Do differentiated processes according to language level in English classes in the first year
of TTO raise pupils' interest?

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Abstract

In order to enroll in bilingual education in the Netherlands, pupils usually partake in an assessment for motivation and language level. Nevertheless, this assessment cannot be conducted in English, since the level of most pupils is not sufficient enough. Therefore teachers of first year students at the bilingual department at RSG Broklede expressed concerns regarding the differences in language level. Using Tomlinson's (1999; 2001) model for differentiation, we investigated what influence differentiated processes have on pupils' situational interest (Schiefele, 1991; Woolfolk, 2013). The interpretation of quotes from two focus group interviews leads to conclude that pupils' situational interest has been raised by the activities. However, both lower and higher language ability pupils raised the issues of more differentiated content throughout the curriculum.

Introduction

The Dutch national education system is highly selective in the sense that pupils are divided between streams based on their level. This level is determined by a test at the end of primary school (the CITO test) and the advice of the primary school teacher. Within this education system, there has been an immense growth of bilingual departments at secondary schools, with one school starting with *tweetalig onderwijs* (TTO) in 1989 up until 123 schools offering such a Content and Language Integrated Learning (CLIL) programme in 2014. Moreover, more schools start offering a CLIL programme in prevocational education, whereas in the early years the focus laid on the pre-university stream (Denman, Tanner & de Graaff, 2013).

In order to enroll in TTO, pupils are sometimes further tested for motivation and/or language level during an individual intake interview. This interview serves as a language assessment, but this cannot be conducted in English, as the pupils have not yet acquired a sufficient level to be able to actually check that. Therefore, higher-level pupils are selected but they might differ in their language abilities and skills, even though the pupils usually achieve the same grades.

This is the starting situation of the secondary school where this research was conducted. RSG Broklede is a regional school in Breukelen that offers two of the regular Dutch pre-university streams and a CLIL programme in the highest stream. Teachers in the bilingual department at Broklede felt the need to address the differences in language level in class, although pupils obtain the same grades in the end. The lower language ability pupils study more and still get good grades, whilst the higher language ability pupils –some were even raised bilingually or in an English speaking country- have no motivation or interest during class, but pass the tests based on prior knowledge. Needless to say, the need for differentiation is present, but teachers express the need to know more about how to differentiate.

Differentiation is an increasingly important topic in teaching as contemporary Dutch society is becoming constantly more open to accept different pupils with various backgrounds and abilities. Those pupils tend to differ greatly and therefore teaching methods need to be adapted in order to assist pupils in their developmental path. The aim of this research is to provide practical evidence towards that direction. The outcome of this research can be a point of reference to the teachers of RSG Broklede and be a stimulus for further awareness towards the need for differentiation in the school. Taking

into consideration the results of our research, we hope that the teachers next year can further develop differentiated lesson activities and that this helps to raise the awareness of differentiation across the school as a whole.

Theoretical Background

Differentiation has always been a topic of interest to many scholars in the field of education. A teacher differentiates when he or she addresses the varying learning abilities of pupils. It is necessary, because pupils learn more effectively when their individual needs are taken into account. In order to be able to differentiate appropriately, the teacher must adjust his or her professional teaching practices (Altrichter & Krainen, 1996).

Wilkinson & Penny (2013) have shown that streaming pupils in different ability classes has negative effects, such as teachers not being able to move pupils between groups. This is in line with Olenchak (2001), because he gives evidence for "personalized differentiation as the optimal means for accommodating the needs" of all pupils. Nevertheless, this is what happens in the Dutch educational system. Dutch pupils are selected and placed in different ability groups assuming that within the class the pupils have the same ability.

