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Dealing responsibly with differences : socio-cultural backgrounds and differentiation in education

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Prof.dr. Eddie Denessen

**Dealing responsibly with differences.
Socio-cultural backgrounds and
differentiation in education**



**Universiteit
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Dealing responsibly with differences.
Socio-cultural backgrounds and differentiation
in education.

Inaugural lecture by

Prof.dr. Eddie Denessen

on the acceptance of his position by special appointment as professor of
Socio-cultural Backgrounds and Differentiation in Education
at Leiden University
on Monday, June 26, 2017.



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Mr. Rector Magnificus, Members of the Board of Directors of the Sardes Foundation, Members of the Board of Trustees of this chair, Highly acclaimed listeners,

“In our 7-year old son’s class at school they use a system in which high performing children are called ‘suns’. In his class of 23 pupils, there are six suns. Our son apparently is a moon, but at his table, there are three suns. Last week he regularly had nightmares; crying and not being able to tell why. Last weekend he spilled the beans: he wasn’t a sun.... I addressed this with his teacher, but according to her, he has to learn how to deal with this. Can you really expect this from such a little guy?”

This question was asked by a worried mother in the advice column of a Dutch website on parenting (www.jmouders.nl). Her son apparently gets reading lessons with the use of the method ‘Veilig Leren Lezen’ (www.zwijsen.nl). On the website of publisher Zwijsen the publisher explains that children can be divided into three levels: suns, moons and stars. The moon group consists of children with normal reading development. They follow the teacher’s regular instruction. This is the largest group. In the sun group are children who already can read or who make rapid progress in reading. Because they usually work faster than the other children do, they can start independently after a short instruction and there are extra and more difficult exercises for them. Finally, the star group are the children who find it difficult to read. They receive extended instruction from the teacher after the regular instruction and they get more time and more exercises. Ability grouping is a common way of differentiating, especially in primary education during language and math education. It is a popular way to deal with differences between pupils. Almost all methods of reading and math in the Netherlands provide the opportunity to differentiate in ability-groups. By dividing the pupils into ability-groups, education can be tailored to the differences between pupils in the classroom and

enable all pupils to benefit optimally from the given education; at least, that is the idea behind this form of differentiation. Ability grouping is just one example of differentiation in education. Other examples of differentiation are tracking in secondary education, providing bilingual education for some of the pupils, or organising a so-called plus-class (a top set) for high-ability pupils.

In this inaugural lecture, I will address some forms of differentiation. I will do this in particular with the aim of giving more insight into the relationship between differentiation and the inequality of opportunities for pupils with different socio-cultural backgrounds. I want to show you how differentiation can reduce the risk of inequality in education, but that differentiation can also increase inequality. I will do that on the basis of six statements about the backgrounds and effects of differentiation in education. But first I will introduce the concept of differentiation.

Attention to differences in education.

Education in the Netherlands is doing well. The general level of education is high. Dutch pupils perform well compared to pupils from other countries, and the Dutch young people belong to the happiest young people in the world (OECD, 2016). Nevertheless, our education is facing a number of challenges. It turns out that the motivation of Dutch pupils in secondary education appears to be low compared to pupils in other countries and high performing pupils are not adequately challenged (OECD, 2016).

A bigger challenge, and a greater social problem, is that our education does not offer enough equal opportunities to pupils with different socio-cultural backgrounds. There is a strong correlation between parents’ education levels and their children’s school career. It is commonly considered unfair that children with equal talents get unequal opportunities for a successful school career because of their parents’ education, occupation, income or cultural background. However, this is still the case to a certain extent.

