Raising the Bar
The Competencies of Specialists in Gifted Education

Proefschrift

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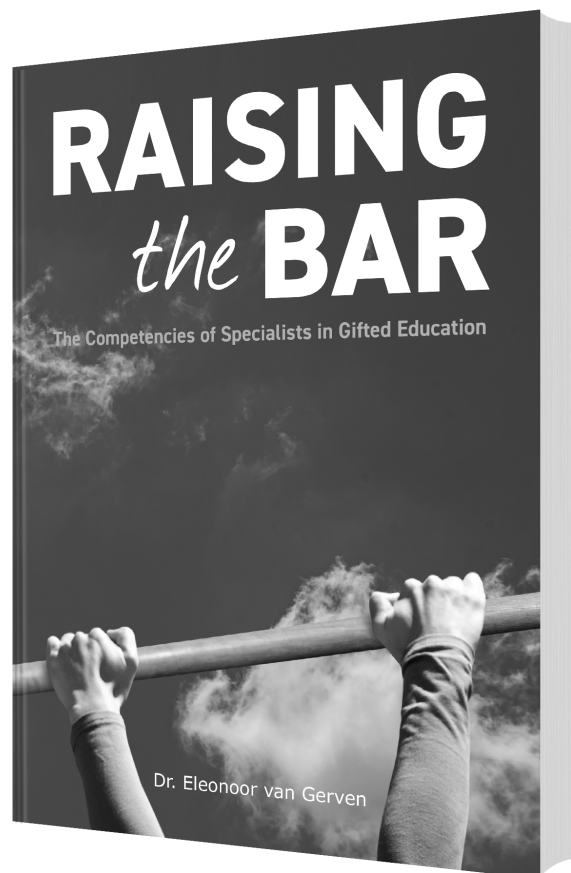**Doctoraatsjury**
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Dr. Eleonoor van Gerven

Colofon

Voor Eugenio

Die mij aanmoedigde om onredelijk te durven zijn en dat vol te durven houden.

"The reasonable man adapts himself to the world around him;
the unreasonable one persists in trying to adapt the world to himself.
Therefore all progress depends on the unreasonable man."

George Bernard Shaw

Content

1 General Introduction

1.1 Professional and Social Relevance

In my daily practice as a teacher educator and as a developer of continuous professional development for teachers in the domain of gifted education, I need a theoretical underpinning to the curriculum that I teach. I approach education from an inclusive perspective.

According to Dutch and Flemish law, teachers are expected to deliver education that stimulates all the students in their classroom to reach for their zone of proximal development. Just like any other student, gifted students are entitled to be educated at that level of challenge; not only academically, but also in other domains of human development. Therefore, gifted students are no exception to what should be considered a teacher's core task. As a teacher educator, it is my job to prepare teachers for that task. Hence, for me, it is important that teachers, graduating from the courses that I teach, feel competent in organising education for gifted students within the context of a regular classroom and in integrating their education into the education of all the students at school.

The courses I teach, match the so-called Dublin Descriptors for higher education (Bologna Working Group on Qualifications Frameworks, 2005; European Commission, 2013). Indicators for competent professional behaviour can be deduced from these descriptors. Combined, these indicators underpin the framework for curriculum construction that I use to develop programmes for educating teachers into becoming specialists in gifted education.

The exit level for graduates of our programme "Specialist in Gifted Education" can be positioned at master's level. During the programme, we place a strong emphasis on a professional approach to evidence-informed teaching, underpinned by current educational theories. As I prepare these teachers for teaching in an inclusive context, interplay between theory and practice outside of the field of gifted education and theory and practice inside the field of gifted education is necessary in the programme itself.

Choices over the didactical approach to the programme are underpinned with different theories about learning and teacher education, that is, theories by Ambrose and Sternberg (2016), Biesta (2007, 2010, 2012, 2014, 2018a, 2018b), Hattie (2013), Korthagen (2004, 2017), Lunenberg et al. (2014), Marzano and Kendall (2007), Maslow (1954), and Vygotsky (1978). These theories offer a framework for both a social-creative constructivist didactical approach and the instructional strategies that encourage teachers to reflect on their professional behaviour. The educational objectives in this programme are based on Marzano and Kendall's New Taxonomy (2007). The strategies used, match the development of skills fit for education in 21st century teaching (European Commission, 2013). Encouragement of the reflective attitude and professional ethical behaviour is supported by working with Korthagen's concept of core reflection (King & Lau-Smith, 2013; Korthagen, 2017) and Biesta's concept of pedagogical virtuosity (Biesta, 2012).