Taking into consideration these individual needs, modifications can be made to content, process and product (Tomlinson (1999), Olenchak (2001) and Theisen (2002)). Content refers to what the pupils must know and understand. One example of how differentiating the content can be achieved is by using varied text and resource materials (Tomlinson, 2001). Process deals with how pupils understand the material; so for example, let the pupils engage in different processes of critical and creative thinking. Product refers to the output of the task, that is, how pupils demonstrate their understanding of the material. Differentiation in terms of product can be achieved by allowing learners to show their understanding in multiple ways, not only through written products but also for example through the production of graphic organizers, art, performance, demonstrations, models, posters (Chamot & O'Malley, 1994).

Carol Tomlinson is one of the pioneers of differentiation. She has suggested that the modifications in content, process or product can be made on three levels; in terms of level (or readiness), interest, or learning profile/style (Tomlinson, 1999). This distinction leaves three questions for teachers: what do you differentiate?, how do you differentiate?, why is the teacher differentiating? These questions must be answered on a lesson by lesson basis.

According to Tomlinson (2001), differentiated instruction is student centered, ensuring that the learning experience will be more effective if it is relevant, engaging and interesting for the student. The extent to which something is relevant, engaging and interesting differs from person to person, therefore the instruction provided by the teacher should be tailored to the students' individual differences and be appropriately challenging. Through a differentiated approach students are actively participating in the teaching and learning and they are active in making and evaluating decisions. Therefore, students become more responsible, their personal growth is promoted and they develop a sense of pride in what they do (Tomlinson, 2001).

		Student Learning Needs		
		Readiness	Interest	Learning Profile
Curricular Demands	Content			
	Process			
	Product			

Figure 1. Tomlinson's (1999) differentiation model. Teachers can differentiate the curricular demands according to pupil learning needs.

In order to better meet learners' different interests, the teacher can allow them a choice of products or tasks (Theisen, 2002). This is supported by Deci's work (1981, 1992) in his analysis of the positive effects of choice on interest within the context of self-determination theory.

In the early 1980s, studies in public classrooms identified a positive correlation between the level of autonomy in the classroom context and the intrinsic motivation of the students. Learners in classrooms with teachers that support their autonomy experience feelings of confidence and self-worth, resulting in higher intrinsic motivation than in classrooms of control-oriented teachers (Deci et al., 1981). Later, Deci conceptualized interest as "the core affect of the self - the affect that relates to one's activities" (Deci 1992: 45). According to Deci, the three fundamental psychological needs intrinsic to the self are the needs for competence, autonomy and relatedness: "To be self-determining means to engage in an activity with a full sense of wanting, choosing and personal endorsement" (Deci 1992: 44).

In this present research, based on Tomlinson's model described above, we are focusing on the differentiation of the curricular demands according to pupils' learning needs and more specifically on how differentiating the process can affect learners' interest. Interest is defined as "a content-specific motivational characteristic consisting of intrinsic feeling-related and value-related valences" (Schiefele, 1991). Feeling-related interest refers to feelings that are linked to a topic or an object. Most likely, feelings of enjoyment and involvement are most typical of interest. Value-related valences, refer to the attribution of personal significance to an object. Personal significance may be attributed to an object (or subject area) for a number of reasons, such as its contribution to one's personality development, competence, or understanding of important problems (Schiefele, 1991).

Furthermore, Schiefele (1991) makes further distinctions regarding interest. One distinction is selective and momentary interest; selective interest is willed or effortful while momentary interest is habitual or impulsive. Moreover, *individual* interest is conceived as a relatively enduring preference for certain topics, subject areas, or activities

and *situational* (one type of contextual interest) interest is an emotional state brought about by situational stimuli. Situational interest is concerned with stimulus characteristics that arouse interest as well as with the effects of text materials on interest. Another distinction is interest as a latent characteristic and interest as an actualized characteristic (Schiefele, 1991).

Moreover, Woolfolk distinguishes between *personal* and *situational* interest. *Personal* interests "are more enduring aspects of the person, such as an enduring tendency to be attracted to or to enjoy subjects such as languages, history or mathematics" (Woolfolk, Hughes & Walkup, 2013: 444). In this research, we are not interested in the *personal* interests of the pupils, but in their *situational* interests. Those are "more short-lived aspects of the activity, text or materials that catch and keep the learner's attention" (Woolfolk, Hughes & Walkup, 2013: 444).

