the education of students with SEN) not only reported higher levels of perceived competence and efficacy but also were generally more positive about inclusion (Buell et al., 1999; Minke, Bear, Deemer, & Griffin, 1996). Similarly, positive relationships were found between teachers perceived competence in teaching students with SEN and teacher attitudes (Everington, Stevens, & Winters, 1999).

The importance of teacher competence in regard to attitudes toward inclusive practice is further illustrated by findings of a study in the UK, which indicated that teachers who attended more in-service training sessions had more positive attitudes toward students with SEN (MacFarlane & Woolfson, 2013). It should be noted however, that most studies concerning teachers' competence, attitudes, and behavior were of a correlational nature. Therefore, these results do not provide evidence of causality and the direction of effects. For example, some international studies (mainly US and Australia) have reported that the acquisition of knowledge and skills positively affects attitudes toward inclusion (Baker-Ericzen, Garnand Mueggenborg, & Shea, 2009; Sharma, Forlin, & Loreman, 2008), whereas other stated that training aimed at attitude change resulted in higher levels of perceived competence (Carroll, Forlin, & Jobling, 2003). Furthermore, although a relationship between competence and attitudes is often implicitly assumed, theoretical frameworks generally focus on one or the other (i.e., theoretical frameworks provide either focus on how competence and efficacy affect (teaching) behavior or explain how behaviors are affected by attitudes). In this regard, the causal direction of the relationships between competence, efficacy and attitudes remains unclear. Both directions are possible. For example, positive attitudes can lead to greater acceptance of students with SEN and willingness to accommodate them in mainstream classes, which allows teachers to gain positive experiences and, hence, contribute to feelings of competence and efficacy. Similarly, increased competence and higher levels of perceived efficacy can result in increased willingness to engage in inclusive teaching behaviors, which in turn can bring about positive changes in attitudes. Nevertheless, it is now generally accepted that attitudes toward the inclusion of students with SEN should be considered in relation to teachers´ (perceived) competence to accommodate students with various SEN in regular classrooms (Borg et al., 2011; Forlin, 2010; World Health Organization, 2011).

Although findings regarding teachers' competence and attitudes offer valuable implications for practice, there may well be other factors that impact the extent to which inclusive practice may be effectively implemented. Still, there appears to be sufficient indication that both teachers' competence and attitudes, independently and in combination, play a pivotal role in the successful

inclusion of students with SEN in regular classrooms and warrant the exploration of ways in which training methods may increase competence and promote positive attitudes.

Effects of Training

In response to the significant challenges of implementing inclusive educational practice, educators and researchers have started to investigate the extent to which training can better prepare teachers for the accommodation of students with diverse educational needs in their classrooms. To this extent, several authors have argued that teacher training should entail not only courses to extent their skills, knowledge and understanding, but also address attitudes and promote teachers´ willingness to include all students in regular classrooms (Borg et al., 2011; Forlin, 2010). The potential effects of teacher education on perceived competence and attitudes are confirmed by empirical research. For example, studies in the UK and US have demonstrated that teacher education can have positive effects on both teachers´ perceived competence and attitudes toward integration (Beacham & Rouse, 2012; Cheney & Barringer, 1995).

Similarly, introductory courses in special education have been associated with a decrease in preservice teachers' anxiety and hostility toward teaching students with SEN in regular classrooms (Shippen, Crites, Houchins, Ramsey, & Simon, 2005), and significant positive attitude changes toward inclusive education (Shade & Stewart, 2001). Baker-Ericzen and colleagues (2009) reported significant positive changes in childcare providers' perceived competence and attitudes toward inclusion after a comprehensive training program. The program comprised of four self-contained sessions, which provided information on the history and philosophy of inclusion, (practical) information on accommodating students with disabilities, positive behavioral support, and creating cooperative partnerships with other professionals and parents, respectively. In addition, Glashan, Mackay, & Grieve (2004) concluded that specific teacher training would not only increase teachers' perceived efficacy, but also would increase the likelihood of inclusive practice.

Other studies conducted in Australia have shown that extensive courses combining formal instruction with practical experience effectively resulted in pre-service teachers acquiring specific competence, more positive attitudes toward inclusive practice and people with special needs, as well as an increased comfort in the interaction with them (Campbell, Gilmore, & Cuskelly, 2003; Carroll et al., 2003). Indeed, job-embedded practice has generally been considered a critical component of effective professional development programs (e.g., Desimone & Garet, 2015). Creating opportunities for hands on experience will allow teachers to gain positive experience, which in turn facilitates perceived competence and efficacy and promotes positive attitudes (Everington et al., 1999). Additionally, a study concerning the effects of training on pre-service

teacher attitudes toward inclusion showed that although course content and inclusive pedagogy were the strongest predictors of pre-service teachers´ attitudes, practical experiences and assignments enhanced their understanding of different types of SEN and increased their willingness to accommodate students with SEN in their classrooms (Sharma et al., 2008).

