

**Praktijkonderzoek AOS**

**Robert-Jan Lantaff**

**An inquiry into the perception and motivation of 5 vwo secondary school students in a convergently differentiated environment**

**Date: 04-07-2016**

## **1. General overview**

This paper will discuss the effects of differentiation in a secondary education classroom. Specifically, we will examine how 5 vwo students perceive differentiation in the English classroom, and in what way it affects their motivation. First of all, the concept of differentiation will be explored in detail in section 2: what types of differentiation are there, and more importantly, which ones will be relevant to the abovementioned discussion topic. In the third section, the setting and motivation for writing this paper and the aims that underlie this research will be explained. Next, the research question and hypothesis will be presented in section 4. Following this, the methodology will be explained in section 5: how was the research conducted to investigate perception and motivation of differentiation. In the sixth section we will discuss the test results and analyse them respectively. In the seventh section, the conclusions will be set and any recommendations, if necessary, will be made.

## **2. Theoretical Framework**

“Differentiatie essentieel • Leraren die differentiëren, sluiten in hun lessen op planmatige wijze aan op het niveau en het tempo van de leerlingen. Ze stemmen hun uitleg en opdrachten af, maken gebruik van de mogelijkheden die de leermiddelen bieden en benutten de beschikbare lestijd voor iedere leerling optimaal. In het voortgezet onderwijs, het middelbaar beroepsonderwijs en het speciaal onderwijs laat een kwart tot een derde van de leraren tijdens de lessen zien dat ze kan differentiëren. In het basisonderwijs en het speciaal basisonderwijs liggen die percentages hoger; hier differentieert ongeveer 50 tot 60 procent van de leraren tijdens de lessen” (Verslag Nederlandse Onderwijsinspectie 2012/2013).

The above quote is taken from the website of the Dutch inspection for education. This quote illustrates the core concept of this research paper: differentiation. The inspection states how teachers should differentiate. This is followed by stating that secondary school teachers do not yet differentiate as much as their primary school counterparts.

“Afstemming en maatwerk niet vanzelfsprekend • Omgaan met verschillen is geen doel op zich, maar een middel om zowel de sterk presterende als de zwak presterende leerling of student tot zijn recht te laten komen. Deze vorm van maatwerk wordt door de invoering van passend onderwijs nog belangrijker. Afstemming en maatwerk zijn om drie redenen nog niet vanzelfsprekend. Ten eerste zien niet alle leraren het belang in van differentiëren (Verslag Nederlandse Onderwijsinspectie 2012/2013).”

The inspection goes on to state that dealing with differences (through means of differentiation) is an excellent method of having the weaker student's performance increase. At this point though, not all teachers are yet seeing the importance of differentiation. The evidence the inspection provides us with contains two important arguments. First, there is great emphasis on this concept in Dutch education. Secondly, there is the argument that there is not yet enough differentiation taking place in secondary education. These facts support me to start differentiating in my own classroom and examining the effects. First though, let us further explore the concept of differentiation in the rest of the theoretical framework.

Differentiation itself entails this: as a teacher, you differentiate between the different levels of your students. That is, rather than giving every student the same programme in class, (e.g. frontal instruction at all times) an attempt must be made at giving each student what he/she needs, i.e. personalising their programme (varying instruction time and manner (Kerpel 2014)) in order to achieve the highest personal growth. For a teacher, it is possible to differentiate in two different ways: converging differentiation and diverging differentiation (Kerpel 2014). The former means that all students need to achieve a minimum level, where emphasis is placed on the weaker students. Instruction is given to all at first, but then the teacher will spend additional time instructing those who have problems in a separate sub-group, whereas the stronger students can fend for themselves with more difficult material. The ultimate goal is to "converge" the level of both students to a similar level. The latter abovementioned form is where the differences between the students will increase even more due to a lesson programme perfectly attuned to the individual student, but primarily because the gifted student can take advantage of the extra attention they are given here, unlike the convergent form, where all students will receive extra attention. It is also important to take notice of the fact that earlier studies have pointed out that diverging differentiation will not necessarily lead to improved student performance, excepting gifted students (Gamoran, 1992; Marzano, Pickering & Pollock, 2001). In fact, some argue this is the case due to the fact that the self-confidence in the weaker groups is damaged. Conversely, converging differentiation has an effect that is the opposite. It is claimed that convergent differentiation in terms of instruction is an effective means to serve the needs of all groups of students (Bosker, 2005; Allcock & Hulme, 2010). For this paper, we will only look into convergent differentiation. The reason for this will be explained in the methodology section.