As soon as teacher education programmes focus on the development of a specialism, content-bound educational objectives – aimed at developing that specialism – become mandatory. Research into the theoretical context of gifted education, reveals a broad spectrum of educational needs that are considered to be specific to gifted learners (Bakx et al., 2016; Dai & Chen, 2014; Haenen & Mol-Lous, 2014; Johnsen et al., 2017; Kreger-Silverman, 2013; Plucker et al., 2017; Subotnik et al., 2011; Tomlinson et al., 2009). Based on these educational needs, it is assumed that specific knowledge and skills are required to be a specialist in gifted education (Johnsen et al., 2016). Research into the understandings of stakeholders in the USA, undertaken by Johnsen et al. (2016) to underpin the standards of the NAGC (National Association for Gifted Children), confirms this assumption.

The supposition that teachers need to develop different competencies if they want to educate gifted students successfully is supported by professional communities already working with gifted students (Johnsen et al., 2016).[1] In The Netherlands and Flanders, teachers often express how they would be happy to work with gifted students, if only they knew how to work with them. They state that, although they are fully qualified teachers (graduating at bachelor's degree level), they do not feel qualified to work with this specific group of students (Haenen & Mol-Lous, 2014; Houkema et al., 2018). This raises questions: in what specific aspects of gifted education do these teachers experience a lack of competency, and what would they need to feel enabled to respond in a way that matches the educational needs of gifted students in the context of current educational paradigms?

Between 1997 and 2007, I trained approximately 1000 teachers in short teacher education programmes on gifted education. Before they enrolled in these programmes, they completed a submission form and stipulated the knowledge and skills they wanted to acquire during these courses. In 2008 this resulted in a "Knowledge and skills list", published as an appendix in *Slim beleid*, a practitioner's book for teachers and school management in how to design and implement school policy on gifted education (van Gerven, 2008). In this book, tasks that emerged logically from developing and implementing school policy on gifted education were matched with the competencies mentioned in the "Knowledge and skills list". Stepping stones for school policy were analysed based on a literature study of current literature at that time (Eyre, 2001, 2007; Heller et al., 2000; Renzulli, 1985; Sternberg, 2002). In doing so, those competences that were distinguished were presented thematically.

In 2009, I started developing the teacher education programme "Specialist in Gifted Education" and reanalysed the existing data. The data were organised into seven domains and combined with the seven domains of competencies underpinning the regular professional standard for teachers. This combination resulted in a matrix with 49 competencies specific to specialists in gifted

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[1] In January 2020, the World Council for Gifted and Talented Children installed a subcommittee to prepare a position paper on teaching standards for gifted education. Expert delegates from 17 countries hold positions on this committee.

education. For every competency, knowledge and skills indicators, taken from the original "Knowledge and skills list", were described, making it possible to assess whether or not a competence is developed. In 2011, the latest version of this matrix was published in *Begaafd begeleiden* (van Gerven & Hoogenberg, 2011).

Characteristic of these competencies is that they are contextually bound and seen as changeable over time (Ceulemans et al., 2016; Lunenberg et al., 2014; Merriënboer et al., 2002). In 2018, I concluded that it was time to stop and explore how the idea of the existing matrix dating back to the timeframe 2008-2011 should be adjusted or maybe even reinvented. My urge to do so was ignited by the impact of changes that I had observed in Dutch and Flemish education in general and developments in gifted education in particular. A new matrix would contribute to a well-balanced curriculum for different teacher education programmes about gifted education in general and for courses to become a Specialist in Gifted Education in particular.