For example, according to data from the Dutch Central Bureau of Statistics over the period 2006-2001 among the pupils in the third year of the highest track of secondary education¹, 11.3% had a father with a low education, 20.7% a father with an average education and 41.8% a father with a high education (Van Gaalen, Bakker, Van der Laan, Westerman & Scholtus 2014). The correlation between parents' social backgrounds and their children's school career cannot solely be explained by inheritable talents in children. There are other explaining factors, some of which are the responsibility of the school (Denessen, 2017). According to the Dutch Inspectorate of Education (2016), the inequality of opportunities has increased in recent years, and policies are needed to reverse this trend. Educational experts argue that more attention should be paid to the talents and opportunities of individual pupils. The provision of adaptive and differentiated education would be an excellent means of dealing with differences between pupils, contributing to equal opportunities and providing a sufficient challenge for all pupils.

Pupils differ from one another, for example in their aptitude to learn, the speed in which they process new information, the extent to which they can work independently, the concentration they manage to uphold in class or the time they need to make an assignment. They also differ in how much they have learned at home, what they do in their spare time, how much they like school, in what subjects they want to put more effort in, and what they want to become later.

At school, teachers must ensure that they support pupils with all these different features in learning. According to the theories that are the basis of adaptive and differentiated education, teachers must tailor their education to differences between pupils to make education meaningful to all (Corno, 2008; Tomlinson et al., 2003). Whole classroom teaching without differentiation would not be appropriate for all pupils. It are often the pupils who have problems with the pace and difficulty of a lesson and the fast learners who get easily bored for whom such a classical approach would not be appropriate.

Many education experts who call for differentiation in education refer to the concept of 'Zone of proximal development' developed by the Russian psychologist Vygotsky (1978). The starting point of that concept is that pupils learn the most when education supports them in activities that they cannot perform independently and that reaches just beyond their own competence (their zone of actual development). If pupils in a class differ in competence and therefore in their zone of proximal development, it is difficult for a teacher to teach what is appropriate for all pupils. Whole classroom instruction may be too difficult for some pupils, too easy for others. Assignments can be boring and uninspiring to some pupils and too complicated to others. Differentiation is considered a solution to dealing with differences between pupils. The idea that the learning of pupils only takes place when the learning activity is in the closest child's development zone forms the basis of many decisions aimed at providing differentiated education

Differentiation as an organisational principle in education

When it comes to differentiation Dutch researchers refer to the definition of De Koning (1973, p. 3). He described differentiation as follows: 'Differentiation in education is the creation of differences between parts (e.g. schools, departments, classes, subgroups, individual pupils) of an educational system (e.g. national school systems, school organisations, school departments, classes) regarding one or multiple aspects (e.g. goals, learning time, teaching methods)'. This means that differentiation can occur at different levels. De Koning distinguished between macro level differentiation, meso level differentiation and micro level differentiation. Differentiation at macro level is organising education for different pupils and students in a system of different school types. Examples of macro differentiation are the tracks in Dutch secondary education (lower vocational education, general secondary education, and grammar school), schools for special education, or separate schools for gifted pupils.

Meso level differentiation is differentiation between classes within one school. Examples are separate sets for pupils in a school, so-called plus-classes for high ability pupils or classes for bilingual education.

Many forms of macro and meso level differentiation aim to reduce the variation between pupils, making it easier for teachers to provide education that is appropriate for all pupils in one group. Differentiation often aims at putting pupils with similar levels together. An assumption behind these forms of differentiation is that a homogeneous pupil population provides the most room for the learning potential of each pupil, and that it promotes the efficiency and effectiveness of education (Mills et al. 2014). This assumption is the basis of the Dutch system of tracked secondary education.

My first proposition is:

Proposition 1: Macro and meso level differentiation lead to greater inequality of opportunities.

Through macro and meso level differentiation, pupils are partly selected based on their parents' socio-cultural background. Analyses of the composition of pupil populations in secondary education show that children of low educated parents are overrepresented in the lowest track (vmbo) and children of high educated parents are overrepresented in the highest track (vwo). International comparative research on student performance (PISA, TIMSS) showed that macro level differentiation in the form of early tracking in secondary education increases the unequal opportunities of children (Hanushek & Wössmann 2006; Van de Werfhorst & Mijs 2010). In countries where the selection is made later, such as the Scandinavian countries and Canada, the correlation between children's school career and their parents' education is smaller than in countries where that selection is made early, like in the Netherlands (Van de Werfhorst & Mijs 2010).

