

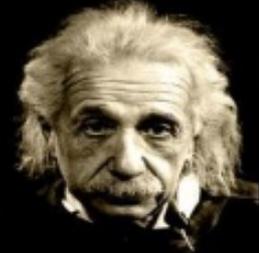


True education is to learn
how to think, not what to think.

Krishnamurti

**Insanity: doing the same
thing over and over again**

and expecting different results. ~Albert Einstein



*So you think you
can teach, eh?*

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Abstract

“The best teachers are those who show you where to look, but don’t tell you what to see.” A quote by A. Trenfor (n.d.), which was inspiring and true these past two academic years (2012-2014). The more I learned at Fontys OSO, the more I had to acknowledge that today’s Secondary Education does not match today’s students’ needs, let alone our highly gifted students (HGS). I questioned my own way of teaching and had to admit I did not show my students where to look, but told them what to see. I was not able to meet every educational need in class; were my colleagues? This made me think of the title of this research:

So you think you can teach, eh?

To be able to develop as an inspirational teacher, I had to change my view; I had to step out of my comfort zone and bring myself to my Zone of Proximal Development (ZPD) (Vygotski, 1997). HGS fascinate me, because I believe the way they need to be taught can enrich other students and teachers too; I changed my pedagogical attitude. I started to listen genuinely to my students, took everything they said seriously and tried to look at them as a person instead of being another member of another class. Because of my interpersonal development, students started to visit me during their breaks and told me their thoughts, their worries or very personal struggles; they know my door (room 053) is always open and they use it literally! This makes my job as a teacher priceless. In addition, I also changed my didactical way of teaching; they no longer work independently, but work in groups to be able to discuss topics, grammar and answers.

HGS were no public subject of discussion at my school; I had to change something for this special group of students, because HGS want to be heard too. I used my growth in interpersonal competency to listen to the Teacher Development Team (TDT) members as I do to my students. I used action research to share knowledge, gain awareness and examples of good-practice among my TDT, to whom I have been a counsellor in their quest to reach their pedagogical and didactical ZPD, so HGS are able to reach theirs. This has resulted in a successful research as far as the TDT and myself are concerned. All three members have



reached their ZPD and developed a different attitude towards highly giftedness. I, myself, have reached my ZPD being a counsellor/change-agent; I learned to look from a bird's-eye perspective and learned to use people's strength. I am not saying I am the best teacher, but I learned to show students and colleagues where to look, not what to see.

Keywords:

Counselling, Zone of Proximal Development, highly gifted students, Secondary Education



1. Introduction

Although this research paper must be written academically, it comes straight from my heart; great education never goes without emotions. As a teacher, one has to teach from one's inner soul; this is where intelligence, emotions and spirituality come together (Palmer, 2005). Students come into our classrooms from different backgrounds; teachers do not know how students left their home situation and what students are about to find when they go back (Gruwell, 2001). One has to make sure all students leave school as if they have been to a playground where it is fun to learn. When they leave, they must leave with more knowledge than they came with. Teachers (and school) are always responsible for the time spent; they have to make sure it is a good one, so students come back for more. Every student has the right to receive education that meets her personal needs (UNESCO, 1994), so do HGS.

1.1 Reason

To meet HGS' educational needs at my school, teachers need to be able to help them to their ZPD. The ZPD is reaching a level beyond one's capability at that particular moment with the help of others (Stuyf, 2002). To meet HGS' ZPD, we have to change our attitude and stop orating whole lectures during fifty-minute lessons. Some colleagues want to change, but feel unable to undertake any action due to absence of knowledge or perseverance. Although school offers a few extracurricular activities like U-talent or Cambridge English, HGS may not want to attend; it is on top of their regular curriculum and therefore not appealing. HGS follow the regular curriculum, but it hardly matches their educational needs. No wonder they sometimes get boisterous. It is time to challenge every student to her ZPD within our regular curriculum.

"It may not be the child who is underachieving: it may be the curriculum and its educators"

- Jim Delisle, 2009 -



1.2 Definition

To meet HGS' needs in the regular curriculum, there must be a view on how to meet those needs. Although the Ministry of Education has sent out the message it wants to focus on excellent students and HGS (OC&W, 2011), my school has not fully answered this request yet; there is no shared view on (highly) giftedness. My school is one out of two secondary schools in town and consists of two auxiliary branches; "S" holds eighteen-hundred students, "B" twelve-hundred students. I conducted this research at annex "S". My task is to create awareness among the management of the importance of meeting HGS' educational needs and the advantages it has for everyone. According to "Actieplan 2020" (Dekker, 2013), professionalizing a school is broader than letting individual teachers doing a refresher course. Zijlstra agrees on this and says; *"the very moment when each layer has achieved the same development, a learning organisation will arise, including a sustainable culture of improvement"* (2011). This means that when the school works according to data driven education, it needs to set high goals whilst working purposefully and systematically; one thrives best where high ambitions and expectations are set (Zijlstra, 2011). An equivalent of the ZPD is growth; throughout the school, posters show that "growth" is the school's mission, but is school capable to reach everyone's ZPD and therefore able to fulfil its mission?

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"It is wishful thinking to suppose that hard-working teachers without sufficient content knowledge, without special knowledge of gifted children, without time to plan programs, and with limited assistance from supervisory personnel, will be able to alter the educational situation for gifted children to any meaningful degree"

- Rogers (1980; 149) (Porter, 2011) -

The Netherlands wants to be part of the global top (OC&W, 2011); HGS and excellent students are therefore on the political agenda because of social and political understanding since they are important to stimulate the knowledge economy (Davelaar, Hubers, Snel, Hoogeveen, Poelman, & Boer, 2013). Setting standards high, makes students aim high



Research Paper

(Zijlstra, 2011). Based on the Wechsler scale (Orthopedagogiek, 2010) (figure 1), annex “S” is supposed to have eleven classes full of (=twenty-five) students who need different educational challenges than the average students. Porter (2009) says “it is a conservative definition that defines 3-5% of the population as gifted. This means that, by definition, there are as many gifted learners as there are children with learning disabilities” (p.4). Consequently, it is of social importance that HGS’ needs are met in the regular curriculum. Time has come to create opportunities to gain experience in this special field so that colleagues know what highly giftedness entails, since State Secretary Dekker really wants to set foot in Secondary Education on this matter, as he claims in his parliamentary letter (2013).

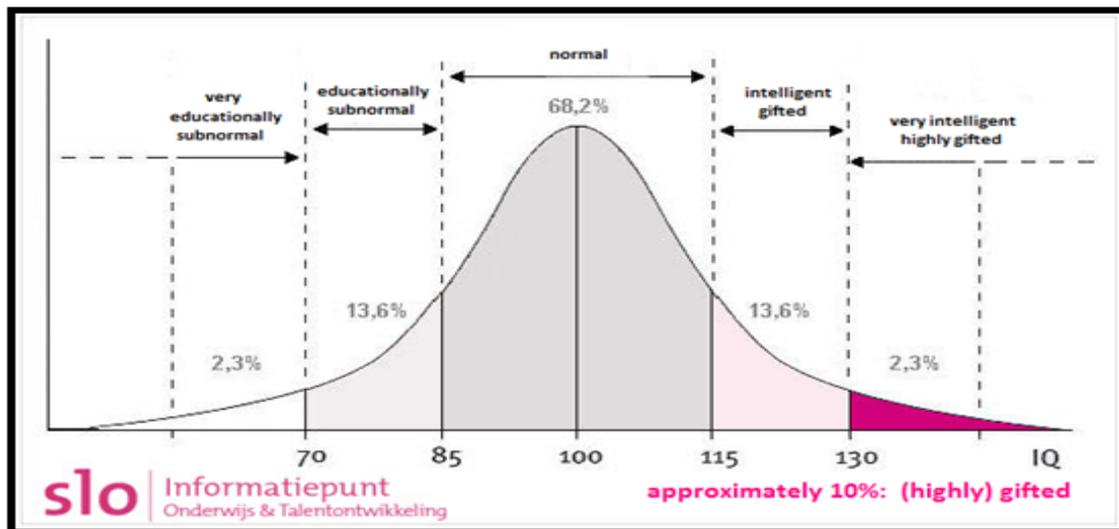


Figure 1: Reprinted from SLO – Informatiepunt Onderwijs & Talentontwikkeling (2014) <http://talentstimuleren.nl/thema/beqaafdheid/hooq-beqaafdheid/hooq-intelligentie>

School has given the opportunity to set up a Teacher Development Team¹. Although HGS are the main reason I started this research, they are my objects; the TDT and I as a counsellor are the research subjects. For the school to be able to fulfil its mission, I came up with a hypothesis: when colleagues are schooled properly about highly giftedness, they are able to meet every need in class. This has originated in the research question:

How can I, as a counsellor, let my colleagues reach their pedagogical and didactical Zone of Proximal Development, so HGS achieve theirs within my school’s reach?

¹ Personal details are available upon request.



To support the research question, it has led to the following two sub-issues:

- ✿ *Which interventions help me reach my ZPD as a highly giftedness counsellor?*
- ✿ *What do colleagues need to enhance their pedagogical and didactical skills in order to teach HGS?*

Having defined the reason and the definition, chapter two will outline the theory that is supportive in finding answers to the two sub-issues, which will result in an answer to the research question.

"Everybody is a genius. But if you judge a fish by its ability to climb a tree, it will live its whole life believing that it's stupid"

- Albert Einstein -



2. Theory

This chapter describes the examined theory necessary to underpin the interventions undertaken by all research participants to ensure this research works. The counsellor is given attention in some length, whereas the other is spent on the TDT's role. To visualize the theory, I designed a personal theoretical concept and baptized it the *"Holistic Zone of Proximal Development"* (Theeuwen, 2013) (appendix 2). Holistic means *"considering a whole thing or being to be more than the collection of parts"* (Hornby, 2010, p. 743) and is in interplay with one another. To be able to grow holistically, everyone's ZPD leads another to theirs. Vygotski (1997) affirms that *"the zone of proximal development defines those functions that have not yet matured, but are in the process of maturation – the "buds" or "flowers" of development rather than the "fruits" of development"* (p.33).