1.2 A Brief Context of the Position of Giftedness in Dutch and Flemish Education

According to studies on giftedness and gifted education, gifted students have specific educational needs, resulting not only from their academic abilities but also as the consequences of particular characteristics (Freeman, 2010; Gagné, 2010a; Kieboom & Venderickx, 2017a, 2017b; Kreger-Silverman, 2013; Leavitt, 2017; Peters et al., 2014; Pfeiffer, 2008; Plucker et al., 2017; Subotnik et al., 2011). Perspectives on what these characteristics are and how they influence educational needs vary enormously (Dai & Chen, 2014). It is up to the classroom teacher to meet the needs of every student as effectively as possible within the context of an inclusive classroom (Florian & Black-Hawkins, 2011). This includes the needs of gifted students (Dekker, 2014a), but how this is done depends on how schools and scholars define these needs and define gifted education (Dai & Chen, 2014; Morris Miller, 2008).

In the Dutch and Flemish framework for inclusive education, the structure of a pyramid represents different levels of student support (Ainscow et al., 2006; Audenaert et al., 2015; Clijsen et al., 2007). This pyramid is regularly represented in three layers. However, due to the way schools have organised their student support system, it can best be presented in five layers (van Gerven, 2015). The base of the pyramid represents the largest group of students: based on the similarity of their needs, these students can be clustered in such a way that the teacher can meet their needs through the standard curriculum and standard instructional and pedagogical strategies, without additional interventions or support. The top of the pyramid represents the smallest group of students: compared to the needs of other students, students at this level of support have additional educational needs. In current Dutch and Flemish educational practice, these are often students exhibiting (characteristics of) learning disabilities or developmental problems. In this pyramid of support, the education of gifted students is positioned between those top and bottom layers at levels two, three or four (van Gerven, 2015) (see Chapter 2, Figure 4).

According to the way educational needs are clustered and instructional strategies are used, meeting the educational needs of gifted students is seen as different from the regular strategies used for students at level one (Bakx et al., 2016; Houkema et al., 2018; Kuipers, 2017; Schrover, 2015). However, complex interventions are not necessary to meet the needs of gifted students in all cases (Bakx et al., 2016; Janson, 2017; Roberts & Inman, 2015; Tomlinson et al., 2009; Winstanley, 2010). If possible, classroom teachers respond to these needs themselves (level two) without the additional support of the (special) educational needs coordinator ((S)ENCo) (Peters & Oveross, 2020). Identically to other students, however, there are gifted students whose educational needs exceed the meaningful responses that can be provided by their teacher at level two. The needs of these students become more complex, making it reasonable to assume that the regular classroom teacher requires support to meet these students' needs. For those students and their teachers, at levels three or four, support is provided. For intervention at these levels, that is, special projects or part-time peer-group education or on-the-job coaching for teachers, the specialist in gifted education becomes involved.

The organisation of the support structure in Dutch and Flemish education is such that it creates a situation where there are hardly any educational facilities for gifted students with additional needs that exceed level four, and who do not belong to the group of so-called twice-exceptional learners. Giftedness in itself is not a classification as mentioned in the DSM-5 and, therefore, is rightfully placed outside the area of special educational needs or learning and developmental disorders. Full-time segregated education for gifted students in The Netherlands and in Flanders is not included at the top level of the pyramid of support. That level is reserved for students with specific learning or developmental disabilities. This puts full-time segregated education for gifted learners outside the formal organisation of this support structure. However, in The Netherlands, as a response to the heavy task load of regular classroom teachers, schools are increasingly looking for opportunities to create full-time segregated settings for gifted students to meet their educational needs. This development is seen by some as contradictory to the policy of inclusion as presented by the Dutch government and as described in Dutch educational law (Wet passend onderwijs, 2012). As a result, gifted students and the question of how to address their educational needs in an inclusive environment now has higher priority on the educational agenda. Remarkably, coinciding with an increasing number of opportunities for full-time segregated education for the gifted (Daeter, 2012), there has been a noticeable development, where school boards who have provided these services for some years have concluded that education for gifted students should become more integrated into regular education again. These boards have concluded that the number of students enrolling on full-time programmes is increasing rapidly and that consequently the available resources are not sufficient. As the available resources will not increase, the number of students has to decrease, and a two-step strategy has been chosen. The first step is to set higher admission standards; the second step is to increase the professional skills of regular classroom teachers. Sometimes there is even a third step, which excludes twice-exceptional students from being admitted into

these segregated groups. To meet the needs of these students, there is sometimes the additional solution of separate full-time segregated programmes for twice-exceptional students, which match the structure of the pyramid of support at level five. Currently, this option is being increasingly explored by local school councils.