The concept of interest presented in Schiefele's research (1991), has the following features:

- Interest is a content-specific concept. It is always related to specific topics, tasks, or activities;

- Interest is a directive force meaning that it can explain students' choice of an area in which they try to achieve high levels of performance or show intrinsic motivation;

- Interest consists of valences attached to a topic or activity. It may be either enduring or short lived, and either general (involving many similar areas) or specific. Interest is not a personality trait like other motives of behavior (e.g. achievement motive).

These features are important for this research as we will design a content-specific differentiated English lesson while having examined pupils' intrinsic motivation of having chosen the TTO stream and its importance to them. Moreover, before the differentiated instruction we have looked into pupils' preferences for particular topics and activities and we try to see how these affect their interest.

Finally, according to Ainley, Hidi and Berndorff (2002), interest has been conceptualized both as an individual predisposition and as a psychological state. This psychological state is characterized by focused attention, increased cognitive and affective functioning, and persistent effort. In this research we intend to design activities that aim to increase the focused attention of pupils, their engagement in the activities, their achievement and effort.

We designed those differentiated in process activities so as to increase pupils' situational interest. Hidi and Renninger (2006) have developed a four- phase model of interest development. The first two phases explain how differentiating process can increase situational interest. More specifically, phase one (triggered situational interest) is found to be engendered by instructional conditions or learning environments such as group work and puzzles. Moreover, phase two (maintained situational interest) can cause persistent attention when instructional conditions or learning environments provide meaningful and personally involving activities such as project based learning,

cooperative group work, and one-on-one tutoring. Phase three (emerging individual interest) refers to the beginning of a relatively enduring individual interest and phase four (well-developed individual interest) refers to an established and enduring individual interest which makes pupils reengage with the content.

Furthermore, research shows that multiple factors affect situational interest in important ways. In one research by Mitchell (1993) he finds statistical significance between increasing students' involvement (differentiated process) and enhancing situational interest.

Research questions and hypothesis

The goal of this research is to investigate how the differences among the pupils can be addressed through a particular process of differentiation. Therefore, the research question formulated was:

> Do differentiated processes according to language level in English classes in the first year of TTO raise pupils' situational interest?

Our hypothesis is that **there is a positive correlation between differentiating process and situational interest**. This means that differentiated processes in terms of language in English classes in the first year of TTO will raise pupils' situational interest following Hidi and Renninger's (2006) four-phase model that explains how differentiating process can increase situational interest.

Methodology

Context of study and participants
The sample used were six learners of English in a first year of TTO in Broklede (3 boys and 3 girls). We decided to focus on first year pupils because of their heterogeneity in language ability, and on English classes because of the willingness of the teacher involved. The learners, 27 in total, were 12-13 years old and were following English in the TTO stream for the academic year 2013-2014.

The criteria for choosing the participants were their language ability in English (high, average and low) as well as their interest in the subject. Their English teacher who knew their language level made the selection of the pupils. Therefore, in this research we differentiated the lesson according to the pupils' language level (readiness) as referred to in Tomlinson's model of differentiation. This was in line with the school's problem statement, which affirmed a need for addressing differences in pupil's language abilities.

Description of instrument
The instrument we used for this qualitative research was the focus group. The focus group has been defined as a "carefully planned series of discussions designed to obtain perceptions on a defined area of interest in a permissive, non-threatening environment" (Krueger & Casey, 2000: 5). In this discussion the group is 'focused' in that it involves a form of collective activity (Kitzinger & Barbour, 1999). We performed two focus group interviews: One interview after a regular lesson the teacher performed (without

differentiation) and a second interview after a differentiated lesson we designed. The differentiated lesson was planned using the information gathered from the first focus group interview.