2.1 Change-agent

To mature the "buds" or "flowers" of all participants, a change-agent, who is a member of the school, helps accomplishing a paradigm shift in acknowledging excellence and highly giftedness (Nout, 2013). The online *Macmillan dictionary* (2009-2014) describes a change-agent as *"someone who is employed by a company or organisation to change the way in which it is organized and managed"*. Complementary, Fullan says that *"teachers as change-agents are career-long learners, without whom they would not be able to stimulate students to be continuous learners"* (1993). To organize and manage this research to stimulate students to become continuous learners, this paragraph describes which theory helps the counsellor to her ZPD as a change-agent.

2.1.1 Covey's eight in a learning organisation

To be able to function as a change-agent, Covey's eight habits provide clear steps to guide colleagues effectively into their ZPD (2010). Before the research, the change-agent is pro-active and informs colleagues about the research and its goal underpinned with an end in mind by means of a vision. To let colleagues physically match with the goal and its vision, the



counsellor has to put first things first and show the benefits of this research and what is in it for all participants to create a win-win situation; this creates a culture where colleagues are willing to learn (understand) and change (understood). This can be achieved by means of a TDT where insights are shared and gained to create synergy. The change-agent has to take care of herself and her TDT in the physical, social/emotional, mental, and spiritual areas; when the TDT members are not balanced, they cannot grow into their Zone of Proximal Development. Going beyond effectiveness leads to self-actualization, i.e. the ZPD. The online *Oxford Dictionary* says that self-actualization is “the realization or fulfilment of one’s talents and potentialities, especially considered as a drive or need present in everyone” (2014), which fits Vygotski’s theory about “buds” and “flowers”. When the “buds” and “flowers” are in bloom, it is time to inspire others to reach theirs.

To go beyond effectiveness, it is important to give participants an equal position to be able to reach their ZPD. This research starts from normative aspects, such as emancipation, participation and empowerment for all participants (Lange, Schuman, Montesano Montessori, 2011). Fullan and Hargreaves endorse these normative aspects:

“high-performing countries use professional capital in their approach to the teaching profession. They don't pick on, praise, or punish a few individuals. Instead, they get better and better by using a strategy that develops and retains all of their high-quality teachers and moves them all forward together” (2012, p. 2).

Although the TDT is a small part of the school system, it aims for development for all participants involved. Both Fullan’s conceptual model (as cited in Lange et al., 2011, p.117) and Senge’s learning organisation concept (Lieskamp, 2014) are “important for the provisional development of professionals for the maturation and renewing of (parts of) the system” (Lange et al., 2011, p.117) and help to move an organisation forward. An interpretation by the researcher of the similarities between both models is shown in figure 2.



Fullan (2001)	Similarity	Senge (2001)
Understanding change	Realization of personal competencies	Personal mastery
Moral purpose	Direction for (inclusive) education	Mental models
Coherence making	Become owner of shared views through critical reflections	Shared vision
Knowledge, creation and sharing	Knowledge development through peer-reviews	Team learning
Relationship building	Working interdisciplinary to become a holistic entity	System thinking

Figure 2: Interpretation of coherence between Fullan’s conceptual model and Senge’s learning organisation concept.

2.1.2 Solution-focused techniques

“Words call forth effects and are the universal means of influencing human beings. Therefore let us now underestimate the use of words.”

- Sigmund Freud, 1920 (Cauffman, 2011) -

Using solution-focused techniques, which stimulate efficient intercourse (Cauffman & Dijk, 2011), helps moving a learning organisation forward. The art of using solution-focused techniques is to listen genuinely and let others use their strengths. Cauffman and Dijk (2011) are convinced that *“appealing questions stimulate one to self-control; it challenges to optimize one’s performances and offers room for individual learning capability”* (p.199). Focussing on solutions generates an upward spiral, whereas focussing on problems generates a downward spiral. The counsellor’s task is to focus on solutions using the TDT members’ strengths as sources of power to enhance them to their ZPD. Finding the TDT members’ strengths is possible when every member has the possibility to participate



equally; no one is inferior to another. Change is possible and will happen eventually, in small steps, as long as one keeps a goal in mind. Therefore, scaling questions are helpful; they visualize and measure a TDT member's development and differentiates one's view (Cauffman & Dijk, 2011).

2.2 The TDT

Since teamwork (Helanus, 2013) has proven its effects and lifts all members to their ZPD, a TDT was created. A TDT consists of teachers of the same or close subjects, who work collectively to renew or improve education (UT, 2014). Meeting HGS' needs is new to the TDT members; peer-reviews are therefore a solution, which fits best to learn from each other's strengths, experiences and insights. This paragraph describes which theory is needed to bring the TDT members to their Zone of Proximal Development.

2.2.1 A "tasc" for a team whilst using Kolb in a triple looping

Simultaneous use of the T.A.S.C. wheel (Thinking Actively in a Social Context) (Gerven, 2008; Wallace, 2010) and the T.E.A.M. learning principles (Together Everyone Achieves More) (Helanus, 2013) is a means to an end. Using the T.A.S.C. wheel means listening to each other's ideas or views, discussing it from where new insights on one's actions are received. Everyone learns and achieves a higher level; this leads to reflection. Reflection is seen as one of the best meta-cognitive methods to reach a next scaffold, i.e. ZPD (Marzano & Miedema, 2013). To reflect upon pedagogical and didactical skills improvement, triple loop learning (Schop, 2013) and Kolb (Thesis, 2013) are helpful. Svinicki and Dixon (1987) underpin the importance of using Kolb's reflective cycle and wrote why teachers do not use more alternative methods than the formal lectures:

"there are many reasons for reluctance like time pressure, familiarity and comfort with the standard methods and fear and failure. An additional and perhaps more subtle source of a limited approach to instructional methodology could be the absence of theoretical framework for selecting and organising classroom activities to enhance learning" (p.141).



Whereas Kolb's reflective cycle breaks the vicious circle and reflects upon how lessons are designed, triple loop learning (Different Kinds of Learning (Loops of Learning), 2014) bears the normative and ethical aspects of these lessons in mind by means of three questions. Figure 3 presents Kolb and triple loop learning as interpreted by the researcher. Combined, they lead to a ZPD.

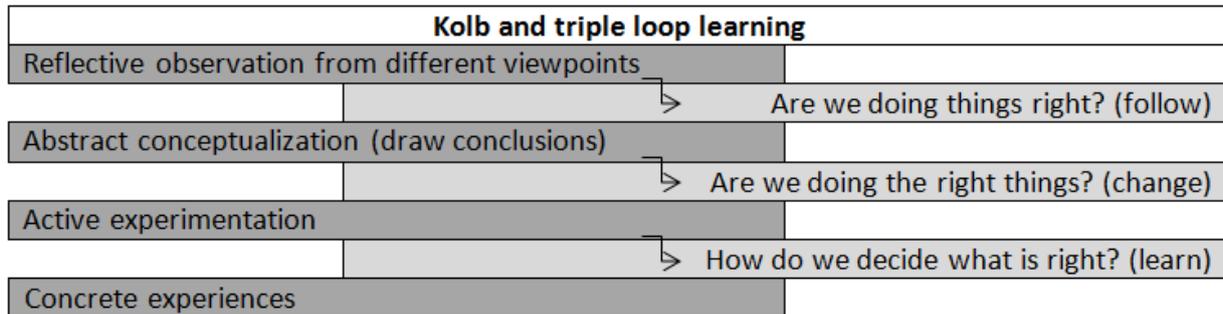


Figure 3: Kolb and triple loop complement one another as interpreted by the researcher.

2.2.2 Fundamentals

To be able to come to a ZPD, Maslow affirms that basic needs have to be fulfilled in a particular order to reach self-actualization (Nieuwenhuis, 2010). In 1985, Deci and Ryan (Ploeg, 2014) already wrote about basic needs to motivate people, established in three fundamental pillars: autonomy, competence and relationship; all clearly explained by Stevens (2008).

- 👤 **Autonomy:** one is given room to decide upon autonomous choices to create one's own learning curve and be responsible for it;
- 👤 **Competence:** one is challenged and this challenge matches one's knowledge;
- 👤 **Relationship:** there is a bond between all members of the school; they listen, and trust one another.

Whereas Maslow speaks about five basic needs, Deci, Ryan and Stevens speak about three; nonetheless, they complement one another. The common factors between all are love and belonging in a relationship; it can work either satisfactory or dissatisfactory. If there is neither love nor belonging, it works dissatisfactory (Herzberg, 1970, as cited by Nieuwenhuis, 2010); there is no safety or common ground to grow from; one might feel



physiologically unbalanced. Alternatively, if one feels physiological unbalanced, there is no safety from where one can neither love nor belong. If love and belonging in a relationship work satisfactory, one is surer and becomes more competent from where esteem can grow; one is able to act autonomously to develop self-actualization from where a next scaffold can be reached. A visualisation of how the fundamentals complement one another is shown in figure 4.

Maslow	Herzberg	Stevens / Deci and Ryan
Self-actualization	Satisfiers	Autonomy
Esteem		Competence
Love/belonging	Satisfiers and dissatisfiers	Relationship
Safety	Dissatisfiers	
Physiological		

Figure 4: How Maslow, Stevens, Deci and Ryan complement one another through Herzberg.

2.3 Highly giftedness

For the TDT to be able to help HGS' to reach self-actualization, i.e. their ZPD, this paragraph gives a brief introduction into highly giftedness. Furthermore, it describes which interventions can be used to mature the HGS' "buds" and "flowers". In the Netherlands, "thirty-three percent of the teachers in Primary Education and fifty percent of the teachers in senior general Secondary Education and university preparatory education do not attune their instructions to the differences between students" (Zijlstra, 2011). Teachers are aware of the differences between students (Davelaar et al., 2013), but feel uncertain teaching different levels in one class during fifty-minute lessons.