According to Berben (2013) differentiation is currently receiving a lot of attention in the secondary education classroom. She states that "it is expected from teachers that they now how to deal with the differences between students." She recommends the usage of the following strategies provided by expert teachers that could be employed when differentiating, namely:

- A classroom consisting of two/three sub-groups.
- Differentiation in instruction and guidance
- Differentiation on the basis of learning styles
- Differentiation on the basis of time
- Making challenging assignments worthwhile
- Providing different levels of difficulty in various assignments
- Differentiation in homework
- A willingness to experiment
- Reflection together with the students (Berben 2013)

From a teacher point-of-view, applying this list its entirety – especially in a short research paper as this one – would be a daunting task. The only elements that we will focus on are classroom consisting of two/three sub groups, providing different levels of difficulty in various assignments, differentiation in homework, and perhaps most importantly, the willingness to experiment. In the methodology section, I will explain how these features are applied in my classroom for the research that has been conducted. However, I will also illustrate in this section what the theory is behind each of the ones I have used using the theory from the strategic approach from Berben (2013).

Dividing an entire group into two/three sub-groups needs to be explained more specific: these groups are not random, they are groups sorted out by their level according to students' performance earlier on in a school year. This will result in a weaker group, an intermediate group and a strong group. The teacher is now capable of focusing on, for instance, the weakest group. He/She can give this a lot of extra attention while the intermediate and stronger group are working on their own on tasks which are challenging, and the weak group will benefit from the extra explanation from the teacher. In fact, because this group only consist of – assuming there are not too many weak students in a group – a handful of students, they could theoretically greatly benefit from the virtually personal attention given by the teacher. Thus, if enough extra attention is paid to these students, the assumption is that their level will go up.

Differentiation in instruction and guidance, according to Berber (2013) has already been mentioned in the abovementioned paragraph. It is a direct consequence of dividing a group into smaller sub-groups. Consequently, the teacher spends more time attending the weaker students,

while the intermediate and stronger students work on their own and perhaps more challenging programme. So far it may seem as if the focus lies primarily on the weaker students. It is critical to note that this is not the case. In fact, differentiation for the stronger students takes place by giving them more challenging assignments such as more advanced vocabulary assignments, advanced grammar constructions, and higher level texts. By the latter, I do not just mean exam texts above their current level, but informative books and literature with assignments that provide a greater challenge. Berben (2013) also states that when a teacher sees a difficult assignment coming up on a short-term notice, extra measures ought to be taken in the form of preparative assignments, e.g. an introductory assignment for homework. As for myself, I also employ this strategy of pre-teaching, however more in the form of YouTube clips that students have to watch at home rather than having to perform a written assignments. Moreover, I also differentiate in homework in this particular way. This, because the students will have an option at home to study the relevant material that is going to be discussed in class. As weaker students might benefit from this, they will most likely prefer watching preparatory video-clips, whereas the stronger students might prefer doing work that will increase their level, or spend their time on different tasks which require more of their attention. I will go into greater detail of my pre-teaching style in the methodology section.

As Berben (2013) claims in her article, "differentiation, for most teachers in secondary education, is something new." This leads me into believing that differentiation could be a considerable challenge in set-up. As for the situation in my school, the board has decided to emphasise its importance to increase the student's growth (recall Kerpel 2014). I will elaborate on the nature of experimentation in this research in the methodology section. Its relevance to the theoretical framework, however, is Berben's statement that first year students in secondary school are already accustomed to differentiation as they start their secondary school careers. Evidence for this is found in the very first quote of this paper: 50% to 60% of all teachers in primary school differentiates, whereas this percentage is much lower (25%-to 33%) in secondary education. As students who arrive new at a secondary school are already accustomed to differentiation, there does not seem to be any reason for teachers to doubt themselves in their capabilities, as the students will find this didactic approach a normal situation. Moreover, considering the evidence that secondary school teachers do not differentiate as much as their primary school counterparts, the need to set-up more differentiated lessons is important. The only way to start this up this process is by not being afraid of experimenting with differentiation. In fact, and this could be the little nudge non-differentiating teachers need, some of the teachers interviewed in Berben's article claim that "it is good fun" and "this way of teaching gives the teacher the opportunity to...provide extra attention to those students who need help" (Berben 2013).

Additionally, two types of differentiation that are relevant to this research paper are differentiation in student level and personal interest. The reason as to why this is, is beyond the scope of this section. This will, however, be discussed in the methodology section. For now, let us discuss in greater detail what differentiation in level and personal interest entails.

According to Berben and van Teeseling (2014), differentiation using the so-called IGDI model (interact gedifferentieerde directe instructiemodel; English: *interactive differentiated direct instruction model*) allows teachers to differentiate between multiple groups. The term is explained as follows:

Interactive: there is interaction between teacher and students and between students alike. (Houtveen et al. 2005, Bakker et al. 2012)

Differentiated: applying differentiation to various sub-groups (Houtveen et al. 2005, Bakker et al. 2012)

Direct: "the teacher offers structure in time, methods and instruction to those who need it." (Houtveen et al. 2005, Bakker et al. 2012).