Distinction of focus group from other qualitative methods
Although focus group research is a form of group interview, it distinguishes itself because of its explicit use of group interaction. Group interaction is a key element of a focus group as it allows researchers to examine "not only what people think but how they think and why they think that way" (Kitzinger, 1995: 299). This highlights the importance of process in decision making in focus groups rather than simply promoting an outcome.

Additionally, features that set focus groups apart from groups discussions may include the specific plan on the process of the interview, the controlled environment as well as the structural way to collect and process data (Larson, Grudens-Schuck & Allen, 2004).

Moreover, despite the similarities that focus groups may share with other survey methodologies in collecting high quality data, they differ in their purposes, procedures and results as indicated in the following table (Figure 2).

Insight not rules - results of focus groups cannot be generalised
Social not individual - focus on combined perspectives
Homogeneous not diverse - regarding the composition of the participants
Flexible not standardised - during the group discussion
Warm not hot - avoids conflicts
Words not numbers - way of reporting results

Figure 2. How focus groups differ from survey methods
(Grudens–Schuck, Allen & Larson, 2004).

The use of focus groups has numerous compelling advantages over the use of other qualitative research methods (Berg, 1995; Hoepfl, 1997; Kitzinger, 1995; Grudens-Schuck et al., 2004):

- Attention to the real voices of actors and broader view of social reality for the researchers;

- Contextualized information that provides an insight in a group's experiences;

- Identification of shared and common knowledge through examining different types of narratives used within the group;

- Discussion of taboo topics, because less inhibited participants break the ice, and provide support in expressing feelings that are common to focus group participants;

- Empowerment of research participants, as they become active part of the process;

- Generation of more critical comments than interviews;

- Provision of more surprises than other types of research, because focus groups elicit as many points of view as possible and provide trustworthy naturalistic data;

- Less time than multiple personal interviews or large surveys.

The use of focus groups comes with a number of limitations. Kitzinger (1995), Kitzinger & Barbour (1999), Grudens–Schuck, Allen & Larson (2004) and Fern (2001) highlight a number of downsides of focus groups. These are:

1. It may silence individual voices;

2. Participants cannot be given an absolute guarantee that the confidence of what is heard in the group will be respected;

3. It is not a reliable technique for determining an individual's authentic point of view, as due to social norms participants may be supportive rather than honest;

4. The small size of a focus group does not allow statistically significant generalization of responses to a larger population.

Our use of the focus group in the case of the school in Broklede was aimed at getting an insight into the lesson and its dynamics. Through the focus group we wanted to investigate the way learners experience the lesson and at the same time gain information about their interests and values. In that way we would have gained materials that could be used as input in designing the differentiated lesson. Finally, a second focus group interview aimed at providing information on learners' feelings and experiences after the differentiated lesson. We draw our conclusions by interpreting quotes from both interviews.

Description of the focus group guide
Permission was granted to have the interview the same day of the lesson during the participants' mentor hour. The place of the interview was a classroom in the school and the duration of the interviews was between thirty and forty minutes. For the focus group an interview guide was formed based on the structure suggested by Kruger (2002) and Kramer (2009) with opening questions, introductory, transition, key questions and ending questions. Figure 3 below shows the questions used.

Opening question	Tell us your name and age?
Introductory question	How did you decide to choose TTO?
Transition question	Think back of the lesson today, what is your impression of it?
Key questions	a. What did you like best about the lesson today?
	b. Can you name the characteristics of those "best" moments?
	c. What did you like least about the lesson today?
	d. How do you feel about the English lesson?

	e. What would you like to learn in an English lesson?
	f. How do you like to learn English?
Ending questions	a. Suppose you could make a change in the lesson today, what would that be?
	b. Is this an adequate summary?
	c. Have we missed anything?

Figure 3. Questions during the focus group.

The learners had no prior experience with focus group discussions. However, they were cooperative and the results of both interviews are very interesting. Both interviews have been recorded and transcribed verbatim.