Differences in the composition of pupil populations also exist in meso level differentiation. For example, a study by Sieben and Van Ginderen (2014) showed that higher educated parents

choose more often for bilingual vwo-programs than lower educated parents. Of the pupils in bilingual primary education in the school year 2014/2015, approximately 75% was found to have high educated parents (Driessen et al. 2016). Such selective programs increase the educational opportunities of children who will already have an advantage at the beginning of their education.

Within-classroom differentiation

In addition to macro and meso level differentiation, De Koning (1973) also distinguished micro level differentiation. That is differentiation within one classroom. It is the way teachers deal with differences between pupils in the same classroom. An example of this is working with ability groups, such as the sun, moon and star groups from the example in the beginning. Other examples are varying the time that pupils is given to make an assignment, or organising group work in which pupils work together on a project according to their choice. This form of differentiation is called 'within-classroom differentiation' (Rubie-Davies 2015).

In the international literature, the definition of micro level differentiation provided by Carol Ann Tomlinson is leading. According to her, differentiation is '*an approach to teaching in which teachers proactively modify curricula, teaching methods, resources, learning activities and products to address the diverse needs of individual students and small groups of students to maximize the learning opportunity of each student in a classroom*' (Tomlinson et al. 2003, p. 121).

The proactive character of differentiation indicates that differentiation is a rational process. Differentiation takes place through a decision-making process in which the teacher, based on knowledge about the pupils and their progress determines what the following goal is for these pupils and chooses which instruction or task is appropriate to achieve that goal (see for example: the model of Prast et al. (2015). Other models also present differentiation as a rational choice model (Gregory & Chapman 2013; Moon 2005).

Reasons to differentiate

In recent years, the Dutch government developed two policies in response to the problems faced by education and that appeal to more attention for the differences between pupils. In 2014, the State Secretary of Education presented the policy plan 'Action plan for top talents' (Dekker 2014). As I said before, international comparative research has shown that the highest performing pupils in the Netherlands appear not to perform as well as the highest performing pupils in other countries.

They are not challenged enough and are often bored at school (Dekker 2014). Education for the so-called 'excellent' pupils could be made more challenging by differentiation.

In 2016, a policy initiative of *Equal opportunities in education* was presented by the Minister and the State Secretary in response to the findings of the Dutch Inspectorate of Education. This action plan was a response to the increased relationship between parents' education levels and their children's school career. The Dutch government is aiming for '*education in which all pupils and students feel at home and get the best out of themselves, regardless of their home situation, talents or background*' (Bussemaker & Dekker 2016, p. 1-2). Differentiation would also be a solution for tackling unequal opportunities. Offering tailor-made education could increase the educational opportunities of pupils from lower socio-economic environments.

Differentiation would therefore promote the quality of education. In recent years, the Dutch Inspectorate of Education however has consistently pointed at the problems of differentiation in the classroom. The Education Report for the 2007/2008 school year included:

In practice, more than half of the teachers do not sufficiently focus their teaching skills to ... differences. The inspectorate considers this to be a concern because in particular the weak, but also the talented pupils are harmed (Inspectie van het Onderwijs 2009, p. 70).

In the most recent Education Report (school year 2015/2016) the Inspectorate of Education still notices these problems, both

in primary and secondary education. The Inspector reports the following:

Classroom observations from inspectors also show that teachers generally are good at general teaching skills, such as giving clear explanations. But the inspectors also see that teachers are significantly less successful ... to adapt education to the specific needs of pupils (to differentiate) (Inspectie van het Onderwijs 2017, p. 40).

These statements about differentiation suggest that differentiation can unambiguously be judged as sufficient or insufficient, or as good and poor. This ignores an important dilemma associated with differentiation.