Instruction: students learn from the teacher, but can also learn from one another. (Houtveen et al. 2005, Bakker et al. 2012). Let us now examine in greater detail how the IGDI-mode exactly works during a lesson. A differentiated lesson will (usually) consist of four phases:

- 1) The explanation phase / orientation / explanation phase (all students)
- 2) Split up into the aforementioned strong, intermediate and weak groups, where the following differences are applied: the strong group will only receive feedback from the teacher at the end of class. During the majority of class, they will work and process information on their own. The intermediate group and weak group will receive instruction, after which the intermediate group will proceed on their own followed by feedback at the end. The weak group will receive additional instruction on top of the initial instruction, after which they process an assignment on their own. Students of all levels are also encouraged to cooperate during the process.
- 3) Round-up: evaluation of lesson and looking ahead with all three groups.

This model is based on that of Förrer & Van de Morel (2010). It is now clear that there is interaction between the students and teachers in this model; the teacher differentiates with three sub-groups; there is direct instruction to those who need it (the intermediate group, but the weak group in particular; the teacher is in control of timing and methodology, as he/she determines when students listen to him/her and when they go to work; The students have learned something from the teacher, but may also have learned from each other.

We will later on see that this IGDI model is applied (with some slight variation to it due to my personal preference) in our methodology. It is the IGDI model that allows us to differentiate between

different levels that students are currently at. For instance, in their penultimate year at grammar school, some students may have already achieved a good feeling for grammar exercises. More specifically, these students can perform these grammar exercises without having to look up the relevant theory or even contemplate it. Their grammar instincts are sufficient enough to complete the exercise without experiencing significant problems. Additionally, those students who have already achieved a reading level that is sufficient enough, they can work on more complex texts or other language skills which they wish to develop. Consequently, it may be better for them to skip the grammar instruction or reading assignment and work on their own on an alternative or more challenging assignment. As a result, the teacher can focus on a smaller group of students who should in need of additional instruction.

In addition to differentiating on the level of the students, our methodology will also make use of differentiation in terms of personal interest. The critical question that now arises is how to differentiate in personal interest? Deci & Ryan (2000) have a theory on this which states that a greater sense of autonomy will in turn result in greater intrinsic motivation. Deci & Ryan continue to argue that once intrinsic motivation increases, it will “result in high-quality learning and creativity (2000). Recall now the IGD model where during phase 2 at some point during a class students of all levels have to process information or an assignment by themselves. As the teacher leaves the students to their own devices at this point, they are all working autonomously. In fact, the stronger group of students should even work on an assignment of their personal choosing (recall Kerpel 2014) to achieve the highest growth possible. Due to the students choosing what they want to work on and the teacher thus giving autonomy to the students in this area, the teacher differentiates in their personal interest which will increase motivation and, in the long term high-quality learning and creativity.

### **3. Setting and Motivation**

Now that the theoretical background has been established, the setting against which this research has taken place along with my motivation for writing this paper will be explained.

This research has been conducted at the Rodenborch College in Rosmalen. It is a school with approximately 1600 students. The three primary level at which classes are taught are vmbo-t, havo and vwo. Additionally, the school has so-called LOOT and Jena departments. The former being a department where top sport students are facilitated, the latter being a department where emphasis is placed on cooperation between students and their self-planning skills. Moreover, the students are placed in heterogeneous groups in jena classes, meaning there is not one specific vwo or havo group; students of the same year of vwo, havo and vmbo-t in fact share the same lessons.

The classes in which my differentiation lessons took place involved virtually all my groups. The only groups, however, where I have specifically conducted my test was a single 5 vwo year consisting of 30 students. The reason for conducting the research in this specific group is actually a simple one. I originally set out with two colleagues to do research at my school. We soon each discovered that we sported an interest for research in various topics, mine being differentiation. Following this, we decided that one colleague would take a 4 vwo group, the other a 6 vwo group, leaving me with a 5 vwo group. The reason as to why they are all vwo groups is because my colleagues and I are all members of the vwo upper-form team. Consequently, we decided it would be advantageous if we could exchange information on our research on the very department we taught most of our classes in.

The motivation for writing this paper consist of several arguments:

1)

It was stated in the overview hat this paper focusses on the issue of differentiation. It is important to note that an important set of recent developments in secondary education didactics involve differentiation. According to Berben and Teeseling (2014) it "almost seems as if differentiation is a fashion word." Moreover, differentiation is mostly considered to be a more advanced didactic method and more complicated than, for instance, frontal instruction, where the teacher has comparatively little interaction with the students.