2.3.1 From Galton to Gagné

Many have already explored the fields of (highly) giftedness into detail and have come up with a definition. This definition has developed from Galton's late 1900s "Intelligence is



related to “keen” senses and is largely hereditary” to Gagné’s late 2000s most-used definition *“the child progresses from giftedness (high potential) to talent (high performance) through the learning process, assisted by intrapersonal and environmental factors”* (Gross, MacLeod & Pretorius, 2007, p.2). Gagné identifies the problem of Galton’s original definition: a student might be as bright as she is clever; if not provoked, her intelligence will neither be activated nor developed. Webb, Amend, Gorer and DeVries (2013) say that time is largely absorbed by students who have disorders or learning disabilities, but can be counter-argued by Porter’s (2009) conservative definition. In conclusion: time and attention must be equally divided to include all students. It is therefore important that HGS are taken to their ZPD too.

2.3.2 Differentiated integration of Bloom and Gardner

To be able to reach the ZPD, a teacher has to provoke HGS’ intellect to go beyond their present capability to activate and develop intelligence; HGS’ attitude in class seem deceptive. Anderson and Krathwohl’s (2001) revised Bloom’s taxonomy is widely used and is helpful to develop HGS’ high order thinking skills (analyze, evaluate and create). This taxonomy is set apart into two dimensions: the knowledge dimension and the cognitive process dimension. Whereas the cognitive process dimension covers steps of complexity (from remembering to creating); the knowledge dimension goes from factual to abstract. Assembled, they represent a learning objective (Heer, 2011; Theeuwes & Heer, 2013) (appendix 4).

Gardner’s (2013) multiple intelligences, which consist of six types of intelligences (linguistic, logical-mathematical, musical, intra-personal, inter-personal, bodily-kinaesthetic and spatial), combined with Bloom’s revised taxonomy, in which students “climb” in six steps from shallowness to meta-cognition, has resulted in an integration matrix (Heacox, 2002) (appendix 5) to let students excel at a level that fits best within their frame of reference. This means that differentiation in the classroom is needed and possible to professionalize the regular curriculum to a more meaningful degree for all students, including the HGS (Gross et al., 2007, p.11).

2.4 Reflexive?

The regular curriculum does not meet HGS' needs yet. To change or improve the TDT's interventions, Van Strien's regulating cycle is used, which "starts from the actions of the professional" (Lange et al., 2011, p.41). The cycle consists of five steps (problem, diagnosis, plan, intervention, evaluation) and reflects upon the process and outcome. Data driven education asks reflection upon the process involved (OC&W, 2011). The PDCA cycle (Mind Tools, 2014) continuously improves the research to reach the goal set. Figure 5 shows both in coherence, linked with the research itself.

Van Strien	PCDA	In practice
Problem		HGS' needs are not met in the regular curriculum.
Diagnosis		Colleagues barely recognize HGS, because they fail awareness, knowledge and with that: experience to teach to HGS' needs.
Plan	Plan	Writing a research proposal.
Intervention	Do	Doing research whilst presenting mini master classes to gain knowledge and create awareness, implementation of a design to help colleagues to meet everyone's educational needs and TDT meetings to serve as peer-reviews by means of reflection.
Evaluation	Check	Do the interventions help the TDT to meet everyone's educational needs, including the HGS?
	Act	Adapt goals and start a new cycle.

Figure 5: Van Strien's reflective cycle and the PDCA cycle in practice.

All theory has been discussed as far as the change-agent, the TDT and highly giftedness are concerned; chapter three will outline the methodology used.



3. Research methodology

Hypothetically, colleagues, when schooled properly, are able to let HGS reach their ZPD without losing sight of other students. This hypothesis is inductive; the conclusion drawn is based on a certain probability (Lange et al., 2011). It is likely that all TDT members move to their ZPD, but it depends on the interventions undertaken by the counsellor and the willingness of the TDT members to change their view and actions. It can also be deductive since the hypothesis in this research is tested to find out whether the theory is supportive and leads to a synthesis for future knowledge-construction. To underpin this research, this chapter describes which paradigm and strategies are used; an overview of the research is shown, followed by an explanation of methods and sources, who is involved and how reliability, validity, triangulation and ethical aspects are dealt with.

3.1 Research strategy and paradigm

Considering the school's gap in its curriculum and the absence of a shared view on highly giftedness, action research will be used. Action research consists of a research part and an action part. The purpose of this research is to improve or renew practice through interventions (Kallenberg, Koster, Onstenk & Scheepsma, 2010; Lange et al., 2010). To improve or renew practice, a critical-emancipatory research paradigm is used. This paradigm goes beyond everything else and is embedded in praxis, i.e. interventions, which is inspired through reflection and strives for emancipation, participation and empowerment of the TDT and the counsellor (Lange et al., 2011). To put the school's mission into a verb, it is desirable to look critically at how we design education for HGS.

3.2 An overview

The sub-issues form a partial entity of the school's gap in its curriculum. To be able to answer the research question legitimately, an overview is presented in figure 6.



	Sub-issue 1 (counsellor)			Sub-issue 2 (TDT)		
Group	Researcher, two language teachers and SEN co-ordinator					
Method	Questionnaire (Interventions inspiring colleagues to participate)	Three TDT meetings (narratives)	Questionnaire (How did the counsellor function?)	Questionnaire (What does the TDT know about highly giftedness?)	Questionnaire (What counselling do they need?)	Three TDT meetings (narratives)
Data	Quantitative	Qualitative	Quantitative	Quantitative	Quantitative	Qualitative
Moment of acquisition	Before research - week 45 + 5	During research - weeks 7, 10 + 12	After research - week 12	Before research - week 45	Before research - week 5	During research - weeks 7, 10 + 12
Analysis	Manually put in diagrams	Transcribed, drawing conclusions and adaptation design	Manually put in diagrams and put text in boxes	Manually put in diagrams	Manually put in diagrams	Transcribed, drawing conclusions and adaptation design

Figure 6: An overview of the research methodology.

3.3 Research group

The TDT consists of four members: two language teachers and the counsellor. Since the means of peer attention to meet HGS' educational needs are a university preparatory education level and a few extracurricular activities, the decision was made to invite the Special Educational Needs (SEN) co-ordinator too. Although she is not able to implement any interventions as far as teaching is concerned; she is able to cover a broader and different area within the organisation, being the link to the management. The TDT members are motivated to change their attitude towards HGS; they all voluntarily participate to aim at development possibilities for all students, our school and themselves.



3.4 Triangulation, reliability and validity

Triangulation means that the same phenomenon is studied and underpinned with various methods or theoretical views (Lange et al., 2011); also Schuman et al. (as cited in Lange et al., 2011) advise to use different research methods next to each other. Literature, questionnaires, TDT meetings, and the design itself are used to underpin the triangulative aspect. The design supports the TDT in developing lessons for inclusive and meaningful education; analysis of data of the questionnaires and transcriptions of the TDT meetings underpin the sub-issues and the research question. *“When triangulation is goal-oriented and carefully used, it usually leads to bigger accuracy and reliability of the research”* (Lange et al., 2011, p.27).

Reliability means that a method, which is used repeatedly under the same circumstances, shows the same results (Lange et al., 2011). Although narratives (TDT meetings) score low on reliability, it is the most authentic way to assess the TDT members’ counselling needs. Questionnaires are reasonably reliable, but have a lower score on validity.

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Validity measures what the researcher thinks or says she measures (Lange et al., 2011). If this research succeeds, it is not given that it will work in other schools too. It is very likely that it might work elsewhere; it needs to fit the culture of the organisation. One should replicate the research based on the school’s information; therefore, external validity is impossible. Internal validity is more likely, since the interventions, based on the school’s gap, will find answers to the research question (Lange et al., 2011). Since questionnaires and narratives follow the goal of this research and are authentic ways of gaining information, this research can be considered reliable and valid.

3.5 Research methods and interventions

Action research is divided into two sections (Lange et al., 2011); the research part consists of studying literature, writing a plan by means of a research proposal, administering questionnaires (appendix 7) and doing the research itself; the action part consists of



interventions like mini master classes (appendix 8), an implementation of the design (appendix 6) and TDT meetings (appendix 9).

Although questionnaires are somewhat shallow (Lange et al., 2011); they quickly measure the needs and gaps the TDT experiences, how they experience(d) differentiating in pace and content and how the interventions undertaken by the counsellor are received. Questionnaires are a reliable way to collect unambiguous data, which is transferred into diagrams (Kallenberg et al., 2010; Lange et al., 2011) (appendix 10). A questionnaire is administered to find out whether the counsellor's role is helpful and valuable in reaching the TDT members' ZPD. Since the questions used are sensitive to socially desirable answers, empty spaces are provided to give extra information.

The five mini master classes (Theeuwes, 2013), developed and presented by the counsellor, serve as a theoretical foundation in knowledge-sharing and create awareness for HGS' beneficial reasons. They also serve as a foundation to implement the TDT members' interventions correctly by means of the design, which subsequently serves as a foundation for the TDT meetings.

The TDT meetings (narratives) are in-depth stories and serve as mid-research reviews, which follow up questionnaires (Kallenberg et al., 2010; Lange et al., 2011). Since TDT meetings empower its members (Lange et al., 2011), they also function as a learning organisation (Fullan & Hargreaves, 2012; Lieskamp, 2014) by sharing theory, examples of good-practice and make one think of views; these meetings are necessary to continue the TDT's development by giving direction to emancipative and participative research to ensure validity. During three TDT meetings, the theory of the mini master classes and the implementation of the design will be discussed through interventions by the counsellor such as T.E.A.M. learning principles (Helanus, 2013), the T.A.S.C. wheel (Wallace, 2010) and solution-focused techniques (Cauffman & Dijk, 2011). In addition, examples of good-practice and less successful stories will pass in review. The design will be introduced and implemented as an intervention to help the TDT members design meaningful lessons.