Such results are further supported by insights from diversity education and awareness trainings, which have successfully applied processes of reflection and feedback on biases and behavior, as a way to change attitudes. More specifically, diversity education has been aimed primarily at increasing awareness of one's own biases and enhancing sensitivity toward the beliefs or feelings of others, and is most effective when combined with other policies and practices that provide enhanced opportunities for people at risk. Although one could argue that attitude change should not be the focus of teacher training programs, providing teachers with insights and understanding of how teachers´ attitudes and perceptions may reduce educational opportunities of students with SEN, may facilitate a more reflective approach and change teaching behavior and teacher-student interactions. Given the recent changes in educational systems to enhance teaching and learning opportunities for all students in response to UN convention of rights of people with disabilities (i.e., on a political level inclusive education is predominantly perceived as the preferred approach in most countries), such training may be especially effective. Through ongoing interactions with students with SEN, teachers may develop increased feelings of comfort in interactions, a prerequisite for reduction of anxiety and prejudice, leading up to more positive attitudes and willingness to face the challenges of accommodating students with SEN. To this extent, Villa and colleagues (1996) found that after experiencing inclusion and developing specific professional skills, teachers expressed stronger commitment to including students with SEN and more confidence in their abilities to teach in inclusive classrooms.

In this spirit, many European and American countries have made the necessary adjustments to their initial teacher training programs in order to prepare teachers for inclusion (Loreman, Deppeler, & Harvey, 2005). Inclusive pedagogy and didactics are increasingly considered as core elements in the initial teacher training programs and introductory courses on inclusive education are now mandatory for many teachers in training (Franzkowiak, 2009). Interdisciplinary courses often combine the fundamental idea of inclusion with other key areas of initial teacher training, such as the consideration of differences in learning, the importance of classroom culture, skills in assessment and accommodations, assistive technology and the use of ICT (Watkins, 2012). Similarly, in line with teachers´ recommendations (Avramidis & Norwich, 2002), many programs try to incorporate both coursework and practical teaching experiences

to facilitate the all-important transfer of learned skills and knowledge to the reality of inclusive classrooms (Forlin, 2010).

Future Directions

Teachers' competence and attitudes affect the extent to which teachers are willing and able to implement inclusive practice. Although studies have been conducted in different countries located in different continents (i.e., Europe, Asia, the US and Australia), findings are fairly consistent. Teacher competence is generally considered a requisite for the successful implementation of inclusive practice, whereby higher levels of teachers´ perceived competence have been associated with better student achievement outcomes for both students with and without SEN. Teacher training programs could clearly play an important role here. Evaluative studies are starting to appear and generally report that teacher training is effective, especially when field work is incorporated, which allows for interaction with students or people with special needs (Campbell et al., 2003; Carroll et al., 2003). Similarly, in-service teachers could benefit from continuing education or in-service courses (Baker-Ericzen et al., 2009), but also need clear guidance, support and access to resources within the educational system in order to successfully deliver inclusive education (Borg et al., 2011).

Studies have also demonstrated associations between attitudes and teacher evaluations of students with SEN. Although most research to date has focused on explicit attitudes, research concerning implicit attitudes may provide new insights as the nature of teaching, typically involving complex cognitive actions under high time demands, suggests a strong influence of automatic attitude-behavior processes. First, studies indicate low correlations between explicit and implicit attitudes and differential effects on judgment and behavior (e.g. Hornstra et al., 2010). Secondly, implicit attitudes may also be less susceptible to the influence of social norms and values, which may elicit bias in self-reported explicit attitudes (De Houwer, 2006). This may be especially true for attitudes toward social sensitive topics such as attitudes toward persons with disabilities (Lüke & Grosche, 2018; Thomas, Vaughn, Doyle, & Bubb, 2014). Future research will need to entangle the differential effects of implicit and explicit attitudes to gain a deeper understanding of the cognitive processes involved in interactions with students with SEN, and particularly the effects of differential attitude-behavior processes on the implementation of inclusive educational practice.

Teacher competence and attitudes may independently, but also in combination, affect the implementation of inclusive practice. Higher levels of teachers´ competence are generally associated with attitudes that are more positive. More specifically, most research identified positive correlations and from intervention studies it has become clear that the acquisition of knowledge and skills

positively affects attitudes toward inclusion (Baker-Ericzen et al., 2009). Similarly, training aimed at attitude change also resulted in higher levels of perceived competence (Carroll et al., 2003).

Successful inclusion of all students may however, only be possible within school settings that provide the necessary support and resources (Borg et al., 2011). Such notion is further illustrated by findings of a six nation study, demonstrating that the ability of teachers to deliver integrated educational services was predicted not only by teacher training and attitudes but also by school support (Meijer, Pijl, & Hegarty, 1994). Lambe & Bones (2006) reported that although teachers generally supported inclusive practice, they felt concerned about their ability to cope with a heterogeneous student population due to their level of preparation, resources and support. Hence, future studies could investigate teachers´ perceived competence and attitudes toward inclusion in the context of school support, as teachers may not only reflect more positively on their competence, but also adopt a more positive attitude toward inclusive practice (Jull & Minnes, 2007), when feeling sufficiently supported (Buell et al., 1999).

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Acknowledgement

The research for this paper was funded by the Fonds National de la Recherche Luxembourg (FNR), Grant C14/SC/7964914/INCLUS