"Verder zeggen leraren vanwege werkdruk of gebrek aan faciliteiten niet altijd toe te komen aan differentiatie en afstemming. In de derde plaats zijn niet alle leraren tijdens hun lerarenopleiding voldoende op differentiatie voorbereid. Leraren die zich willen bekwamen in differentiatievaardigheden, zien niet hoe ze dat kunnen doen zonder dat hun werkdruk verhoogt" (Verslag Nederlandse Onderwijsinspectie 2012/2013).

This quote demonstrates that a lot of teachers are not easily willing to differentiate in their classes.

It is now possible to expect that both unexperienced teachers and long-time experienced teachers, who have grown very much accustomed to their own teaching style not involving differentiation, will have trouble adapting to this relatively demanding didactic form. In short, because this topic plays such an important role in modern-day classroom situations, it is one of the motivations for writing this paper.

2)

The school at which this research was conducted considers differentiation to be an important feature in secondary education.

“We bieden uitdagend en gevarieerd onderwijs. De leerlingen werken regelmatig samen in groepen en de docenten hanteren activerende werkvormen. Ze differentiëren binnen de klas. Daarom werken we aan de didactische vaardigheden van de docenten en aan de implementatie van ICT in de lessen.” (Rodenborch Schoolbeleid 2012-2016)

The abovementioned quote taken from the school policy 2012-2016 translates itself as follows: “We offer challenging and effective education. The students frequently work in groups and the teachers utilise workforms that are didactically activating. They differentiate within the classroom. Therefore, we shall work on the didactic skills of the teachers and the implementation of ICT in the lessons.”

As can be deduced from this statement, one of the school's primary objectives is to ensure high quality lessons, and, more importantly, that all the teachers differentiate in their classroom lessons. Due to the emphasis placed on differentiation, it is vital to investigate this topic in greater detail to ensure that it can be applied to maximum effect at school.

3) Closely related to the points stated under reason 2, my personal wishes to improve myself as a teacher in the field of differentiation also play a profound role: aside from researching differentiation, the fact that one is busy with this particular topic may generate additional insight in how to differentiate in the classroom. Finally, I also wish to see if differentiation can truly make a difference in my teachings.

4) Personally, I think that as a teacher the utopic situation is to see your students being intrinsically motivated for your subject. However, intrinsic motivation will not always be present in a students for my subject, in this case English. Therefore, I assume good didactics are required to trigger extrinsic motivation for students. It is thus interesting to see what application of differentiation as a didactic tool can do to the perception of differentiation and motivation of your students.

5) There are many forms of differentiation that can be applied in the classroom. Moreover, some teachers and researchers are convinced that differentiation is the key to successful teaching, yet the Dutch education inspection claims that dealing with differences between students in the classroom is still the “Achilles hill of Dutch education.” (Vernooij 2009) The fact that differentiation is claimed as being a successful didactic tool, yet not being applied properly leads me into believing more research into this field is required to get a better a understanding of why not applying differentiation is

justified.

It is now possible to combine the core elements of the theoretical framework and the motivation section to formulate a research question. The Dutch education inspection considers differentiation an important factor in secondary schools and would like to see it applied more often. The same goes for the policy currently in use at the Rodenborch College. It is, therefore, that I use differentiation in my lessons. Taking into account the theoretical framework, an increase in intrinsic motivation will be observed when using the IGDI model, as this model allows for intrinsic motivation. The IGDI is applied to a large extent in my lessons. The one feature I would now like to have researched is to *verify how students perceive the application of convergent differentiation and what it does to their motivation.*

#### **4. Research Question and Hypothesis**

As the research topic consists of two features - perception of convergent differentiation and motivation - the research question is thus two-fold and as follows:

*- How do 5<sup>th</sup> year vwo students perceive convergent differentiation in the English classroom and what does it do to their motivation?*

Recall our observations made on the positive effects of differentiation in section 2 (Kerpel 2014; Bosker, 2005; Allcock & Hulme, 2010; Berben 2013)

Consequently, our hypothesis will be as follows:

*- Students will perceive convergent differentiated lessons in a positive way and their motivation will have increased.*

#### **5. Methodology**

In order to research whether our hypothesis is true or false, it was necessary to set-up a differentiation methodology in class. Specifically, a methodology was required that implemented the IGDI-model so convergent differentiation would be allowed for. As stated in section, I would explain this section why specifically convergent differentiation is the methodology I have chosen for and not the divergent form. The choice was a simple one: recall that convergent differentiation serves all levels of students and can increase their motivation, whereas divergent differentiation does not do the latter and primarily serves the stronger students. As I wish to see if the perception and motivation will be positive and have positively increased, respectively, I assume convergent differentiation is better as it will serve all students, not just the talented ones.