3.6 Ethics

This paragraph describes how the six principles of ethical aspects for practice-based research are adhered to. These applied ethics mean there is an ethical reflection on practice-based research within the framework of the Master Special Educational Needs (SEN) (Boerman, 2008). The Code of Conduct (Andriessen, Onstek, Delnooz, Smeijsters & Peij, 2010) can be found in appendix 13.

1. Trust, deceit and self-deceit

Potential participants received a clear explanation of the goal and view of the research via mail (appendix 11). They have again been informed of the goal as introduction to the questionnaires (appendix 7). All research methods have been carefully picked by means of Critical Friendship; Critical Friends (CFs = teachers and fellow students) have been asked to cast a critical eye on the holistic entity to preventively take care of (self-)deceit or negligence. All agreements have been complied with through means of feedback and precision.

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2. Carefulness and negligence

The Deputy Principal of Education was asked for permission to start the research. All data will only be used for this research and will be destroyed afterwards. Colleagues were asked through email to participate voluntarily. Clear deadlines were set when asked for CFs' feedback to prevent negligence. For a timeframe, see log (appendix 12).

3. Completeness and selectiveness

Comprehensiveness in selecting and limiting data to bring this research about is important. The researcher has justified the data that could not answer the research question due to vague set-up of questions and deleting a sub-issue.



4. Rivalry and fellowship

Three colleagues and a circle of eight CFs were involved. All participants were devoted to bring everyone to one's ZPD, thought along of ways to go about difficulties and were loyal and respectful to eachother's ambitions and individuality by being honest and genuine in their feedback (appendix 9 and 14).

5. To publish, authorship and confidentiality

The researcher makes this research available for Special Educational Needs, necessary for the development of qualitative education for HGS in Secondary Education. After completion, the researcher shares the outcome with the Deputy Principal(s) and the Teacher Development Team. Upon request, the researcher is available to provide in-school training, peer-reviews or workshops to share knowledge and examples of good-practice to bring more colleagues to their ZPD.

6. Research under authority

The researcher is fully responsible for this research in search for an answer to meet HGS' educational needs in Secondary Education by means of bringing the TDT members to their ZPD. Nobody has interfered or manipulated the research in any way.

Now that chapter 3 explained which methodology is used, chapter 4 represents the gathered data based on above mentioned methodology.



4. Analysis of data and results

This chapter represents the data and results per sub-issue. In chronological order: first, outcome of the counsellor's growth; second, the TDT passes in review whether its members have been helped to their ZPD teaching HGS. Below a summary of the answers to the questionnaires (appendix 7); a complete survey with diagrams (D) is shown in appendix 10.

4.1 Which interventions help me reach my ZPD as a highly giftedness counsellor?

Questionnaire before the research (D1-2)

Before the actual research started, the counsellor wanted to know how to meet the TDT members' counselling needs to be able to anticipate correctly and to be able to reach her own ZPD.

All members needed understanding in terms of support and counselling; they did not expect delegation or managing. To be able to support and counsel in an effective way, the counsellor wanted to use Covey's eight steps of effective leadership (2014). All TDT members' recognized these steps before the research started; only one member recognized "synergy"; two "put first things first".

Evaluation after the TDT meetings by means of a questionnaire (D3-8)

After the TDT meetings, its members and the counsellor evaluated whether the counsellor's interventions had affected the TDT members regarding the way they were able to meet HGS' educational needs.

All members said the counsellor reached her ZPD. This was evident because of the way she responded to obstacles. Although she was fairly limited in her freedom of scope, they noticed she remained calm, but enthusiastic. She listened to, summarized and anticipated to the TDT members' needs. Figure 7 represents the data of how the TDT experienced Covey's eight steps as undertaken by their counsellor.



1. Be proactive	All members noticed the counsellor has been proactive in approaching colleagues and that she made clear what she expected of them. She took lead; the TDT members put the gained knowledge in practice.
2. Begin with an end in mind	All members noticed that the goal for teachers to differentiate to reach the HGS' ZPD was achieved.
3. Put first things first	All members observed that the counsellor gave room to let everyone take care of oneself first.
4. Think win-win	All members noticed that the counsellor has grown in gaining insight according win-win; particularly according to the school's view on HGS. One member notice that the counsellor did not see enough room for scope first, but "spreading the good news" made Deputy Principals enthusiastic; the counsellor needs to trust on her own investment. The counsellor also asked the TDT members for feedback; all members noticed the counsellor saw the benefits of teamwork instead of working alone.
5. Seek first to understand, then to be understood	One member noticed that at some point the counsellor "had had enough" and that she was not willing to take any initiative towards the management anymore. She questioned if the counsellor still feels the same way. The two other members wrote they felt mutually dependent, only time was too short at hand to become more creative in solving problems.
6. Synergize	One member noticed that the counsellor definitely looked for cooperation and synergy; this was evident during the TDT meetings. The two other members said the counsellor did not push to adopt her lessons and ideas, but encouraged the members to take initiative and design their own.
7. Sharpen the saw	One member said that continuous feedback to grow was the main



	<p>theme. One member noticed that the counsellor likes to learn new things and that she absorbed feedback. Two members stepped outside their own comfortzone as far as teaching is concerned; the main question always was “what can we do better next time?”</p>
<p>8. Finding your voice and inspire others to find theirs</p>	<p>All members noticed the counsellor enthuses, is authentic and inspires through stories, examples of good-practice, beliefs and encouragement.</p>

Figure 7: How the TDT experienced Covey’s eight steps as undertaken by their counsellor

Two TDT members would recommend the counsellor as a highly-giftedness specialist in school to enhance colleagues’ pedagogical and didactical skills to teach HGS. One did not say no, but recommended to start with peer-reviews first.

4.2 What do colleagues need to enhance their pedagogical and didactical skills teaching HGS?

The mini master classes (appendix 8 + D18, D27, D28, D32 + theory)

These classes were launched to gain awareness and share knowledge. All members said they gained more knowledge and that it was helpful in understanding HGS’ way of learning.

Before the TDT meetings (D11-18)

For the TDT members to anticipate to HGS’ needs within a limited timeframe, it was necessary to find out whether they already knew something about highly giftedness.

All knew something; their answers: HGS excel unilateral, they become underachievers when they are not challenged properly, have particular interests, difficulties with social interaction and are a high-risk group for physical symptoms. Since this research is built upon a critical-emancipatory paradigm, the TDT members were asked which step on the ladder of participation (Hart, 1992) they would like to occupy in developing a design, which helps them to reach their ZPD teaching HGS. None of the TDT members wanted to take



responsibility to co-produce or interfere in the whole process of the design. One member, however, wanted to advice on the matter. Notable was that two members miss knowledge-sharing on highly giftedness in school; one member did not fill in anything. None of the members think they have HGS in their classes; they do not have any or do not recognize them. Two members said their lessons do not challenge HGS' Zone of Proximal Development, because there is no attention for HGS, no time to prepare challenging lessons and they are occupied teaching the weaker students. Although the SEN co-ordinator is not a teacher, she thinks her lessons will challenge HGS. The members are in need of a specialist whom they can ask for help, theory or ideas. Notable is that none is willing to do a part-time study or in need of ideas.

The TDT meetings (appendix 9 + D28)

The three TDT meetings held after the first questionnaire gave qualitative input (Lange et al., 2011). Challenges, examples of good-practice, new ideas and insights were shared to enhance the TDT's pedagogical and didactical skills.

Below an approved summary by all members with the main points discussed during the TDT meetings according to Van Strien's regulative cycle (as cited in Lange et al., 2010, p.41). An extensive record, including Power Point slides, can be found in appendix 9.

One Present: member 1, 2 and 4

Absent: member 3 (due to overload of work)

During the first meeting, the members wrote down targets and ranked themselves on a scale of one to ten teaching HGS. Both teachers felt uncertain and scaled themselves on level one (diagnosis). In two weeks, member 1 wanted to be at level four and member 2 at level two (plan). The latter has many ideas but does not dare to use them; these ideas would not fit in one lesson. After questioning why it was holding her back using two lessons or more, she realised it did not matter; she needed awareness and an incentive to implement her lesson ideas, which might bring HGS to their ZPD (plan). The design was introduced to help attuning suitable lessons for HGS too (intervention).



Two Present: member 1, 3 and 4

Absent: member 2 (due to personal reasons)

This meeting was mainly about member 1's good-practice (evaluation) and the design itself. Member 1 told how she struggled to attune lessons suitable for HGS due to her busy schedule and stumbled upon difficulties during the lessons (problem). In the end, the lesson series turned out to be successful; she told us she moved from level one to level seven (diagnosis). She is thinking about using the design in other classes (plan). The design was discussed and could use some adaptations; member 1 said some items were difficult to understand or did not belong in the design. Members 1 and 3 agreed upon adding a compact elucidation (intervention) (appendix 6).

Three Present: member 1, 2 and 4

Absent: member 3

Members 1 and 2 shared their examples of good-practice and said they have been helped into their ZPD. Both said the integration matrix and the design had been helpful to gain awareness of HGS' needs when it comes to designing lessons (evaluation). It gave members 1 and 2 satisfaction and inspiration seeing students work enthusiastically on the designed tasks (diagnosis). Each is going to use the integration matrix more often and is looking for sparring-partners (plan). Member 2 mentioned differentiation is also good for the weaker and average students; she had more time to focus on questions for help and support (diagnosis). Meanwhile talking about examples of good-practice, member 1 and 2 found out their group, who were doing a more difficult task than the average students, can differ from topic to topic and from subject to subject; member 1 had different students than member 2 from the same class (evaluation). To have a chance for in-school success, creating more awareness and implementing the design, including the integration matrix, they advised me how to go about (problem, diagnosis and plan).