In Flanders, gifted education has only recently been explicitly mentioned on the educational agenda (Vlaamse Regering, 2019). Segregated schools for the gifted are not formally accepted, although there are initiatives for segregated schools. The legal construction is almost identical to that of The Netherlands, that is, regular schools set up special classes for full-time gifted education. In Flanders most interventions can be placed at levels two and three in the previously described pyramid of support: either implemented by classroom teachers or implemented in the context of special projects or part-time peer-group education.

The pyramid of support can only exist if the bottom layer is widespread and carefully anchored in the educational system in general (Ainscow et al., 2006). This means that, for effective student support, the centre of gravity must be placed at the base layer of the pyramid, directly in the hands of the classroom teacher. Consequently, when the intensity of student support that is needed to meet a student's educational needs cannot be provided at the originally designated level of support, it has to be provided by a professional at the next level (Peters & Oveross, 2020). Alternatively, the professional at the next level provides specific teacher support, in such a way that the gifted learner is still served by the regular classroom teacher in the regular group (Amsing et al., 2009; Kuipers, 2017; LBBO, 2019; Pameijer & van Beukering, 2007; van Gerven & Hoogenberg, 2011; van Meersbergen & de Vries, 2017). In situations where there are too many cases calling on the top levels of the pyramid and basic support is insufficient for a larger group of students, the shape of the pyramid changes into the shape of a fir tree, and the support system becomes unstable and feeble (van Gerven & Weterings-Helmons, 2014).

In daily practice in education, it is easy to recognise this disproportionate pressure at the top levels of the pyramid. Both teachers from in-school special programmes and peer groups of teachers working in programmes organised at council level, report that a large percentage of the students who enrol in their programmes could be relatively easily catered for in the regular classroom (Houkema et al., 2018). Regular classroom teachers nominate these students because they feel that the educational needs of these students differ so much from what they are capable of offering in the regular classroom, and that this justifies the student's participation in these programmes. There appears to be a gap between the needs of gifted students and the services that regular classroom teachers can offer them (Houkema et al., 2018).

In The Netherlands, this has resulted in increasing governmental pressure to bring in gifted education at a higher level of services. Schools feel the pressure of the Dutch school inspectorate to get high results for as many students as possible. Schools are experiencing an increased focus on results aimed mostly at the domains of language arts and spelling, (comprehensive) reading and maths (Blok et al., 2013). Excellence has become a keyword. Education is supposed to

aim for excellence, and the government has made the concepts of excellence and giftedness mutually exchangeable (Dekker, 2014b; Slob, 2018a, 2018b).

1.3 Objectives

This research project aimed to develop a set of coherent recommendations offering a framework for the professional standards of specialists in gifted education. This framework is presented as a competency matrix that can be used within the context of the inclusive approach of primary education in The Netherlands and Flanders. In The Netherlands and Flanders, a specialist in gifted education is likely to have core tasks based in levels two, three and four of the pyramid of support. These tasks can best be compared with the tasks of special educational needs coordinators (SENCo). Therefore, the matrix should match the competencies needed at these levels. This implies that the matrix should not only aim for competencies in educating gifted learners, but also for competencies that support teachers of gifted learners. This is a similar approach to that used for other educational specialists such as SENCo's, specialists in reading, specialists in maths, and specialists in complex behaviour and learning disabilities (LBBO, 2019, n.d.-a). The matrix can be used by institutes for teacher education to design courses for gifted education both at undergraduate and postgraduate level. The matrix can also be used by a specialist in gifted education as a framework or outline for professional behaviour, and, as such, the matrix can be used as an instrument to assess the professional competences of current and future specialists in gifted education.