Now that the reasons for applying convergent differentiation have been discussed, let us

return to application of the IGDI model used in my lessons. The group, consisting of a test population of 29 students, is effectively split up in three groups to create the stronger, intermediate and weaker group system, according to features described in the section 2 on the IGDI-model. The first group is a group containing the advanced students, or otherwise those who are above the current level in class. The decision to in which category a student belongs is at the teacher's discretion: generally, those students who have an insufficient grade in the area I wish to instruct them in are considered weak. Those who have a grade somewhere between a 5,5-7 are intermediate and 7 or higher is considered strong. In practice, the strong group is the group of students who can permit themselves to work on alternative assignments because they already have a sufficient command of English, and do not require any new or repeated instruction from the teacher. The second group consist of the what can be defined as the intermediate students. They understand the theory explained to them and do not require additional explanation from the teacher, yet their level is not high enough to be working with material that is above their current level or outside of the books used in class. Note that with the higher and average level groups I differentiate in personal interest, as students can work with something in English which arouses their interest. Finally, the third group consists of those students who do not understand / have difficulty understanding the material explained to them. As mentioned above, they are very often the students who have scored insufficient grades and these students will receive additional instruction by the teacher, along with a series of extra exercises which are done together in this small group as well. Moreover, the students are also asked to watch an online video at home and study the relevant grammar at home to prepare for the lesson ahead. This "flipping the classroom" technique where the student is given the explanation of the relevant theory at home, is utilised in order to profit from the time gain that is not used explaining e.g. vast portions of grammar theory. Flipping the classroom will also result in a series of control questions being asked on the material that has been studied in order for me to quickly verify which students may be in need of extra attention.

In the methodology section, I stated that I would explain how Berben's (2013) strategies are applied in my classes. Having now discussed the application of the IGDI-model, it is possible to do this. First, the difference in level is now created because the strong group works on its own with advanced material outside that of the book used to generally teach English. In addition, I differentiate between the intermediate and weaker group in terms of additional instruction and my call as to whether or not I wish a student to receive additional instructions from me. Secondly, this automatically creates a difference in difficulty of the assignments which the students work on. It is the strong group in particular that will have to fend for itself with assignments that are above the current level of difficulty. Third, recall that phase 1 and 3 of the IGDI-model contain a review and looking-ahead moment respectively. In order to achieve this looking ahead moment, I have decided

to provide students with video clips on theory that needs to be studied for the next lesson. Note that this theory has not been explained to the students yet. The idea is that the students view material that is about to come up in class so that I will not have to spend too much time on explaining the theory to all students, so that I may divert my time to those who are in need of the extra instruction. Through this so-called element of pre-teaching, I effectively differentiate now as students can decide whether or not they wish to watch (if they understand it already, they can proceed with other things that need to be done by them). The video clip then acts as a differentiator for me in class, as those who have not understood the material can come to me for extra explanation. The fourth and final strategy, the willingness to experiment by a teacher works as follows in my school. As far as I know, I am the only teacher at school who applies this particular method in all his or her classes, especially with the vast amount of material I supply the stronger groups with. One thing is absolutely for sure: I am the only one who is investigating this particular method, and I think it the best way to discover to what extent convergent differentiation via the IGDI-model works.

So far, we have discussed what is done in class to differentiate between students' levels. Now, we will describe how differentiation takes place between students' personal interest. The more advanced students, who can handle a challenge, have the opportunity to choose from a variety of additional exercises which are at their disposition. These exercises vary from such things as advanced vocabulary and collocations, all the way down to (socio)-linguistics. Additionally, the students of the intermediate group can do extra listening and reading exercises. For instance, when a student needs to work on his/her reading comprehension, he/she is free to practice reading from a reading book. Similarly, should a student require extra practice in listening skills, he/she can watch documentaries online using their own device brought to class. In order to ensure the student actually does something with this material, he/she will be required to write a summary on the material that had just been observed. More importantly, please note that the students of the middle and advanced group are free to work on both the method or opt to work on the abovementioned advanced or comprehension specific exercises. The students of the lowest group have to work using the standard book methodology at all times or join me for extra instruction at my desk to ensure a proper understanding of the material discussed in class.

The students in the test group have worked according to this principle during periods one, two, and three of the schoolyear 2015-2016. Specifically, since the start of the year they have worked in this particular way for 30 weeks. Recall that our hypothesis stated that we expect to find a positive student perception and motivation towards differentiation. Therefore, we shall now discuss what approach will be taken in testing this hypothesis.

The group of respondents used to test the hypothesis is a group of 29 students, all between the ages of 16 and 18 years old. All respondents attend the Rodenborch College and are students of mine in the fifth year of the vwo level.

