1. **Reason and inclusive education**

Offering and developing more inclusive education is one of the most important points of attention in education worldwide (Van der Bij, Geijsel, Garst & Ten Dam, 2016; Woodcock & Hitches, 2017). Inclusive education is the (political) ideal that all children receive education at a regular school. This implies a thorough adaptation of traditional education. Every school should be able to teach every child, regardless of disabilities and special needs, and ensure that all children form a community (Avramidis, Bayliss & Burden, 2000).

There are at least three reasons (De Boer, 2012) why the ideal of inclusive education has emerged since the early 1980s. Firstly, during this period, it is striking that an increasing number of children have special educational needs and that ever more special forms of education are emerging. Secondly, it is noteworthy that these special forms of education lead to the undesirable effect of segregation, which casts doubt on the desirability of special education. The third reason is that this period has seen the emergence of an ideal society in which everyone must be able to function in society, and fewer people are excluded on the basis of disabilities or characteristics (Oliver, 2013).

In June 1994, 92 countries and 25 organizations signed the UNESCO Salamanca Statement and Framework for Action (UNESCO, 1994, p. 8) which defines the ideal of inclusive education. This agreement starts with a statement in which education for all is put on the agenda:

“Regular schools with this inclusive orientation are the most effective means of combating discriminatory attitudes, creating welcoming communities, building an inclusive society, and achieving education for all; moreover, they provide an effective education to the majority of children and improve the efficiency and ultimately the cost-effectiveness of the entire education system.”

1.1 **Different approaches within inclusive education**

Researchers distinguish two different approaches to inclusive education in literature. Both approaches are extensions of each other and one does not exclude the other. The first approach is based on the notion that education must be adapted to enable each individual child to attend school, regardless of their personal learning and development needs, disorder or disability (Ueno & Nakamura, 2011). In this approach, individuals with special learning and support needs are
the starting point. The second approach focuses on context and community. In this community approach, the environment and the context are the starting point. The context is organized in such a way that individual differences are no longer relevant (or to a lesser extent), so that special educational needs cease to exist (Freire & César, 2002; Ainscow, 1999; UNESCO, 2005; Avramidis, Bayliss & Burden, 2000). This distinction coincides with the way in which we look at the phenomenon of differences in educational needs. Miles (2000) distinguishes a medical and a social model for differences in educational needs and recognizes the tension between these two models in the development of a more inclusive education. The medical model takes the child as a starting point and addresses the problem within the child. This model is shown in Figure 1. The social model examines the context: differences in educational and developmental needs of children are seen as part of common diversity (Oliver, 2013). This model is shown in Figure 2.

![Figure 1. Medical model of different educational needs (Miles, 2000).](image1)

![Figure 2. Social model of different educational needs (Miles, 2000).](image2)
1.2 Inclusive education in the Netherlands

Governments support the ideal of inclusive education, although the way in which governments describe the idea of inclusive education in publications appears to be abstract and in broad outlines (Sikes, Lawson & Parker, 2007). The Dutch government also recognizes the need to achieve more inclusive forms of education. As in other countries, the number of children in special education has increased in the Netherlands (Graham & Sweller, 2011; Minne, Webbink & Van der Wiel, 2009). The Dutch government has therefore implemented various policy changes in recent years to reduce the number of children in special forms of education. In 1995, the government introduced the ‘Back to school together’ policy in order to improve cooperation between regular and special education (Meijer, 1999). The idea was that stricter criteria would prevent even more children ending up in special education (Gubbels, Coppens & De Wolf, 2018). Nonetheless, the number of children in special education continued to rise as a result of failure to apply these principles properly (Koopman & Ledoux, 2013; Pijl, 2016). In 2003, the government adjusted financing of special education (Gubbels, Coppens & De Wolf, 2018) and introduced the so-called ‘backpack financing’ (backpack scheme), which gave parents a significant say in how best to use this budget. A psychiatric diagnosis was required to be granted this budget. Following the introduction of this scheme, the number of children in special forms of education once again rose sharply. In order to halt this increase and make more inclusive education possible, the Dutch government approved the Inclusive Education Act in 2014 (roughly translated as ‘Education that Fits’ in Dutch: ‘Passend Onderwijs’). This act introduced a duty of care for all schools towards all children and clustered the expertise needed to fulfill this duty of care in partnerships (Gubbels, Coppens & De Wolf, 2018). In this way, the government sought to contribute to ensuring that all children would have an appropriate place in education and that as many children as possible would attend a regular school (Ministry of Education, Culture and Science, 2014). Around the same time, in 2015, the Dutch Parliament approved the new Youth Act. Its aim is, among other things, to ensure a reduction in medication prescriptions and to reduce the demand for specialized psychiatric care (Ministry of Health, Welfare and Sport, 2015). The development of more inclusive education is difficult, as evaluation studies have shown in 2016, 2017 and 2018 (Van der Woud, Van Bokhoven & Van Grinsven, 2018). One of the reasons is that teachers are not enthused because they perceive more work pressure and stress and find it difficult to take care of children with specific issues in regular forms of education.
In addition, teachers indicate that the context is not optimal; there is insufficient opportunity to give individual pupils individual attention.