To translate the competency matrix into daily practice in education, I consider it necessary to have a set of concrete examples of knowledge and skills. These examples are indicators of competent behaviour, and a specialist in gifted education can use these indicators to demonstrate how their professional behaviour and attitudes can be recognised in their actions. Indicators of competences in knowledge and skills can be deduced by analysing existing international literature within and outside of the field of gifted education. In this systematic literature review, empirical research is considered to be equally relevant as the more practically based literature the international community of practitioners uses to design their strategies for gifted education. Teachers of the gifted, specialists in gifted education, and parents of gifted children use the more practically based literature to form their opinion on what they consider as good for gifted education and hence, what are relevant knowledge and skills for specialists in gifted education. To obtain the necessary and widespread support, this research is completed with an empirical section where stakeholders of gifted education are asked to select what, in their eyes, are the most relevant and important examples of competent professional behaviour.

Both the competency matrix and the matching indicators for knowledge and skills are not intended to be used unidirectionally or as a simple checklist. Hence, the empirical part of the research is not focused on the development of a list usable with a Likert-like scale. The research aimed for the development of a knowledge and skills profile that, according to the stakeholders, provides the best match for professional behaviour and approaches of the specialist in gifted

education within the current overall educational paradigms.
Competencies and indicators are stipulated, that offer a specialist in gifted education the professional and discretional freedom to mould these indicators to match both the context within which they are applied and the individual specialist's perspective of giftedness. As stated before, the Dublin Descriptors form the underlying framework for professional behaviour in education. Professionals should be taught to form their own critical and professional opinion on what is a good perspective of gifted education. Therefore, it is out of the question to direct and prescribe what is to be seen as *the* right perspective of gifted education or the *best* interventions.

1.4 Research Question

Based on the previously described context, the main question of this research is:
> *Which competencies are necessary to provide gifted education that meets the needs of gifted students in an educational environment in The Netherlands and Flanders, which knowledge and skills are representative of these competencies, and what is needed to develop these competencies?*

This main question can be divided into five partial questions.

1. Which developments and shifts in educational theories in The Netherlands and Flanders influence the professional context of a specialist in gifted education?
   a. Which developments and shifts in educational theories in The Netherlands and Flanders influence the professional context of primary school teachers in general?
   b. How can we currently position gifted education in The Netherlands and Flanders?
   c. Which specific topics are, therefore, recognisably of influence on the professional actions and approach of the specialist in gifted education?
2. Which developments in The Netherlands and Flanders regarding teacher education influence the professional actions and approach of the specialist in gifted education?
   a. What should be reflected in the educational level of the specialist in gifted education and how does this match the international demands for teacher education to which both The Netherlands and Flanders are committed?
   b. Which factors in current perspectives on teacher education influence the professional standards that can be set for specialists in gifted education?
   c. Which professional standards of teachers in general, interact with the professional standards set for specialists in gifted education?
   d. What are the criteria which should be met when stipulating a competency, and how can these criteria form a framework for assessing the quality of the competencies?

3. Which knowledge and skills for the specialist in gifted education are pointed out by the international professional community and international research on gifted education as essential for the optimal development of gifted students?
   a. What advice is available in international literature for the shaping of gifted education?
   b. How does this advice fit into the Dutch and Flemish perspective on education in general?
4. How can advice in international research be translated into the Dutch and Flemish educational context?
   a. What knowledge and skills can be deduced from international research on gifted education, considering the international educational standards for specialist teachers?
   b. How can these indicators be stipulated to meet the Dublin Descriptors for professional behaviour?
5. What knowledge and skills indicators are considered by Dutch and Flemish stakeholders as the most relevant and important examples of competent professional behaviour of the specialist in gifted education?
   a. Do different groups of stakeholders differ in their emphasis on specific indicators, and if so, what differences can be found?
   b. Are there noticeable differences between Dutch and Flemish stakeholders regarding their emphasis on specific knowledge and skills indicators, and if so, what differences can be found?

1.5 Outline of the Dissertation

This dissertation consists of three parts: (1) a wide theoretical and practical context for the matrix; (2) the actual construction of the matrix; and (3) overarching conclusions and recommendations.

In part 1 (Chapters 2 and 3), the theoretical context of gifted education in The Netherlands and Flanders and the theoretical context of teacher education in the Netherlands and Flanders are described. In doing so, I address research questions 1 and 2. Based on this theoretical context I build the outline for the new competency matrix.