The students' perception of differentiation and their motivation in our investigation will be tested via an enquiry. This enquiry can be found in appendix A. The students have been asked several questions regarding the differentiation applied in the English classroom. In this enquiry, they had to answer a total of 8 questions. Some of the questions consist of both an A and a B question, where the A question would always ask for their opinion on a certain aspect of differentiation e.g. I like it when I can choose what material I want to work with, and the B question always asks them whether or not they make use of a certain differentiation opportunity. Additionally, the students were also asked to obligatory illustrate their answers to ensure I would understand the reason why they choose a specific answer. The questions were answered on a 5-point scale, where respondents had to indicate whether they strongly disagree, disagree, are neutral, agree, or strongly agree. In appendix A, an overview of these questions can be found. This particular set-up has been chosen because it provides a relatively easy way of measuring the students' opinions.

## **6. Data Analysis**

The raw data results can be found in appendix B. The most striking results will now be mentioned:

1. 86% of the students is agrees<sup>1</sup> with the opportunity to choose their own skill they wish to practise is a good thing according to question 1a. Additionally, 1b indicates that 83% of the students, when offered this opportunity, will also make use of it.
2. Similar to question 1, the majority of the students (85%) prefer additional instruction on top of regular instruction when they do not understand something when looking at the data from question 2. Interestingly enough, though, not all students make use of this, as question 2b only has just under 45% agreeing with the statement.
3. 58% of the students prefers doing extra assignments when given the option if the material in class is not understood , but fewer (37%) make actual use of this.
4. A striking 64% actually prefers traditional frontal instruction from the teacher. Note that this means no application of the IGDI-model.

---

<sup>1</sup> I have only taken 'eens' and 'zeer mee eens' into account when calculating positive answers. Likewise, if something negative needs to be addressed, only 'oneens' and 'zeer oneens' are added up. Neutral answers (niet eens/niet oneens), for the sake of simplicity, have not been taken into account.

5. Only a handful of students have a positive attitude towards the flipping the classroom technique (37%), and 40% of the students claim even not to study at home at all.
6. 65% however, do prefer check questions stated by me when they had to study at home.
7. Students do not necessarily feel more motivated to do assignments, yet when it comes to studying for English, just over half the group does (58%).
8. As stated in the methodology section, all students had to illustrate their answers in the remarks section to ensure I would fully comprehend why they had chosen a particular answers. All the remarks with the exception of one were simple illustrations of the chosen scale answer and not worth mentioning in this paper. The one that stood out though, must be mentioned. It concerns the comment section of the last question where students are asked about their motivation to study for English. Although the idea was that the students would state if the differentiated lessons would make them feel more motivated, the 58% that did say so on the 5 point scale actually argued that they only felt more motivated due to the fact that their grades were not high enough, and not because they feel more motivated as a result of differentiation. This might not have been entirely clear due to the nature of the question, which did not include: I feel more motivated thanks to the *differentiated* lessons, Nor is it clear whether the students interpreted the question as such. (this is most likely not the case, otherwise they would not have given an answer which is heavily based on their grades).

## **7. Conclusions**

What does the data above imply? First and foremost, the students perceive differentiation positively when it comes to the strong and intermediate students groups' liberty to choose which particular language skill they wish to work on. They also have a positive attitude when it comes to being given additional instruction in the intermediate and weaker group. The lower percentage of students who actually makes use of this can be found in the fact that not the entire class belongs to the intermediate and weaker group and not all students of the intermediate have to make use of the additional instruction time. Mixed feelings are clearly indicated when it comes to completing extra assignments in class when material is not understood. Only half the group actually wants to do so, and even fewer make use of this. This is fascinating, as though there seems to be an attitude among

the students that they only wish to improve as long as it only takes minimal effort. Attitudes become even more negative when it comes to the form of explanation: two-third of the group would rather have traditional direct instruction, rather than the sub-group system, where preparation has to take place through pre-teaching. Moreover, the students are not positively geared towards pre-teaching with a percentage of only 37% appreciation. Again, this seems to reinforce my assumption that students only wish to work for English with minimal effort. That is, the teacher explains everything in class so we do not have to put any effort into working at home. Finally, as has already been pointed out in the data section above, the students do not necessarily feel more motivated. Their chief course of motivation originated in their goal to score a higher grade. It does not seem as if that they feel more motivated to study for English. Moreover, the comment section leaves us to assume the student's primary form of motivation can be found in their grades: they must go up. Differentiation does not seem to have an influence on this. The fact that just under half the group even prefers frontal teaching is an indicator that differentiation in the style discussed in this paper is not always preferred. It is important to take into account on critical variable: what are the attitudes I am dealing with as a teacher in this classroom? If the group is one which likes things easily come and served, for instance with all work explained in class without having to do anything at home, they will not have a positive attitude towards differentiation. It is also not possible to safely state that differentiation will yield the scores from the data section for every classroom, as a total of 29 students is not representative for every single classroom. In fact, I personally think this is more of an indication what the attitudes are of this group, and more classes would need to be tested to provide a more sound image of students' attitudes towards differentiation. We should also bear in mind that this group has never before been exposed to this form of differentiation and so far they have always had their primary focus on scoring good grades. We as teachers have effectively brought them to this stage, and therefore, we cannot just expect them to switch to a new style within the timespan of three-quarter schoolyear.