1.3 The individual point of departure within inclusive education in the Netherlands

In the Netherlands, the individual point of departure and the medical model of differences in educational needs are dominant in decision-making and people’s views on more inclusive education. This individual approach is evident, for example, from the outcome measures used in evaluation research into the implementation of inclusive education in The Netherlands. In 2015, 2016, 2017 and 2018, Dutch teachers were asked: “Is it generally easy to keep pupils with behavioral, developmental and psychiatric problems (Cluster 4) in regular classes?” and “Is it generally easy to keep pupils without indications who do need extra support in the regular classes?” (Van der Woud et al., 2018, p. 7-8). Researchers Dalkilic and Vadeboncoeur (2016) point out the odd and conflicting reasoning behind this approach to inclusive education. At first, disability is a reason for exclusion (it is determined that the deviation from the norm equates to disability or special needs) and subsequently this disability is a reason for inclusion (the desire for more inclusive education).

The individual approach ultimately seems to stand in the way of more inclusive forms of education (Connell, 2013; Hardy & Woodcock, 2015, Terzi, 2010). Dehue (2014, p. 233) attributes this individual orientation to the emergence of the neo-liberal ideal of society since the 1990s, in which the engineerable society “is or has largely been exchanged for the engineerable individual”. The government expects individuals to save themselves and “to be responsible for their own lives”. In short, since the 1980s and 1990s, two developments seem to coexist that may reinforce each other: on the one hand, the increasing desire for more inclusive education, where emphasis is placed on the individual pupil and the medical model of disability is used, and on the other hand, the growing social emphasis on the development and engineerability of the individual. This focus on the individual may have been reinforced by the popularity of the medical model in social sciences and thus also by a more ‘medical’ and biomedical approach to children (Porter, 1997; Wade & Halligan, 2004), also in educational settings (Haegele & Hodge, 2016).
1.4 The obstacle of the focus on the individual as the point of departure for inclusive education

There are reasons to assume that inclusive education based on the individual is problematic for the realization of the ideal (Connell, 2013). After all, first a child is considered to deviate from the norm, only to indicate that this child must have a place in regular classes (Dalkilic & Vadeboncoeur, 2016). In this context, Vehmas (2010, p. 91) points to the language that is often used with respect to inclusive education. For example, 'special needs', 'behavioral problems' and 'diagnoses'; terminology which, according to him, points to the use of "traditional individualistic psycho-medical assumptions about the nature and origins of disability and difference in which all the problems are explained by the individual's deficits". When using these terms, the difference between people and the extent to which they experience problems is explained based on individual defects. The reason for the difference is (partly) sought in the individual (in the brain, genes or the body). In this biomedical view, characteristics of a person are regarded as a result of the pathological condition (Conrad & Schneider, 1992; Deacon, 2013). Many still see the biomedical model as one of the most dominant condition models used worldwide. This model is based on the idea that conditions are based on possible defects in the underlying structures (such as in cells or the brain) (Porter, 1997; Wade & Halligan, 2004). The use of the biomedical explanatory model is dominant (Horowitz, 2002) and may have more status as ‘science’ than the psychological and sociological sciences (Healy, 2016). However, there are also doubts about the use of this model, for example because it creates a focus on the individual, as a result of which causes and solutions in the context of the individual are taken out of the picture (Horowitz, 2002). It is perhaps for this reason that the biomedical model is developing into a bio-psycho-social model, with more attention being paid to psychological and social factors and the connection between individual and context; nevertheless, the individual remains the point of departure (Engel, 2003; Wade & Halligan, 2004).
1.5 The biomedical model within the educational context

When using this biomedical model in the school context, remarkable behaviors within the educational context are ‘explained’ with medical assumptions and addressed according to medical principles. The cause of remarkable behavior is sought in the pathology (or pathological structures) of the individual child. According to the biomedical model, clarifying the pathological state of the child, classifying and diagnosing, is necessary to find the right approach for the child. This method of reasoning is a possible cause of the increase in the number of children with a diagnosis, for example ADHD, in the Netherlands (Health Council of the Netherlands, 2014) and other Western countries (Danielson, Bitsko, Ghandour, Holbrook, Kogan & Blumberg, 2016; Timimi, 2015). An increasing number of professionals and scientists consider this increase worrying (e.g. Frances & Carroll, 2017; Coon, Quinonez, Moyer & Schroeder, 2014). The biomedical explanation model focuses on the condition in the child, which means that the opportunities and possibilities of adapting the context are not (optimally) considered (Te Meerman, Batstra, Grietens & Frances, 2017).