Proposition 2: In their education practice teachers are placed in a differentiation dilemma

The two policy initiatives of the government, the 'Action plan for top talents' on the one hand and promoting equal opportunities on the other hand, are at odds with each other (Labaree 2012). To challenge high-performing pupils and to support the chances of children from lower socio-economic environments cannot be combined in one single approach of differentiation in practice because they refer to different conflicting functions of education (Labaree 2012; Schiro 2013). To illustrate this I will first discuss two perspectives on differentiation that are distinguished in the literature. These two perspectives are called convergent differentiation and divergent differentiation (Bosker 2005). In *convergent differentiation*, differentiation is aimed at teaching in such a way that every pupil is optimally supported to achieve the learning goals that are the same for all pupils. Because the time and guidance required to achieve these learning outcomes vary per pupil, convergence requires teachers to provide more guidance and support to the children who take the most effort to achieve the learning goals.

Divergent differentiation means that education is aimed at providing all pupils with the best opportunities to develop their talents and opportunities. Because pupils differ in

knowledge and learning rates, the logical consequence of this form of differentiation is that the differences between pupils will increase. For high-performing pupils, more and higher learning goals can be set than for the low-performing pupils. In terms of current discussions in education, this perspective aligns with concepts like talent optimisation, excellence promotion and statements like ‘we want to make every child perform at its best’. Education from this perspective aims at a tailor-made learning environment for each pupil.

The distinction in convergent and divergent differentiation exposes a differentiation dilemma. It affects the ethical concept of *distributive justice* (Resh & Sabbagh 2016). Differentiation is about the fairness of the distribution of education among pupils. In a class, the teacher distributes attention, interest, affection and appreciation among the pupils (Resh & Sabbagh 2016). There are different views about the fair distribution of this attention, interest, affection and appreciation connected to the different perspectives on differentiation, convergent and divergent.

In the light of divergent differentiation, it is justified that all pupils receive the same amount of time and attention. In accordance with this view, each child has the same right to education (or right to the same amount of education). For convergent differentiation however, it is justified to give disproportionate time and attention to children who need more support in learning. Because children from higher social environments have a head start on children from lower social environments, the latter need more time and support to fully develop their talents and give them equal opportunities for a successful school career. Based on this reasoning, it is fair to spend more time and attention on pupils from lower socio-economic backgrounds in order to give children an equal opportunity for educational success.

Providing equal opportunities for pupils with equal means or optimising pupil talents that may vary depending on their family background poses a difficult dilemma. It appeals to the views of teachers about justice. In addition, attributions

of teachers play a role (Georgiou, Christou, Stavrinides & Panaoura 2002; Jager & Denessen 2015). Teachers who attribute low performance of a pupil to a lack of talent or effort are less likely to invest in this pupil than teachers who attribute low pupil performance to lack of support from parents or to the injustice of the education system (Mills et al. 2014). In a recent master’s thesis study by Sien te Grotenhuis (2017) on the attitude of teachers regarding the differentiation dilemma one teacher expressed her attitude in the following, fine way:

“I think it’s a very difficult issue. On the one hand, I (and many with me) aim for equality in our society. Reducing the gap and therefore concentrating on convergent differentiation seems desirable in this respect. On the other hand, I think everyone’s talents should be developed. A weaker pupil is not necessarily worth less for society than a stronger pupil is. In our society, we also need people who perform ‘lower’ jobs, so why should there be no differences? I also oppose to stifling the talents of stronger pupils in order to keep the differences smaller. When it comes to pupils with the same IQ but with a different education support by the parents, I think that there should be as little difference/inequality as possible. I therefore try to apply both forms of differentiation in my teaching and I still do not know exactly what my own point of view is.”

The choice for convergent or divergent differentiation is difficult for many schools and teachers. It is even more difficult when it is not unambiguously clear whether a teaching method aims at convergent or divergent differentiation or when teachers are not aware of this dilemma.