After the TDT meetings (D20- 32)

After the TDT meetings, another questionnaire (appendix 7) was administered: have the TDT members been helped into their ZPD teaching HGS?

All members answered they have been helped to their ZPD teaching HGS and gained more knowledge. Member 1 wrote it was scary to let go of the daily routine and lesson plans, but students were enthusiastic. Member 2 noted that differentiating lessons opened her eyes; coming up with different tasks challenged “excellent” students and HGS. Member 3 noticed that differentiation is the key to challenge all students in class. The design helped designing challenging and differentiated lessons for all students involved. The two teachers indicated they would use the design more often and would recommend this way of teaching to colleagues since it is very satisfactory, albeit very time-consuming. Member 2 wrote it re-motivates the “sunk-back” students and it enriches teachers too. All members would like to learn more about highly giftedness with enthusiastic colleagues through peer-reviews, but only if there is enough time. Both teachers indicated that not only the design helped attuning lessons, also the integration matrix helped to come up with new ideas; the reflection form helped to evaluate one’s interventions. Gaining awareness how to go about a lessonplan, whilst using the integration matrix, made the two teachers aware of the different needs HGS have. All members indicated that the T.E.A.M. learning principles in combination with the T.A.S.C. wheel helped them out of their comfortzone and to their ZPD.

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The design has been used as an intervention to help the two teachers to attune their lessons to all levels. Figure 8 shows the adaptations made to the design through Van Strien’s regulative cycle (as cited in Lange et al., 2010, p.41) during the three TDT meetings. After, chapter 5 shows provisional conclusions of the presented data based on triangulation.



Interventions		Design 0	Design 1	Design 2
Regulative cycle	TDT meeting 1	TDT meeting 2	TDT meeting 3	
				Presentation
Evaluation		The design is helpful.	The design is more practical and to the point.	The design looks professional and is going to be used by the TDT members in other classes.
Problem	Lessons are not attuned to HGS.	The design is too complex to use by colleagues and very time-consuming.	The differentiation part is still not clear enough to be used by colleagues. The design is too extensive.	It is not tested among a bigger group of colleagues.
Diagnosis	TDT members do not attune their lessons to HGS. They know too little about HGS.	Some items in the design were confusing or not relevant.	The differentiation part in the design was not set up right to attune differentiated lessons.	To validate the design it needs to be tested among a bigger group of colleagues.
Plan	Presentation of the design to help TDT members to attune lessons also suitable for HGS.	Leave out excessive information; adapt the differentiation part into clear boxes.	Adapt the differentiation part to clear boxes. Compact it to one A4 sheet.	Presentation to the management, including examples of good-practice.
Intervention	Put the outcome of the questionnaires, the theory of the mini master classes and the input of the TDT meetings into praxis.	Use the TDT's feedback to make the design accessible for more colleagues. Add an elucidation to explain Gardner's intelligences.	Use the TDT's feedback to make the design accessible for more colleagues.	Explain the use and value of the design to the management.

Figure 8: the adaptations made to the design through Van Strien's regulative cycle



5. Conclusions and recommendations

This chapter is written to translate the researched data to the theoretical framework of the “*Holistic Zone of Proximal Development*” from where provisional conclusions for the sub-issues and research question are drawn to ensure triangulation.

5.1 The professional Master SEN as a counsellor/change-agent

All TDT members concluded that I, as a counsellor, have grown and that I reached my ZPD, i.e. self-actualization. So, which interventions (in random order) helped reaching the ZPD as a highly giftedness counsellor? And which theory underpins this?

First intervention: becoming a change-agent

Both questionnaires and TDT meetings show that a change-agent as counsellor/highly giftedness specialist in school is important for spreading the importance of attuning lessons to HGS’ needs to stimulate students to become continuous learners (Fullan, 1993). Therefore, a recommendation as a highly-giftedness specialist in school is not at all surprising. Although the members would recommend me as a highly-giftedness specialist, I need to find balance between enthusiasm in where I am standing and where my colleagues are as far as knowledge about highly giftedness is concerned; my enthusiasm might be overwhelming. Covey also endorses balance: I first need to understand (listen to understand, not only reply), before I can be understood (2014) to undertake actions (appendix 3).

Second intervention: mini master classes

Colleagues indicated they knew little and needed theory to be able to teach HGS. Van Gerven (2009) agrees that teachers must be theoretical informed about highly giftedness and the underlying thoughts; she endorses the importance of gaining awareness and knowledge sharing. In addition, Svinicky and Dixon (1987) endorse the viewpoint that teachers must be theoretically informed about highly giftedness to be able to attune lessons. Since there is hardly any knowledge sharing in school about this subject, these master classes helped to understand the way HGS learn and closed the gap in the TDT’s theoretical



framework. Therefore, the mini master classes have been helpful to be able to design challenging lessons to meet HGS' needs.

Third intervention: TDT meetings

However, I had a different position than the TDT members; equality and empowerment, during the TDT meetings was utterly important. During these meetings, I was given room to anticipate to the TDT members' needs. Although not explicitly mentioned in the data, Nout's saying for a change-agent to be able to accomplish a paradigm shift in thinking about highly giftedness (2013) is correct. Senge's (as cited in Lieskamp, 2014) and Fullan's (as cited in Lange et al., 2011, p.117) models (figure 2) helped to

- accomplish realization of personal competencies; where I first did not see enough room, I needed this to look from more perspectives and become creative to be able to lead the TDT.
- give direction for inclusive education: I was able to let the TDT members see the surplus of teaching HGS, which lifted the whole classroom to a higher level;
- let us become owner of shared views through critical reflections: my interventions created better education for all students during a 50-minute lesson. Triple loop learning (Schop, 2013) helped to remain focused;
- develop knowledge through peer-reviews: I was able to construct knowledge by means of the T.E.A.M. learning principles (Helanus, 2013). To listen to each other, we were able to improve quality;
- work interdisciplinary to become a holistic entity: since I have reached my ZPD, the TDT reached theirs too in teaching HGS; this means HGS are able reach theirs. It is a strengthening process which makes it holistic.

Since I have reached my ZPD, was my growth into my Zone of Proximal Development adequate to help TDT members into theirs?



5.2 The TDT

All members concluded they have grown into their ZPD concerning highly giftedness and teaching HGS. The scaling question visualized that member 1 grew from level one to level seven; member 2 grew from level one to level four; member 3 did not use a scaling question, but said she had grown in gaining knowledge. What did the two teachers need (in random order) to enhance their pedagogical and didactical skills teaching HGS? And which theory underpins this?

First need: attitude change thanks to mini master classes

Although none of the TDT members think they have got HGS, the Wechsler scale (Orthopedagogiek, 2010) concludes otherwise. There are supposed to be three to four students per class at our school who might be (highly) gifted and have different educational needs than average students. Like Davelaar et al. (2013) and Zijlstra (2011) said, teachers are aware of the differences, but feel uncertain to attune lessons. The voluntarily participation in filling in questionnaires, attending the mini master classes and TDT meetings proved that all members were willing to change their attitude and willing to learn how to meet HGS' educational needs. Over the course of the mini master classes, the members started to see the sur-plus and importance of teaching to HGS' educational needs; also, their examples of good-practice showed satisfaction. The mini master classes created awareness and contributed to an attitude change.

Second need: the design

To design meaningful lessons to meet HGS' needs, a design was introduced during the first TDT meeting. This research shows that, although the TDT members were uncertain first, implementation of the design, based on Bloom (Anderson & Krathwohl, 2001; Heer, 2011; Theeuwens & Heer, 2013) and Gardner (2013), assembled in an integration matrix (Heacox, 2002) offering a wide range of activities, has been helpful in designing lessons and teaching to different levels in one class. Research by Noble (2004) underpins the use of the integration matrix as being helpful for teachers, whereas Heacox (2002) endorses the importance of differentiation; offering choices is an important way to motivate students and



get them interested in a project. Since the TDT members have experienced the positive effects of teaching to different levels as spoken about during the TDT meetings and as shown in the questionnaires, using the design has proven to be successful. Research by Van de Putten affirms that *“getting acquainted with realistic and workable practice, builds up self-esteem from where a possible open attitude can be maintained”* (2007). In addition, also Maslow, Stevens, Deci and Ryan (Nieuwenhuis, 2010) stress on building up self-esteem to reach self-actualization. The design proved to be very successful; the Deputy Principal of year one got enthusiastic and passed on the information to the Deputy Principal of Education.

Third need: TDT meetings

During the TDT meetings, both teachers told, and visualized through means of the scaling question (Cauffman & Dijk, 2011; Visser, 2009), they have grown in using differentiation in their lessons; they explained their examples of good-practice and spoke about their struggles. Working in a TDT where no one is inferior to another whilst working collectively to renew or improve education (UT, 2014) is endorsed by Brooks (1994): *“what appeared to be the key to successful collective teamlearning was either each team’s control over or else the absence on the teams of significant power differences of team members”* (p.46). Both questionnaires and TDT meetings show that using the T.E.A.M. learning principles (Helanus, 2013), whilst thinking actively in a social context (Wallace, 2010) by means of triple loop questions helped reaching a next scaffold; according to Wiersma (2012), it touches one’s identity. Coenders (2010) agrees in his dissertation on the benefits of a TDT; he says that teachers who are involved in the development of the material learn more than teachers who only use the developed material.