In order to "break the ice" there was an initial group experience (Figure 4) to encourage participants to concentrate on one another and to explain their different perspectives as described by Kitzinger (1995).

| **Focus interview: activating exercise description** |
| Five cards were given with the words boredom, enjoyment, anxiety, interest, achievement and pupils had to think of the lesson of that day and remember how they felt during the lesson. Giving numbers 1-5 (1 is agree the most and 5 agree the least) they would communicate their feelings during the lesson. The same exercise took place also after the differentiated lesson. |

Figure 4. Activating exercise description.

Description of the differentiated lesson
The lesson took place during the first hour. It lasted 45 minutes and was divided into five phases (Figure 5). The topic of the lesson was adverts; the learning aims stated that pupils would by the end of the lesson be able to use *will* and *won't* forms for predictions and would be able to identify the characteristics of a good advert. During the first phase, in order to stimulate the learners, the teacher presented some adverts on the whiteboard so as to initiate a plenary discussion on the characteristics of a good or bad advert.

This is in line with phase one of the four-phase model of interest development, triggering situational interest and a result of affective and cognitive processing. This is typically externally supported, sparked by environmental or text features and usually caused by instructional conditions such as group work or puzzles (Hidi and Renninger, 2006: 114). In our differentiated lesson we also externally supported the triggering of situational interest through a number of advertisements that were on the whiteboard and provided instructional conditions through the plenary discussion initiated by the teacher.

During the second phase, the learners read a number of adverts that were in a textbook so that through an inductive method the learners would understand the grammar involved. In the third phase the class was split into five smaller groups and a 'committee' was set up. The five smaller groups had to apply the grammar by designing an advert and the higher language ability group had to design a rubric by analyzing and evaluating the grammar. Therefore, there were different same ability groups formed and this is how process was differentiated in accordance with Tomlinson's (2011) model. The content given to the pupils was the same but the degree to which they processed it varied

according to level. Differentiated processes engaged pupils in different processes of critical and creative thinking. The content was the same but the learning goals were achieved through different paths.

During the fourth phase the members of the committee joined the teams and as "experts" they tried to improve the quality of the adverts. The lesson was structured in that way so as to have appropriately challenging tasks for the higher language ability pupils and to make them more active in evaluating other pupils' decisions (Tomlinson, 2001). The third and the fourth phases of the differentiated lesson plan corresponded to the second phase of the four-phase model of interest development- maintained situational interest. This involved "focused attention and persistence over an extended episode of time" (Hidi and Renninger 2006: 114). To achieve that in our differentiated lesson plan we formed and included personal involvement tasks and co-operative group work (committees, groups and experts in each group) that maintained situational interest and supported the transition of the pupils to the third phase of the four phase model; emerging individual interest.

In the last phase, one person per group went to the white board and completed the sentence "A good ad will be…" as a wrap-up activity. In the course of the lesson the teacher did not perform the last phase. Instead, she held a plenary discussion of the pupils' products and the characteristics of good adverts. This was due to a lack of time. The phases of the differentiated lesson are in Figure 5.

Phase 1	5 min
Plenary discussion: Show on the board 2-3 adverts and the teacher starts a discussion whether they would buy this product or not. **Pupil activity description**: activate them and start thinking of what makes a good/bad advert.	

Phase 2	5min
Warm-up: Pupils individually read the adverts from the book on page 104 (bottom, with the adverts) to understand the grammar. They have a look at the sentences that contain *will* and *won't* (inductive). At this phase the teacher can explain something if it is necessary (deductive).	

Phase 3	15min
2 "groups" of pupils; One group will be the "committee" (6 higher language ability pupils) and the rest of the class will divide in groups of 4-5 and will design an ad (of their interest). They make one advert per group. The "committee" will design criteria for good adverts in order to assess the adverts (the quality, the product and the **language**).	