In Chapter 2, the position of the education of gifted students in primary schools in the Dutch and Flemish educational system is explained using the context of five significant paradigm shifts in education. These paradigm shifts are not limited to The Netherlands and Flanders. Since the late eighties, these paradigms have determined the international discourse of perspectives on education. By clarifying the interdependency of these five paradigm shifts, the complexity of teaching as an occupation becomes visible. The stratification in the depth of interventions, arising from an internationally accepted continuum of support, makes it apparent that at each level of intervention other competences are required. This stratification does not change when it comes to educating the gifted. It merely creates a context for a specifically aimed development of competences in educating the gifted. Although the context of competence

development is described, it is not the purpose of this chapter to describe the specific competences at each level. It sketches the outline for the framework to develop the description of these competencies.

In Chapter 3, the need for a professional standard for specialists in gifted education is demonstrated. The context for this standard of professionalism is rooted in the European striving for high-quality education. In The Netherlands and Flanders, general teachers are educated at bachelor's degree level (level 6). Teacher-specialists and/or specialists in education are educated at master's degree level (level 7). As specialists in gifted education operate as teacher-specialists, then the prerequisite for this should be an initial teaching qualification, with additional studying at master's degree level to become a specialist in their field of expertise. We explore the demands that are conditional for teacher education at this level: the Dublin Descriptors, the notion of competence and a model for intrapersonal adaptation as the generic approach for teacher-specialists. The word "skilledge" is introduced to express the result of continuous contextual professional development for teacher-specialists. The necessity for a professional standard for specialists in gifted education influences the conditions of education of teachers in this domain of expertise. As a consequence, a professional standard for gifted education should reflect an integrated approach, combining both competence in giftedness and general teaching competencies.

Part 2 is based on an additional literature review study and an empirical study using a questionnaire to better understand teacher-specialists' understanding of the competencies of specialists in gifted education. The literature review study provides the content for the competency matrix and for the matching knowledge and skills indicator list. This provides the answers for research questions 3 and 4. The empirical study provides the data for answering research question 5. Chapter 4 describes the methodology used in this second part of the dissertation. Firstly, the outline for the theoretical review is described. The chapter starts with a description of the intended use of literature to construct the content for the actual matrix and the knowledge and skills list. It describes how literature selection took place and how a narrative review of literature completed the systematic review of literature. Secondly, the outline for the empirical research is described. In this part of the chapter, statistical approaches are described and the thresholds for relevant differences, statistical significance and practical significance are defined. Chapter 4 concludes with an analysis of the population of respondents participating in the conducted empirical research. It was decided to include the final competency matrix and the knowledge and skills indicator list into several appendices for Chapter 4.

Chapters 5-9 each focus on a different domain of the competency matrix. In each chapter the results of the literature review are first presented, then the data analyses of the empirical part of the research. This is the point where the most detailed level of data analysis, per competency of each domain and per group of stakeholders, is presented; displaying data within the context in which they were observed. At this level, conclusions could not be far-reaching. Trends could be observed, but conclusions can only be considered as transferable within a specific group of stakeholders and cannot be generalised about the wider

group of stakeholders or even to both countries. Each chapter comes with a separate appendix, including all the tables being used in that specific chapter. Chapter 5 focuses on the first domain of the matrix: theories of giftedness. Chapter 6 addresses domain 2: seeing the educational needs of gifted learners. Chapter 7 describes domain 3: understanding the educational needs of gifted learners. Chapter 8 addresses domain 4: meaningful responses to the educational needs of gifted learners. Chapter 9 describes the results for domain 5: assessing the responses to interventions in gifted education.

In Chapter 10, the overarching results of the empirical research are presented. General trends observed in the empirical data and reported in their respective chapters are integrated and analysed at a more superficial level. This offers the opportunity to draw conclusions based on an overview of the entire matrix and the complete list of knowledge and skills indicators.

In part three of this thesis, Chapter 11, theory and practice are integrated. In this chapter the results of the research are summarised and discussed, perspectives are offered on the limitations of these results, directions outlined for further research and implications for teacher education programmes are considered.