Recall now our hypothesis:

*- Students will most likely perceive convergent differentiated lessons in a positive way and their motivation will have increased.*

Based on our data, for this particular group it is neither possible to overwhelmingly accept this hypothesis, nor reject it. Certain aspects are clearly more positive than others (recall, for instance, choosing what aspect of English you wish to work on being more positive), yet flipping the classroom is perceived negatively and the question on motivation contains too much noise, as students have

not focused on differentiation increasing their motivation, but their low grades in answering where the source of their motivation lies.

To conclude, this research will require more follow-up research in the future, as one classroom does not provide a sound conclusion. It does, however, indicate this group's mixed feelings towards this particular teaching style. Based on the abovementioned discussion, I would recommend testing this in a first year group in secondary school who have just entered the system freshly, and are not yet familiar with frontal teaching as being the norm. Due to their "freshness", this may yield highly interesting results.

## 8.

## Literature

Allcock, S.J. & Hulme, J.A. (2010). Learning Styles in the Classroom: Educational Benefit or Planning Exercise? *Psychology Teaching Review*, 16, 2, 67-79.

Bakker, M., Gerrits, P. & Theil, J. (2012). *Resultaat met rekenen. Handvatten voor een goede rekenles. Amersfoort: CPS.*

Berben, M. & Teeseling, M. (2014). *Differentiëren is te leren!*. Amersfoort: CPS, Onderwijsontwikkeling en advies.

Berben, M. (2013). 'Is differentiëren te leren?' In: *Prima*, maart 2013, nr. 2, p. 24-25.

Bosker, R.J. (2005). De grenzen van gedifferentieerd onderwijs. Rede uitgesproken bij de aanvaarding van het ambt van hoogleraar. Groningen: Faculteit der Psychologische, Pedagogische en Sociologische wetenschappen van de Rijksuniversiteit Groningen.

Förrer, M. & Mortel, K. van de (2010). *Lezen... denken... begrijpen! Handboek begrijpend lezen in het basisonderwijs.* Amersfoort: CPS.

Gamoran, A. (1992). Access to Excellence: Assignment to Honours Classes in the Transition from Middle to High School. *Education Evaluation and Policy Analysis*, 14, 3, 185-204

Guiton, G. & Oaks, J. (1995). Opportunity to Learn and Conceptions of Educational Equality. *Educational Evaluation and Policy Analysis*, 17, 3, 323-336.

Houtveen, T., Koekebacker, E., Mijs, D. & Vernooij K. (2005). *Succesvolle aanpakken van risicoleerlingen. Wat kan de school doen?* Antwerpen/Apeldoorn: Garant.

Marzano, R., Pickering, D. & Pollock, J.E. (2001). *Classroom Instruction That Works: Research-Based Strategies for Increasing Student Achievement*. Alexandria, VA: ASCD.

Vernooij, K. (2009). *Omgaan met verschillen nader bekeken. Wat werkt? - Onderwijs Maak Je Samen*. Retrieved July 04, 2016, from <https://www.onderwijsmaakjesamen.nl/actueel/omgaan-met-verschillen-nader-bekeken-wat-werkt/>

## 9. Appendix A: Enquiry

Enquete VWO 5 Lessen Engels

Beste leerling,

Het zal je vast niet ontgaan zijn dat je bij mij in de les dit jaar op een wat andere manier les hebt gehad dan je tot nu toe . Zoals je weet mag je bij mij bijvoorbeeld ook documentaires kijken, uit een boek lezen of aan andere verbredende of verdiepende opdrachten uit de kast in lokaal 142 werken. Los daarvan geef ik ook veel minder klassikaal les, maar laat ik je de stof thuis bestuderen en geef ik extra instructie bij mij aan mijn bureau aan de leerlingen die moeite hebben met de stof.

Hieronder volgt een aantal vragen over deze manier van lesgeven. Ik heb graag dat je deze vragen eerlijk beantwoordt en vooral je eigen visie geeft en niet die van je klasgenoten. Je bent ook **verplicht** een toelichting bij al je antwoorden te geven. Als je namelijk alleen maar eens/oneens zou invullen begrijp ik nog niet waarom je een antwoord geeft. Je **mag** de enquête anoniem invullen.

Alvast bedankt!