Phase 4	5min
One member from the committee joins a group. All together they discuss how the advert	

can be improved based on the rubric. The committee member will be the expert so they will be more challenged in the sense that they will lead the discussion. The teacher assigns this role to them and explains that they will be the "leaders".

Phase 5	10min
Plenary discussion: One person per group goes on the board and writes one good characteristic of a good advert/what would a good ad look like/contain. "What will a good ad contain so that it will or won't be attractive?" The pupils need to write down a whole and complete sentence making use of the grammar. For example, the pupil needs to write: "A good advert will be… attractive/funny…". They will have decided that during their discussions.	

Figure 5. Phases of the differentiated lesson.

Analysing the results of the focus group
In the analysis we compare discussion of similar themes or perspectives and examine with the use of our theoretical framework how they relate to the research question. A key point in the analysis is that the reference needs to be done in the group context, meaning that we identify key themes in the group but also "the operation of individual 'voices' within it" (Kitzinger and Barbour, 1999: 16). As group interaction is essential in focus group, the group dynamics, jokes, agreement, disagreement will be on the spotlights of our investigation.

When analysing the results of the focus group, either by using direct quotes, or drawing major themes (Williams and Katz, 2001), or by using large chunks of transcripts to illustrate the context in which remarks were made (Myers and Macnaghten, in Kitzinger and Barbour, 1999: 16) the goal is to identify the core insights of the group.

Results
The major topics that emerged from the group discussions were: (a) lack of interest during the first focus group; (b) raise of interest during the second focus group; and (c) need for even more challenge. The ideas generated from the two focus groups are described below. The statements that are used for the description of the results and for the conclusions are to be found in Figure 6.

Focus group 1
1. Interviewer2: Or not? Do you all feel the same about the book? Pupils: Yeah, a bit boring.
2. When [the teacher] talks a lot I lose my attention and then when we have something to do, I don't know anymore what I need to do.
3. I feel rather bored in class when they [are] just talking about, like a review [...], so then I like it most if we just work on our, on our own speed.
4. I think that, what I want is more of a challenge, that you get more challenge with learning new things and get weekly some kind of short tests - if you can - and then learn it in a challenging way.

Focus group 2
5. Well, this time it is something else than working from the book and it is something also creative.
6. I liked the idea that you could decide on your own what you wanted to make, out of what you learned … or learn em… the past lessons.
7. Yes. That we could do our own things in a group, because it's not that I really thought I really learned a lot of it, but it just was kind of fun.
8. That we really learned things, or actually for me not because if she actually just say something to [make an advert], we are more busy to draw and to talk with each other. Yes, nothing actually.
9. Yes I did understand what she tried to do because it was challenging. Because you did have to think about it more, about what you had to put in the advert.
10. Interviewer: Mh, so did you achieve something?   Pupil: No.   Interviewer: No, why not?   Pupil: Because, the grammar we already knew.
11. And maybe some more challenge.
12. Yes, I also liked it, because we could work in groups and I like work in groups. And not out the book.
13. Yeah, it is more challenging [than what we usually do] but it is not...   Pupil interrupts: "not much, much."
14. Yeah, the activities are fine but more challenging content, I think.

Figure 6. Statements from the two focus groups.

Lack of interest during first focus group
After the non-differentiated lesson, the pupils stated that they do not enjoy working from the school textbook as it decreases their personal interest. All pupils mentioned their lack of personal interest in working from the textbook. In this research the main focus is situational interest. Nevertheless, we briefly mention this major result on personal interest. Many pupils supported the opinion that working from the book is a bit "boring" (Figure 6, statement 1).

As of situational interest, they stated that they want to actively participate in the lesson otherwise they get bored. This is a view supported by both higher and lower language ability pupils. One pupil said that he loses his attention, when the teacher talks a lot (Figure 6, statement 2).

Raise of interest during second focus group
This lack of personal interest in working form the textbook was also brought up during the second focus group discussion. When talking about the differentiated activity a pupil

said that she enjoyed it, because it is something else than using the text book (Figure 6, statement 5).