1.6 Teachers and inclusive education

Teachers play an important role in the implementation of a more inclusive education. Their attitude determines the extent to which inclusive education is implemented (Monsen, Ewing & Kwoka, 2014; Varcoe & Boyle, 2014). Various studies have shown that teachers are positive about the ideal, but doubt its feasibility (Avramidis & Norwich, 2002; De Boer, Pijl & Minnaert, 2011; Van der Woud et al., 2018). In addition, teachers experience an inability to provide adequate educational support with regard to inclusive education (Hay, Smit & Paulsen, 2001; Paliokosta & Blandford, 2010) and prospective teachers do not yet feel able to put inclusive education into practice either (Varcoe & Boyle, 2014). Researchers indicate, based on observations in classroom practice, that teachers do not yet have sufficient pedagogical strategies and that how the concept of inclusive education should be worked out in practice is not clear either (Lingard, 2007). Teachers also wonder whether they can cater to these special pupils within regular education (Angelides, Stylianou & Gibbs, 2006).
1.7 Reason for research

Lakkala, Uusiautti and Määttä (2016) indicate the importance of taking the broader context into account in the development of inclusive education. This introduction described the two movements within inclusive education: focusing on the individual and focusing on the community. In the Dutch context the emphasis is on the individual, the use of a medical model of differences of special needs, and therefore also on the major role of the biomedical explanatory model when it comes to explaining problems within the educational context. A possible reason for inclusive education not taking off is this focus on the individual rather than on the context of the individual. This focus on the individual provides a strong breeding ground for individual-oriented biomedical classifications and thus for an ever-growing group of children with a classification or diagnosis, while implementing inclusive education may require a shift from the question ‘what is this child’s disorder’ to ‘what does this child need’ (Vehmas, 2010).

The present thesis focuses on the teacher and examines the teacher’s perception of the behavior of pupils and the degree of adaptability of this perception. This attitude and perception are important context variables in the social model of differences in educational needs (Miles, 2000). The teacher’s attitude towards the biomedical explanation model is also studied with respect to children with one of the most often diagnosed psychiatric disorder: ADHD. This is important, because perception vis-à-vis children with specific learning and development needs, and thus also behavioral disorders, influences the success of more inclusive education (De Boer, Pijl & Minnaert, 2011; MacFarlane & Woolfson, 2013; Wood, Evans & Spandagou, 2014). Schools are an important place where often the first signals arise that lead to a diagnosis (Sax & Kautz, 2003; Snider, Busch & Arrowood, 2003; Baughman & Hovey, 2006). Consequently, more insight into teachers’ perceptions and attitudes may provide tools for promoting more inclusive education and fewer individual childhood psychiatric classification. It could also provide more insight into the direction in which cooperation between education and youth services could develop.

In this thesis we prefer to use the term ‘classification’ when we refer to the categorization of behaviors and problems according to descriptive criteria sets for disorders as in the Diagnostic and Statistical Manual of Mental Disorders, the DSM (APA, 2013); we prefer to use the term ‘diagnosis’ when we refer to the diagnostic process more broadly.
1.8 The structure of this thesis

The research consists of five related sub-studies, the first three of which are quantitative in nature and the last two qualitative.

Chapter 2 describes teachers’ perception of children’s behavior and the role the ‘relative age’ of children plays in this. Various studies have shown that relatively young children in age cohorts (classes) are more often psychiatrically diagnosed or disadvantaged in several ways. In this chapter, we explore whether this influence of relative age is visible in teacher perceptions of child behavior.

In Chapter 3 of this thesis, we investigate to what extent the teacher’s perception of children’s behavior depends on classmates. We investigate whether the number of children who score above clinical cut-off values on a behavioral screening questionnaire influences the teacher’s perception of the behavior of the other pupils in class.

In Chapter 4, we focus on a widely used approach in schools to influence teachers’ perceptions of children’s behavior and to provide teachers with tools to guide children’s behavior. This involves examining whether the School-Wide Positive Behavior Support program works to positively change teachers’ perceptions of pupil behavior.

From Chapter 5 onwards, qualitative research methods are used. The fifth chapter explores how teachers perceive an ADHD classification and how they weigh up whether such a classification has added value in the educational context. This information is relevant because it may explain the high number of diagnoses (Health Council of the Netherlands, 2014; Timimi, 2015; Danielson et al., 2016), of which we know that the first problems occur at school to a significant extent (Sax & Kautz, 2003; Snider, Busch & Arrowood, 2003; Baughman & Hovey, 2006).

In Chapter 6, we examine teachers’ perception with regard to the use of ADHD-medication by pupils. Recent research indicates that medication, although effective in reducing ADHD behavior in the short term (Schachter, Tharmalingam & Kleinman, 2011), has no long-term effects on ADHD symptom levels, but can cause lasting growth suppression and may increase the risk of antisocial and criminal behavior (Swanson et al., 2017). In addition, a recent meta-analysis confirmed that ADHD-medication does not improve school results or academic performance (Kortekaas-Rijlaarsdam et al., 2018). More insight into the teacher’s perception of medication helps to better understand teachers’ role and views in pupil medication use.
The last chapter of the thesis provides an overall picture and a discussion of the findings of our research, placing them in the current Dutch context. Recommendations are also made for practice, political decisions and further research.