5.3 The research question concludes and recommends

In conclusion, this research has been successful. I, as counsellor, reached my Zone of Proximal Development and was able to let the TDT members reach their pedagogical and didactical ZPD by means of different interventions based on the Teacher Development Team needs. Yet, testing the design among a larger group of teachers to serve meaningful



education for more students to ensure internal validation (Boers-Müller, Janssen & Steenbergen-Penterman, 2013; Theeuwes, 2014) is recommended. However, doing research among HGS to ensure HGS' needs are genuinely met, makes this research holistic and thus more reliable in closing the school's gap in its curriculum. Now, it is unknown whether HGS have reached their ZPD by means of the TDT's interventions since students, including HGS, were no part of this research. Still, Van Swet, Wichers-Bots and Brown (2011) are of the opinion that

“real participation on the part of students, however, requires more than the usual citizenship course programme. Real participation means that students must really engage and have a voice in decision-making with regard to programmes and projects in addition to being able to take the initiative in such developments” (p.914).

In addition, Wierdsma (2012) affirms, *“the client's feedback is the most powerful source for learning collectively”* (p.7); it is therefore wise to listen to our HGS' needs for development. A last, but not least, recommendation is to formulate a strong view on highly giftedness; according to Zijlstra, it helps the school grow in its full length (2011). For this research, I used a PCDA cycle (Mind Tools, 2014) to understand the definition of the problem (see p.31). For the school to be able to grow in its full length, it is advisable to use this cycle; it gives direction to their goal. This research and the *“Holistic Zone of Proximal Development”*, including recommendations made for the school (appendix 2a), will be valuable assets in achieving a higher scaffold.

5.4 Critical reflection on the methodology

Fullan and Hargreaves (2012) were right: we all reached a higher scaffold by using professional capital to move the TDT forward together. Action research and a critical-emancipatory paradigm realised an evident awareness among the TDT teaching highly gifted students. Emancipation, participation and empowerment are skeleton keys to unlock the “buds” and “flowers” to be able to bloom and develop talent. My role as a counsellor/change-agent opened a path for more knowledge-construction. Action research made us all experience that well-considered interventions influence another's behaviour in a



positive way and helps to reach a next scaffold. All members were given room to act according to their students' needs, and especially their own. Everyone has been honest about struggles, physical health and critical towards the design; internal validity could be safeguarded as far as one's ZPD and the design was concerned. Therefore, I conclude this research as reliable. The TDT created a bond in the quest for meaningful education for HGS. Although action research has been time-consuming for all participants, it was worth the effort seeing students discussing over topics we once thought were too difficult; it therefore provides a positive answer to the research question.

5.5 From hypothesis via synthesis resulting in cooperation

My hypothesis, an assumption, gave direction to this research; it resulted in a synthesis, a composition, visualized in the *"Holistic Zone of Proximal Development"* within the framework of Special Educational Needs. This whole research has not only resulted in helping me to reach my ZPD as a counsellor, but also the TDT members were able to reach their ZPD in designing differentiated lessons to teach HGS. This research is an addition to knowledge construction from where the school will be able to reach a higher scaffold as a holistic entity. The *"Holistic Zone of Proximal Development"* gave direction to help all participants to a higher scaffold. Also John F. Kennedy affirms that *"a rising tide lifts all boats"* (2008, p. 327). This aphorism means that a holistic approach helps everyone to one's ZPD. Recently, school had set out a quest among its staff to come up with ideas of how to become an above-average school; the result is that school has chosen, among three other ideas, to work with my plan as presented in this research. This research will help the school to put its mission into a verb. But to be able to grow holistically, other research questions arise:

- 👤 What if HGS were involved in this research, would they have been helped to their ZPD?
- 👤 Will implementation of (parts of) this research and its interventions help the school to become an above-average school?



6. Reflexive evaluation

My reason was, and still is, to meet all students' educational needs, especially the HGS'. I could not do this on my own; to achieve this, I needed a TDT. My role as a TDT's counsellor offered new opportunities; looking at issues from different perspectives whilst empowering the TDT members. This resulted in covering two majors Fontys OSO offers:

- 👤 Counselling Which interventions helped me as a counsellor to let my colleagues reach their ZPD teaching HGS?
- 👤 Behaviour What did colleagues need to reach HGS' Zone of Proximal development, so HGS participate actively in class?

As a student at Fontys OSO, I have seen that education can be challenging and motivating when given autonomy for one's own learning process, being able to build up relationships with teachers and Critical Friends as being supportive in one's growth in competence as a reflexive Master SEN. I can frankly say that my personal values always strive to achieve the highest possible within my reach; so do I expect of others. The pitfall of perfectionism is that I have to be aware these values are mine and not somebody else's; I might get disappointed. This has happened a few times during these past two academic years (2012-2014). Nevertheless, these disappointments made me aware of my resilience and strength to adapt to new standards; it created opportunities to reflect upon and being able to look from different angles.

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6.1 Silver lining

The Principal gave permission to do this research, but within strict boundaries set by a Deputy Principal. I did not have permission to interview students personally, so I had to leave them out of the research group. I also had to downsize my original plan for a TDT to language teachers only, because I was not the only one doing a research. It was hard letting go of my desire to do an entirely holistic research to develop better education for HGS to create inclusive education. Nevertheless, these boundaries helped to become more flexible and getting round obstacles more easily. Although the Ministry of Education has set out a



plan for “*Passend Onderwijs*”, including HGS (Dekker, 2013), which needs to be ready for implementation in schools by August 2014, my school is reserved in this. Like any school, our school has underachievers, whether highly gifted or not. Therefore, I was elated to hear that one Deputy Principal, who visited one of the TDT members’ attuned lessons, became enthusiastic about the research. Result: she spread word among other Deputy Principals.

My role as a counsellor/change-agent has been important for my own development; I learned to look from a bird’s-eye perspective and I am more aware of other people’s strengths from where new opportunities and perceptions arise. This makes me stronger as a teacher, a colleague and a counsellor. The well-considered interventions as a counsellor created opportunities for the TDT to gain examples of good-practice and have shown that an attitude paradigm shift can decrease the number of “sunk-back” and underachieving students. To reflect upon my role as a counsellor, Bateson’s levels of learning (as cited in Kessels & Smit, 2014) and Korthagen’s core reflection (2013) are presented in figure 9.

Bateson/Korthagen	Realization as a counsellor/change-agent (Koppejan, 2012)	Self-management as a counsellor/change-agent (Koppejan, 2012)
Environment (Meta reflection)	The school is managed according to an organisation chart. I learned to respond to tight boundaries set by the management. I had to lead this research within those boundaries.	A school in where I can grow as a highly giftedness counsellor, where students are guided how to learn and think critically instead of how to perform. Educating teachers about highly giftedness in an organization like Fontys OSO is something I visualize myself doing in the future.
Behaviour (Critical reflection)	First, I was frustrated that no one was willing to listen and that I had to work within tight boundaries; along the way, I took a step back and looked	I would love to expand my professionalism as far as highly giftedness is concerned and to be able to look at more perspectives.



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	<p>from a bird's eye view to overlook what my goal was and how to get there. I became more relaxed and looked at opportunities instead of problems.</p>	
<p>Capabilities (Technical reflection)</p>	<p>I took a step back (made room) and listened carefully to my colleagues' needs and anticipated to them by asking the right questions. This created a safe atmosphere where one could learn freely, dared to make mistakes and opened up to learn something new.</p>	<p>I would love to be able to provoke one's inner creativity, to have the ability to touch one's inner motivation within a safe and warm environment without using force.</p>
<p>Values and Beliefs (Biographical reflection)</p>	<p>I think and believe that everyone is able to grow limitless; there is always a new ZPD. Why would we want to restrict one's inner creativity and ability to learn we cherish and admire so much in an unprejudiced child?</p>	<p>In the future, I will still believe that provoking one's inner creativity and inner motivation makes one learn limitless.</p>
<p>Identity (Biographical reflection)</p>	<p>My goal is to strive for the best within my/one's reach; I am a perfectionist. Besides, I am very sensitive to a negative atmosphere; it makes me feel unbalanced and distracts me. Therefore, I would like to make one feel welcome and loved.</p>	<p>Prospectively I would love to be a teacher/lecturer/counsellor/change-agent who can let go of things and give room for others to use their strength to be able to let one grow limitless.</p>



Vision and Mission	My actions are based on who I am; a passionate person who is deeply interested in people; being emotionally, intelligent and spiritually (Palmer, 2005) balanced, makes people beautiful.	When students hear my name or think back at the time they were in my class, I wish they would think: she used to be my passionate and inspirational teacher who taught me where to look, not what to see. She learned to stand up for myself and made me stand on my own two feet.
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Figure 9: Reflection through Bateson and Korthagen.

6.2 Mirror, mirror on the wall

As a professional Master SEN and researcher, I have always put one's ZPD first. I already knew whatever a teacher brings to class, elicits a reaction from students. Although the *"teacher is at the heart of the process"* (Eyre, 2007, p. 33), I did not realize differentiation would have such remarkable effects on students' behaviour, as did I not realize that well-considered interventions would bring us all to a next scaffold. If I were to do another research, I would research HGS' educational needs and recommend a larger TDT. Interviewing HGS would help to understand what is needed to mature the "buds" and "flowers" to reach their ZPD; a larger TDT would give more input from different perspectives. Implementing both recommendations would make this research more valid and holistic. As a researcher, I needed to be more consistent and precise; I wandered off into different directions when drawing conclusions; I had an end in mind and I was too focused towards that end, therefore some questions could not be used in this research, although they contain valuable information. The design itself was too complex in the beginning; the TDT's input has been valuable in creating a suitable and workable solution to design differentiated lesson plans.



The critical-emancipatory research paradigm helped me to go a step further. I had put the TDT members in a participative and emancipative position and they had as much of a voice as I had. Their interventions were needed to reflect genuinely upon the design and gave direction to their growth. Therefore, I used action research, which made me aware that carefully picked interventions elicit desired response. Schuman's model for action research (as cited in Lange et al., p.114) fits the research methodology. In addition, Senge's theory of a learning organisation (Lieskamp, 2014) fits closely to action research, since the interventions as a counsellor are based on all participants' normative aspects. I believe that I have implemented all steps of action research carefully and that I was able to let loose of my perfectionism to empower the TDT members; "learning and change" went hand in hand. This research has taught me to be able to let one grow; one needs to show where to look, but do not tell what to see.