Effects of differentiation

Proposition 3: Whether differentiation is convergent or divergent does not depend on the method of differentiation, the intended objectives or intentions, but on the realised effects

I hear teachers often claim that they use convergent differentiation, because they work with whole class teaching in combination with ability-groups where the weakest group

gets extended instructions. I also hear teachers regularly say that they offer equal opportunities for pupils because they work with a form of personalised learning, where each pupil can work at his own pace at assignments that match his own level. These statements indicate that teachers have the intention to contribute to more equal opportunities with their differentiation method or that they assume that this really happens. Whether that is actually the case, often remains unknown.

Research into the effects of ability grouping for example, shows ambiguous and varying outcomes. In some studies, all pupils benefit from this approach (Lou, Abrami & Spence 2000), while other studies show that the highest ability group benefits most from this approach. Considering the research in this field, ability grouping very likely leads to divergent outcomes rather than convergent outcomes (see for example: Condron 2008; Nomi 2010), but these effects depend on the way the teacher uses differentiation in the classroom. Therefore differentiation where pupils may not be in a fixed ability group, but can change groups frequently (flexible grouping) can lead to more convergent outcomes. Differentiation with extended instruction for low ability groups may also lead to more convergent outcomes (Deunk et al. 2015; Houtveen & Van der Grift 2012).

There are strong indications in the literature that working in fixed ability groups contributes least to the performance of pupils in the lowest ability groups (Boaler et al. 2000; Oakes 2008). There are at least two reasons for this (see also: Vernooij 2009). First, placing a pupil in a low ability group can have stigmatising effects. The pupil can develop an identity of a weak learner and develop a so-called 'fixed mindset'. A pupil in a low ability group can become convinced that he is indeed a weak learner and can adjust his future aspirations accordingly (Boaler 2013; Dweck 2006). Research on pupils in ability groups shows that the pupils in the lowest ability group are less motivated (Saleh, Lazonder & De Jong 2005), and have a lower self-esteem and less confidence in their own ability (Boaler, Wiliam & Brown 2000). Second, pupils in the lowest ability

group would receive less challenging education (Oakes 2008). Pupils in higher ability groups are more strongly enabled to practice their higher thinking skills and their ability to self-regulation while pupils in lower ability groups receive more teacher-centred instructions and spend more time rehearsing and preparing for tests (Boaler et al. 2000; Oakes 2008). Pupils in mixed ability groups on the other hand experience more variation in their education.

Not only ability grouping, but also whole class teaching or personalised learning can have both divergent and convergent effects, depending on the way in which this education takes place in practice and how the teacher deals with differences between pupils (Rubie-Davies 2015). An important factor is the time spent with each pupil (Bosker 2005). But also the perceptions that teachers have of their pupils and their backgrounds also determine the organisation and outcomes of differentiated education (Civitillo, Denessen & Molenaar 2016).

Differentiation as an unconscious and intuitive process

Proposition 4: Teachers unconsciously contribute to differentiation that increases inequality of opportunities

In educational science, differentiation is perceived as a rational, proactive process in which teachers use educational adaptations based on objective knowledge about their pupils to optimise the learning process of all pupils in the classroom (Bosker 2005; De Koning 1973; Tomlinson et al. 2003). Two critical comments can be made regarding this perception of differentiation. First, it is questionable to which extent differentiation is actually based on objective knowledge about pupils and second, it is the question whether all differentiation behaviours of classroom teachers are rational and proactive. Research into the extent to which teachers make valid assessments of their pupils shows that this is not always the case. Although estimations made by teachers of pupils' academic performance are highly accurate (Jussim & Harber 2005), there is also empirical evidence that teachers overestimate and underestimate the performance of some