Mr. Lantaff

1. a. Ik vind het fijn om in de les zelf te mogen kiezen uit verschillende mogelijkheden.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

- b. Ik maak gebruik van die mogelijkheid.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

Toelichting: \_\_\_\_\_

---

---

2. a. Ik vind het fijn om extra instructie te krijgen als ik de stof niet heb begrepen.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

b. Ik maak gebruik van die mogelijkheid.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

Toelichting: \_\_\_\_\_

---

---

---

3. a. Ik vind het fijn om extra opdrachten te maken als ik de stof niet heb begrepen.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

b. Ik maak gebruik van die mogelijkheid.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

4. a. Ik vind het fijn om elke les klassikale instructie te krijgen.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

b. Ik maak gebruik van die mogelijkheid.

Zeer oneens    oneens            niet eens/niet oneens            eens            zeer mee eens

Toelichting: \_\_\_\_\_

---

---

---

5. a. Ik vind het fijn om thuis de stof van te voren te bekijken.

Zeer oneens   oneens        niet eens/niet oneens        eens        zeer mee eens

b. Ik maak gebruik van die mogelijkheid.

Zeer oneens   oneens        niet eens/niet oneens        eens        zeer mee eens

Toelichting: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. a. Ik vind het fijn dat de docent controlevragen stelt over de stof die ik thuis heb moeten leren.

Zeer oneens   oneens        niet eens/niet oneens        eens        zeer mee eens

b. Ik maak gebruik van die mogelijkheid.

Zeer oneens   oneens        niet eens/niet oneens        eens        zeer mee eens

Toelichting: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Ik voel mijzelf nu gemotiveerder om voor Engels opdrachten te maken.

Zeer oneens   oneens        niet eens/niet oneens        eens        zeer mee eens

Toelichting: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

8. Ik voel mijzelf nu gemotiveerder om voor Engels te leren.

Zeer oneens    oneens    niet eens/niet oneens    eens    zeer mee eens

Toelichting: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## 10. Appendix B: Results

N=29

	aantal	%
1a		
Ik vind het fijn om in de les zelf te mogen kiezen uit verschillende mogelijkheden		
zeer oneens	0	0.0
oneens	1	3.4
niet eens/niet oneens	3	10.3
eens	17	58.6
zeer mee eens	8	27.6
1b		
Ik maak gebruik van die mogelijkheid		
zeer oneens	0	0.0

oneens	1	3.4
niet eens/niet oneens	4	13.8
eens	20	70.0
zeer mee eens	4	13.8

## 2a

Ik vind het fijn om extra instructie te krijgen als ik de stof niet heb begrepen

zeer oneens	0	0.0
oneens	0	0.0
niet eens/niet oneens	4	13.8
eens	14	48.3
zeer mee eens	11	37.9

## 2b

Ik maak gebruik van die mogelijkheid

zeer oneens	1	3.4
oneens	8	27.6
niet eens/niet oneens	7	24.1
eens	12	41.4
zee mee eens	1	3.4

## 3a

Ik vind het fijn om extra opdrachten te maken als ik de stof niet heb begrepen

zeer oneens	0	0.0
oneens	4	13.8
niet eens/niet oneens	8	27.6
eens	15	51.7
zee mee eens	2	6.9

## 3b

Ik maak gebruik van die mogelijkheid

zeer oneens	2	6.9
oneens	7	24.1
niet eens/niet oneens	9	31.0

eens	10	34.5
zee mee eens	1	3.4

4

Ik vind het fijn om elke les klassikale instructie te krijgen

zeer oneens	0	0.0
oneens	5	17.2
niet eens/niet oneens	5	17.2
eens	13	44.8
zee mee eens	6	20.1

5a\*

Ik vind het fijn om thuis de stof van te voren te bekijken

zeer oneens	5	17.2
oneens	6	20.7
niet eens/niet oneens	11	37.9
eens	6	20.7
zeer mee eens	0	0.0

\*Totaal N 5a = 28 want 1 respondent heeft een dubbel antwoord gegeven

5b\*\*

Ik maak gebruik van die mogelijkheid

zeer oneens	6	20.7
oneens	6	20.7
niet eens/niet oneens	11	37.9
eens	5	17.2
zeer mee eens	0	0.0

\*\*Totaal N 5b=28 want 1 respondent heeft een vraag niet beantwoord

6

Ik vind het fijn dat de docent controle vragen stelt over de stof die ik thuis heb moeten

leren		
zeer oneens	1	3.4
oneens	5	17.2
niet eens/niet oneens	4	13.8
eens	16	55.2
zeer mee eens	3	10.3

7

Ik voel mijzelf nu gemotiveerder om voor Engels opdrachten te maken

zeer oneens	2	6.9
oneens	10	34.5
niet eens/niet oneens	12	41.4
eens	5	17.2
zeer mee eens	0	0.0

8

Ik voel mijzelf nu gemotiveerder om voor Engels te leren

zeer oneens	1	3.4
oneens	3	10.3
niet eens/niet oneens	8	27.6
eens	17	58.6
zeer mee eens	0	0.0