6.3 Three dimensional

My view on inclusion and values for diversity is that I am convinced the way HGS learn, can enrich society in its broadest sense. At some point everyone needs to learn to analyse, evaluate and create concepts or views. To be able to help HGS achieve this too, I needed to be equipped to connect to all students' educational needs. The highest level should be the norm, from where I can tone down to connect to the average and weaker students. Since I know more about highly giftedness, I feel more balanced; a lot fell into place because of recognition. I do not need to feel misunderstood anymore, but can act authentically, because I have theory and proof to underpin my hypothesis.

This research has been beneficial to look critically at my own way of teaching and made me realize that I needed to implement the gained theory at Fontys OSO by means of this research. This research contributed knowledge construction for my school. Starting this research focused on possibilities for development for myself, my colleagues and the whole school as a holistic entity. The heart of school should always be the educational needs of our students, regardless their intellectuality. It is me, the teacher, who creates a pedagogical and didactical safe atmosphere from where students can learn. Although I did not involve students or parents in this research, the only way to attune lessons to everyone's needs is to



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involve our livelihood to learn cooperatively. This research has made me aware that I need to be flexible and that education is in motion all the time. To adapt to this motion, I have to update my knowledge to remain reflective on my own actions.

During this research I have conscientiously abided by Andriessen's Code of Conduct (Andriessen, 2010), the Dublin Descriptors (NVAO, 2004) and the denominators as described in the Profile of Competence for Inclusiveness (Claassen, 2009), all written out in appendixes 13, 14 and 15.



Epilogue

I would like to thank school for giving the opportunity to let me do this research. I am very grateful to my devoted TDT members; you opened up to new perspectives and made yourselves vulnerable. You reached peaks, rolled down slopes and climbed up again; my sincere compliments!

Thank you Critical Friends (appendix 16); you have been of much support during the academic years 2012-2014 at Fontys OSO. Without you, I would not have come this far with such remarkably high notes; you kept me focused. Critical Friendship has become a natural part of me. A special thanks goes to Steve and Ingrid, who both cast a critical eye on my English. Another special thanks goes to Will, who accepted me with all my imperfections; you became a friend for life!

I would like to address three of my very inspirational teachers; without your professionalism, I would not have been so inspired and devoted. You made my time at Fontys OSO worthwhile.

Louise: Thanks for being my study counsellor; you were very helpful and devoted in bringing me to my ZPD;

Annemieke: you opened doors I never thought they existed; thank you for being so patient and inspirational;

Marianne: I have never met such a warm-hearted and congruous teacher. You have truly been inspirational and straight-from-the-heart.

I sincerely hope we stay in touch to develop excellent inclusive education for all!

"If you treat an individual as he is, he will remain how he is. But if you treat him as if he were what he ought to be and could be, he will become what he ought to be and could be"

- Johann Wolfgang von Goethe (1749 - 1832) -



Appendix 1 Bibliography

Anderson, L. &. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Andriessen, D. O. (2010). *Gedragcode praktijkgericht onderzoek voor het hbo*. HBO Raad.

Boerman, R. (2008, Juni 06). Ethische uitgangspunten bij praktijkonderzoek. pp. 1-6.

Boers-Müller, A. J.-P. (2013). *Focus op talent ontwikkeling en excelleren in het VO*. Enschede: SLO.

Brooks, A. (1994). Collective team learning in work organizations. *PAACE Journal of lifelong learning* , pp. 34-49.

Cauffman, L. &. (2011). *Handboek Oplossingsgericht werken in het onderwijs*. Den Haag: Boom Lemma Uitgevers.

Claassen, W. D. (2009). *Inclusief Bekwaam - generiek competentieprofiel inclusief onderwijs*. Antwerpen - Apeldoorn: Garant.

Coenders, F. (2010). *Teachers' professional growth during the development and class enactment of context-based chemistry student learning material*. Enschede: Ipskamp Drukkers B.V.

Covey, S. (2010). *De zeven eigenschappen van effectief leiderschap*. Amsterdam: Business Contact.

Covey, S. (2014). *The 7 Habits of Highly Effective People®*. From www.stephencovey.com:
<https://www.stephencovey.com/7habits/7habits-habit7.php>

Davelaar, A. H. (2013). *De onderprestatie te lijf*. Leiden.

Dekker, S. (2013, december 03). *Aanbieding rapport 'Resultaten PISA-2012 in vogelvlucht'*. From www.rijksoverheid.nl: <http://www.rijksoverheid.nl/documenten-en-publicaties/kamerstukken/2013/12/03/aanbieding-rapport-over-pisa-2012.html>

Dekker, S. (2013, september 4). Debat op 2. (A. Boomsma, Interviewer)

Dekker, S. (2013, september 02). Ruim baan voor toptalent. Ministerie van Onderwijs, Cultuur & Wetenschap.

Delisle, J. (2009). Underachievement and the quest for dignity. *Understanding our gifted* , 3 - 5.

Different Kinds of Learning (Loops of Learning). (2014). From managementhelp.org:
<http://managementhelp.org/misc/learning-types-loops.pdf>

Eyre, D. (2007, June). Structured Tinkering: Improving Provision for the Gifted in Ordinary Schools. *Gifted and Talented International* , pp. 31 - 38.



Forehand, M. (2005). Bloom's Taxonomy: Original and revised. *Emerging perspectives on learning, teaching, and technology*, pp. 1 - 12.

Fullan, M. (2001). *Leading in a culture of Change*. San Francisco: Jossey-Bass.

Fullan, M. (1993). *Why Teachers Must Become Change Agents*. From <http://www.ascd.org>: <http://www.ascd.org/publications/educational-leadership/mar93/vol50/num06/Why-Teachers-Must-Become-Change-Agents.aspx>

Fullan, M., & Hargreaves, A. (2012, Juni 06). *Reviving Teaching With 'Professional Capital'*. From www.michaelfullan.ca: <http://www.michaelfullan.ca/media/13438456970.pdf>

Gagné, F. (2010). *Gagné*. From Gagné's Differentiated model of Giftedness and Talent: hoogbegaafdheid.slo.nl

Gardner, H. D. (2013). *Multiple Intelligences*. From <http://howardgardner.com/>: <http://howardgardner.com/multiple-intelligences/>

Gerven, v. E. (2008, Februari 15). From Slim! Digitaal: <http://mweb.bicat.com/blob/GERTINK9999.pdf>

Gerven, v. E. (2009). Ontwikkelingen in het denken over begaafdheid. In E. v. Gerven, *Handboek Hoogbegaafdheid* (pp. 6 - 21). Assen: Koninklijke Van Gorcum.

Gross, M. S. (2007). *Gifted Students in Secondary Schools: Differentiating the Curriculum*. Sydney.

Gruwell, E. &. (2001). *The Freedom Writers Diary: How a Teacher and 150 Teens Used Writing to Change Themselves and the World Around Them*. Broadway Books.

Hart, R. (1992). *Children's Participation: From tokenism to citizenship*. Florence: UNICEF International Child Development Centre.

Heacox, D. (2002). *Differentiating Instruction in the Regular Classroom*. Minneapolis: Free Spirit Publishing Inc.

Heacox, D. (2002). Vrije vertaling en aangevuld door Breedijk, J. *Differentiating Instruction in the Regular Classroom: How to Reach And Teach All Learners, Grades 3-12*. Minneapolis, USA.

Heer, R. (2011, juni 07). <http://www.celt.iastate.edu/teaching/>. From <http://www.celt.iastate.edu/>: <http://www.celt.iastate.edu/teaching/RevisedBlooms1.html>

Helanus. (2013). *Together Everyone Achieves More*. From <http://www.helanus.nl/>: <http://www.helanus.nl/2012/05/together-everyone-achieves-more/>

Hornby, A. (2010). *Oxford Advanced Learner's Dictionary of Current English*. Oxford: Oxford University Press.

Kallenberg, T. K. (2010). *Ontwikkeling door onderzoek - een handreiking voor leraren*. Baarn/Utrecht/Zutphen: ThiemeMeulenhoff.

Koppejan, P. (2012). *Van Buiten naar Binnen*.



Korthagen, F. (2013). *Korthagen training & Coaching*. From <http://www.korthagen.nl/>: <http://www.korthagen.nl/>

Lange, d. R. (2011). *Praktijkgericht Onderzoek voor de Reflectieve Professional*. Antwerpen - Apeldoorn: Garant.

Lieskamp, M. (2014). *Theorie van een Lerende Organisatie*. Retrieved februari 26, 2014 from www.myriamlieskamp.nl: <http://www.myriamlieskamp.nl/wp-content/uploads/2012/05/theorie-van-een-lerende-organisatie.pdf>

Macmillan, P. L. (2009-2014). *Change agent*. From www.macmillandictionary.com: <http://www.macmillandictionary.com/dictionary/british/change-agent>

Marzano, R. &. (2013). *Leren in 5 dimensies*. Assen: Van Gorcum.

Mind Tools, L. (2014, januari 07). *Plan-Do-Check-Act (PDCA)*. From www.mindtools.com: http://www.mindtools.com/pages/article/newPPM_89.htm

Movare. (2008). *Boeiende Ontwikkelingen. Movare* .

Nieuwenhuis, M. (2010). *Klassieke motivatie theorieën: Maslow, Herzberg, Covey*. From www.123management.nl: http://123management.nl/0/040_mensen/a400_mensen_19_motivatie_klassiek.html

Noble, T. (2004, January). *Integrating the Revised Bloom's Taxonomy With Multiple Intelligences: A Planning Tool for Curriculum Differentiation*. From eric.ed.gov: <http://eric.ed.gov/?id=EJ687584>

Nout, C. (2013). Ruim baan voor de toppers. *VO Magazine 1* , 34 - 39.