pupils. In the Early Childhood Literacy Study in the US, about two thousand teachers of over thirteen thousand children were asked to estimate the children's performance. Then the actual test results of the children were compared with the teachers' estimates. Teachers were found to underestimate the performance of the pupils from lower socio-economic backgrounds and to overestimate the pupils from higher socio-economic backgrounds (Ready & Chu 2015; Ready & Wright 2011). The researchers also found that the grouping decisions that the teachers made were largely based on their knowledge of prior performances of the children, but that socio-cultural backgrounds also had an effect on the ability group in which the children were placed (Tach & Farkas 2006). Thus, even if teachers base their differentiation on objective test scores, the background of pupils seems to play a role in the grouping decisions made by teachers. Other international studies also show that on average teachers have lower expectations of pupils with low educated parents and pupils with a migration background (Glock, Krolak-Schwerdt, Pit & Cate 2015; Rubie-Davies 2015). Dutch research shows a similar picture. Teachers tend to underestimate the achievements and possibilities of children with low educated parents and children with migrant backgrounds (De Boer, Bosker & Van der Werf 2010; Timmermans, Kuyper & Van der Werf 2015). However, we should realise that there is large variation between teachers. Some teachers are strongly influenced by the socio-cultural background of pupils, whereas others are not.

In recent years, we have developed a research line at Radboud University on group-specific attitudes of teachers and the effects of those on teacher expectations and pupil achievements. With social psychological, implicit measures, which are computer tests that are better in capturing teachers' stereotypical attitudes towards pupils with different backgrounds than questionnaires, we have shown that teachers differ in their attitudes towards different groups of pupils and that these attitudes affect the performance of pupils from these groups. For example, we found that ethnic prejudices of teachers coincided with the performance gap in

their classrooms between children of Turkish or Moroccan background and children with a native Dutch background (Van den Bergh et al. 2010). It was also found that in the classes of teachers who have negative attitudes towards dyslexia, the performance of children with dyslexia was relatively lower than in classes of teachers with a less negative attitude towards dyslexia (Hornstra et al. 2010). Meanwhile, we have also developed tests for gender-specific attitudes towards technology (Denessen et al. 2011) and we have investigated the extent to which teachers have stereotypical views on the learning styles of boys and girls (De Kraker-Pauw et al. 2016). With these techniques we can gain more insight into the backgrounds of unconscious differentiation by classroom teachers; differentiation that contributes to larger or smaller differences between groups of pupils.

Researchers who consider differentiation of teachers as an unconscious and intuitive process developed the concept 'Teacher Differential Behaviour' (Babad 2005). Teacher Differential Behaviour refers to differentiation that takes place in each class during verbal and nonverbal interactions between teachers and pupils. In this approach, differentiation is broadly understood as treating pupils differently. Teacher Differential Behaviour refers to teacher behaviour that is different for different pupils. This involves giving attention, feedback, or help (Babad 2005; Rosenthal 1994). During a lesson, many differentiating behaviours of teachers can be observed, for example in the interactions during instruction or when the teacher walks around during independent work. One pupil is encouraged with a nod, another pupil will be asked a question or given a hint, one pupil receives a short answer to a question, the other receives a detailed explanation. These differential behaviours have effects on pupils. The quality and nature of classroom interaction influence the different learning processes of children in the same classroom. (Keuvelaar-Van den Berg 2013; Rosenthal & Rubie-Davies 2015; Rubie-Davies 2015). In the context of research into the effects of teacher expectations, it has been repeatedly demonstrated that teachers have more positive interactions with pupils of whom

their expectations are higher than with those of whom their expectations are lower. These pupils get more attention in class, they experience more warmth from the teacher and they get more room to show what they have learned. Through differential teacher behaviour the development of pupils of whom the teacher has high expectations is particularly stimulated which increases the differences between pupils in the classroom.

Differential interactions may interfere with the effects of proactive forms of classroom differentiation. For example working in ability groups, with the intention of convergent differentiating, can turn out to be divergent, as teachers translate their expectations into unconscious differentiation (through verbal and non-verbal interactions) favouring the high-performing pupils. With ability grouping the teacher explicitly expresses the expectations of the pupils and can trigger negative expectations for the weakest performing pupils. In this way, differentiation with convergent intentions can lead to divergent outcomes.

Reasons not to differentiate

Proposition 5: In order to achieve citizenship goals, social cohesion and integration, it is desirable not to differentiate.