Regarding the increase of situational interest after the differentiated lesson, all pupils were more interested but to a different extent. One higher language ability pupil said that he enjoyed the autonomy of the activity, by stating that the pupils could decide on their own what to do with the material from previous lessons, as well as this lesson (Figure 6, statement 6). Another higher language ability pupil mentioned his hypothetical raise of interest by only working in mixed ability grouping. The group work raised their situational interest even though the learning was not effective. A pupil stated that she enjoyed the activity, but it was not like she learned a lot from it (Figure 6, statement 7).

On the other hand, a lower language ability pupil said that it did not work for her because she got distracted by the side assets of making an advert, such as drawing and talking about it (Figure 6, statement 8). The higher language ability pupils thought that the activity of working on the rubric was not interesting because they were working separately from the other pupils on a less creative activity.

More challenge for the pupils
During the first focus group a higher language ability student said the pupils would like to work on their own speed (Figure 6, statement 3). Furthermore, the majority of the pupils said that they enjoyed learning new things. Also, when asked about what they would like to learn they indicated more in depth knowledge on English culture. Finally, a higher language ability pupil stated that he wanted to be more challenged, for example by using short tests, and liked that learning things in a challenging way (Figure 6, statement 4).

This also came up in the second focus group. A higher language ability pupil thought that their activity was more challenging, because they had to think more about what to put in the advert (Figure 6, statement 9). When one lower language ability pupil was asked whether she achieved something in the lesson she said she had not, because the grammar was already known to them (Figure 6, statement 10). A higher language ability pupil agreed with her later on expressing the need for some more challenge (Figure 6, statement 11).

Discussion
In this research we have investigated whether differentiated processes according to pupils' language ability raise their situational interest. According to the results the process, especially the group work, did raise their interest. In the first focus group a lack of interest emerged whereas in the second focus group pupils indicated a clear interest in the activity. This matches with Hidi & Renninger's (2006) four-phase model, and the idea that group work raises the pupils' interest. This is demonstrated by statement 12 (Figure 6), which shows enjoyment as a result of this working format. Phase-one of Hidi & Renninger's model suggests that learning environments such as group work trigger situational interest and Schiefele (1991) says that the feeling of enjoyment is the most typical characteristic of situational interest.

Moreover, during this type of activities pupils are allowed to have greater freedom and autonomy, which according to Deci (1992) has a positive effect on their interest. Furthermore, Tomlinson (2001) mentions an increased sense of pride in what

pupils do because they have more responsibility and choices. This is confirmed by our results as some pupils indicated that they enjoyed the freedom of designing their own advert and using the content learned in their own way. We can conclude that their interest has been raised because they are more engaged in this group activity.

Although the differentiated process did raise their interest, it was also apparent from the results that it did so to different extents for the pupils. The higher language ability pupils stated that they were less interested in the same ability grouping although they did notice the challenge posed by this differentiated process (Figure 6, statement 13).

One higher language ability pupil said that they did have to think about it more (Figure 6, statement 9). This links to the necessity of higher order thinking skills, for example, the higher three levels of Bloom's taxonomy, for more challenging differentiated processes (see Krathwohl, (2002) for the original taxonomy, including a revision of it).

However, all of the pupils agreed on the low level of the content, which is confirmed by their scores for 'achievement' in the first activity and by statement 14 in Figure 6. Even though content is not the focus of this research, we think it is necessary to take it into account. The teachers wanted to increase pupils' interest especially of the higher language ability pupils and we expected that the differentiated process would raise their interest. The results though suggest that differentiated content is a factor that affects the increase of interest more than process does. Using Tomlinson's model on differentiation (2001), we can then conclude that in order to raise their situational interest in the lesson, the teacher might have to differentiate the content and make it more challenging in order to match their level. A general raise of the level of the content is needed, because on average it is too low for the TTO pupils as indicated by our results.