NVAO. (2004, Oktober 18). *Shared 'Dublin' descriptors for Short Cycle, First Cycle, Second Cycle and Third Cycle Awards* . From www.nvao.net: http://www.nvao.net/page/downloads/Dublin_Descriptoren.pdf

OC&W. (2011, mei 23). *Actieplan Beter Presteren: opbrengstgericht en ambitieus*. From www.rijksoverheid.nl: <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/kamerstukken/2011/05/23/actieplan-vo-beter-presteren/actieplan-vo-beter-presteren.pdf>

OC&W. (2013, september 02). *Kamerbrief over toptalent in het funderend onderwijs*. From www.rijksoverheid.nl: <http://www.rijksoverheid.nl/bestanden/documenten-en-publicaties/kamerstukken/2011/05/23/actieplan-vo-beter-presteren/actieplan-vo-beter-presteren.pdf>

Orthopedagogiek. (2010, december 07). *Intelligentie testen*. From www.orthopedagogiek.com: <http://www.orthopedagogiek.com/intelligentie.htm>

Overbeek, M. (2014, April 30). *Professionalisering van docenten via docentontwikkelteams*. From www.ecent.nl:



<http://www.ecent.nl/artikel/2591/Professionalisering+van+docenten+via+docentontwikkelteams/vie w.do>

Oxford Idioms. (2008). Oxford: Oxford University Press.

Oxford, U. P. (2014). *Oxford Dictionaries.* From www.oxforddictionaries.com:
<http://www.oxforddictionaries.com/definition/english/self-actualization>

Palmer, P. (2005). *Leraar met hart en ziel (the courage to teach).* Groningen/Houten: Noordhoff Uitgevers B.V.

Ploeg, P. v. (2014). *De drie 'van' Stevens.* From www.pietervanderploeg.nl:
<http://www.pietervanderploeg.nl/De%20drie%20van%20Stevens.doc>

Porter, L. (2011). *Dr. Louise Porter - child psychologist.* From www.louiseporter.com.au:
<http://www.louiseporter.com.au/>

Porter, L. (2009). Gifted Children meeting their needs. pp. 1 - 18.

Schop, G. (2013). *Reflectie.* From www.gertjanschop.nl:
<http://www.gertjanschop.com/reflecteren/ingredienten-reflectieverslag.html>

SLO. (2014). *Hoe kan rekening gehouden worden met verschillen in leervoorkeuren?* From talentstimuleren.nl: <http://talentstimuleren.nl/thema/stimulerend-signaleren/inspelen-op-behoeften/leervoorkeuren>

Smit, K. &. (2014). *Dilts & Bateson: de logische niveaus van denken.* From www.kessels-smit.nl:
<http://www.kessels-smit.nl/nl/238>

Smith, M. (2001). *Peter Senge and the learning organization.* From infed.org:
<http://infed.org/mobi/peter-senge-and-the-learning-organization/>

Stevens, L. (2013, augustus 31). *Naar een ander begrip van 'Prestatie' in de school.* From Naar een ander begrip van 'Prestatie' in de school: <http://users.telenet.be/vvo/vtvo024art3.doc>

Stuyf, v. d. (2002). Scaffolding as a teaching strategy. *Adolescent Learning and Development* , Section 0500A.

Svinicki, M. &. (1987). *The Kolb model modified for Classroom Activities.* Washington D.C. : Heldref Publications.

Swet, v. J.-B. (2011). Solution-focused assessment: rethinking labels to support inclusive education. *International Journal of Inclusive Education* , 909-923.

Theeuwen, P. &. (2013, mei 22). *Het herschreven model van Bloom in het Nederlands.* From talentstimuleren.nl: <http://talentstimuleren.nl/thema/focus-vo-havo-vwo/tool/261-het-herschreven-model-van-bloom-in-het-nederlands>

Theeuwen, P. (2013). BGF lessen 1 t/m 5. *BGF lessen 1 t/m 5* . Houten.



Theeuwen, P. *Holistic Zone of Proximal Development*. Student Fontys OSO 2012-2014, Houten.

Thesis. (2013). *Kolb*. From www.thesis.nl:

http://www.thesis.nl/thesis15/index.php?option=com_content&view=section&layout=blog&id=4&Itemid=4

Trenfor, A. (n.d.). *www.pinterest.com*. From <http://www.pinterest.com/pin/140033869636204106/>

UNESCO. (1994). The Salamanca statement. *The Salamanca statement and framework for action on Special Needs Education* (p. 50). Salamanca: United Nations Educational Scientific and Cultural Organization.

UT. (2014). *Docentontwikkelteams*. From www.utwente.nl:

<http://www.utwente.nl/elan/opleidingen/en/professioneleontwikkeling/professioneleontwikkeling/dots/>

Vygotski, L. (1997). Interaction between learning and development. *Readings on the development of children*, 29-36.

Wallace, B. (2010). *Thinking Actively in a Social Context*. From <http://www.tascwheel.com/>:
<http://www.tascwheel.com/nl>

Webb, J. A. (2013). *De begeleiding van hoogbegaafde kinderen*. Assen: Koninklijke Van Gorcum.

Weterings, A. (2013). *Format verrijkingstaken groep 3-8*. *Format verrijkingstaken groep 3-8*. Utrecht, Nederland.

What is TASC? (n.d.). From tascwheel.sheffielddcl.net:

http://tascwheel.sheffielddcl.net/?page_id=289

Wiercx, P. (2013, April 25). Scholen doen weinig moeite om goede en excellente leerlingen te stimuleren. *Inspectie: meer klasse in de klas*. Limburg, Nederland: www.limburger.nl.

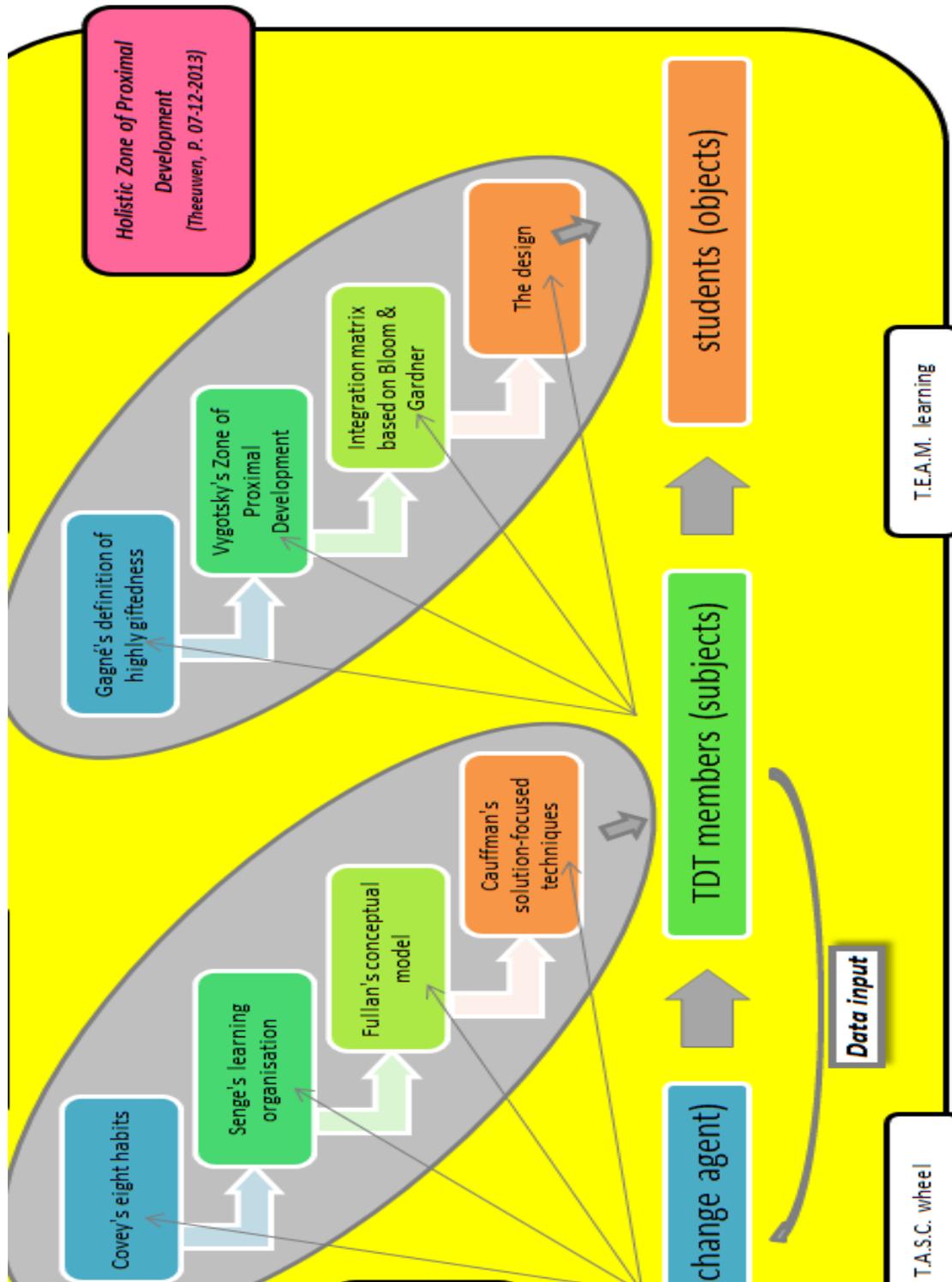
Wierdsma, A. (2012). Leren 'tussen de neuzen'. (I. v. Roekel, Interviewer)

Zijlstra, H. (2011). *Leraar 2020 – een krachtig beroep!*. Den Haag: Ministerie van Onderwijs, Cultuur en Wetenschap.



Appendix 2

Holistic Zone of Proximal Development (Theeuwen, 2013)





Appendix 2a **Holistic Zone of Proximal Development, including recommendations** (Theeuwen, 2013)