Differentiation is a concept that is used mainly when it comes to the cognitive development of pupils. A major problem of differentiation is that it divides pupils. Ability grouping makes it difficult for pupils in different levels to meet each other. When ability grouping also runs along social-cultural lines then this differentiation makes it more difficult to contribute to social cohesion and integration in school and in society. Especially in a time of tensions between groups and populism and radicalisation cause increasing polarisation in society, it is important that children at school learn about, from and with each other. Children must learn how people differ from one another, but also how to be together and how to collaborate in a group with many differences. The school as a meeting place and as a mini-society does not ask for differentiation, but on the contrary to keep pupils together for as long as possible,

delaying selection moments, abolishing selective programs, and less thinking in levels. Emphasis on integration and social cohesion means that schools and teachers must be very hesitant to differentiate and work as much as possible in mixed ability groups. However, this is difficult to realise in a society that is strongly focused on individual achievements, in which mutual solidarity decreases and with increased competition for societal positions that increasingly depend on the level of achieved education (Davies & Bansel 2007; Labaree 2012).

The role of parents

Proposition 6: Parents contribute to more differentiation and more inequality of opportunities

Performance pressure is high. Children are pressurised to perform at the highest level, to excel, and to distinguish themselves from others (Jedema et al. 2014; Labaree 2012). Especially the high educated parents expect schools to differentiate. According to Terwel (2013), the demands of high educated parents are a main cause of the increase in tracked classes in Dutch secondary schools. Parents of children in the highest track of secondary school are more likely to send their child to a single-track school (gymnasium) than to a school offering a broader range of tracks with a larger diversity of pupils. High educated parents also choose selective programs and can pay for additional homework support and exam preparation for their children (Jedema et al. 2014). With those practices, these parents contribute to more differentiation and more inequality of educational opportunities. Those high educated parents, however, should not be blamed. It is a well-known reproduction mechanism that parents use their financial, cultural and social capital to ensure a good future for their children (Bakker et al. 2013; Bourdieu 1989). However, we can blame the education system. Due to the many choices, a differentiated education system and the pressure on pupils' performance, the operation of parents' capital is facilitated and it is possible that the inequality of opportunities in education increases instead of getting smaller (Ravitch 2010). Compensatory measures for children from lower social

backgrounds, such as early childhood education, and after-school programmes for disadvantaged children, are insufficient to reverse this trend. A critical re-orientation on our education system is needed to contribute to equal opportunities for all children.

A research agenda in the context of socio-cultural backgrounds and differentiation in education

With future research in the context of the socio-cultural background and differentiation in education, I want to contribute to this re-orientation. This research relates to three themes.

- 1) First, I want to support schools and teachers in formulating a vision on how to deal with differences between pupils, so schools and teachers can justify their position regarding the differentiation dilemma. What are the views and ambitions of schools and teachers when it comes to realising equal opportunities and to meeting the wishes and needs of all pupils in the school and class? How do schools and teachers account for their differentiation practices?
- 2) Second, I would like to give schools and teachers more insight into the divergent and convergent effects of their differentiation practice. It is important to research how teachers proactively and rationally deal with differences between pupils, but also how they differentiate unconsciously and intuitively. It is also necessary to see, in specific contexts, the effects of differentiation on the cognitive development, well-being and self-confidence of pupils with different socio-cultural backgrounds and on social cohesion in the classroom. How responsibly does the school or teacher deal with differences in the classroom?
- 3) I also want to help teachers gain insight into their attitudes toward pupils and how these attitudes work through their differentiation practice. In this context, Lieke Jager is currently conducting her PhD study on the perceptions of teachers in secondary education of their pupils and what these perceptions mean for classroom differentiation.

My ambition is not to explore these research themes with large-scale studies. I want to gain insight into the social effects of differentiation with small-scale in-depth studies, combining qualitative and quantitative methods.

The insights provided by this research can help the development of programmes to support teachers to deal with differences between pupils. I hope with this research to contribute to more justice in education.

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Notes

- 1 This track is called vwo, which provides pre-university education.

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