This case study is a qualitative research and the results cannot be automatically generalized. One needs to be critical with the results and conclusions as the research focuses on one bilingual class and more specifically on the views of six pupils. Therefore, the class sample is not representative but it could be considered representative of a typical Dutch TTO school. Moreover, the teacher made the choice of the six pupils and she chose two pupils of three different language levels in order to have a representative sample.

During our research, the discussion emerged about what was differentiated during the lesson. It could be argued, following the phases and the description of the differentiated lesson, that it is not the process but the content that has been differentiated. Those for differentiated content would argue that the process is the same, namely group work, and the content is different: designing the rubric versus making an advert. However, following the definition of process as 'how pupils understand the material' (Tomlinson, 2001; Chamot & O'Malley, 1994), this lesson can be seen as a differentiated process. Pupils go through different learning paths to achieve the same content goals. Those goals were to understand what a good advert contains and to be able to use *will* and *won't* correctly in predictions. Looking back on this lesson, we could have made the distinction between process and content more visible. This could have been done by using completely different working formats and exactly the same task. It was only after having given the differentiated lesson that it could be argued that the lower language ability pupils were actually performing tasks that needed higher order thinking skills than

the higher ability pupils. The lower language ability ones were creating, using the material on a higher level than the higher language ability ones, which were analysing and evaluating (Krathwohl, 2002). If we were to repeat this research, we would certainly adapt those elements, so the level would be more appropriate to the level of the learners.

Conclusions

One major conclusion of this research is that differentiated processes lead to an increase of situational interest for the first year TTO pupils. The extent to which this occurs though differs between higher and lower language ability pupils. Although the Dutch system is already streamed, and the motivated and higher language ability pupils are selected for TTO, the positive correlation between differentiated processes and situational interest suggests that differentiation is also an important aspect of TTO in the Netherlands.

Furthermore, the findings of the research lead to the conclusion that the same ability grouping process did not have the expected positive effect on raising pupils' situational interest, especially regarding the higher language ability pupils. Even though the differentiated process did raise their situational interest, a choice of mixed ability grouping would have led to a greater raise in their interest as stated by the pupils. This differentiated process was not only more interesting but also more challenging for both higher and lower language ability pupils. However, challenging content to match the pupils' level did not support it.

One suggestion for the teachers in Broklede is that mixed ability grouping should be preferred over same ability grouping processes. Apart from the necessity of process differentiation another aspect needs to be considered, that is, content differentiation. From the second focus group discussion a major issue raised was more challenging content that addresses the different language ability of the pupils.

Even though our research question does not focus on content differentiation, the results indicate that it should be taken into consideration complementary to process differentiation. Consequently, it is vital to have further research on the connection between process and content differentiation on raising situational interest.

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References

Ainley, M., Hidi, S. & Berndorff, D. (2002). Interest, Learning, and the Psychological Processes That Mediate Their Relationship. *Journal of Educational Psychology*, 2002, Vol. 94, No. 3, 545–561.

Altrichter, H., & Krainer, K. (1996). Wandel von Lehrerarbeit und Lehrerfortbildung. In K. Krainer, & P. Posch (Eds.), Lehrerfortbildung zwischen Prozessen und Produkten (S. 33-52). Bad Heilbrunn: Klinkhardt.

Berg, B. (1995) Qualitative Research Methods for the Social Sciences (2nd ed.). Boston: Allyn and Bacon.

Chamot, A.U. & O' Malley, J.M. (1994). CALLA Handbook: Implementing the Cognitive Academic Language Learning Approach. MA: Addison-Wesley Publishing Company.

Deci, E. L., Edward L., The relation of interest to the motivation of behavior: A self-determination theory perspective.(in Renninger, K. Ann (Ed); Hidi, Suzanne (Ed); Krapp, Andreas (Ed), (1992). The role of interest in learning and development. , (pp. 43-70). Hillsdale, NJ, England: Lawrence Erlbaum Associates, Inc, xiv, 461 pp.

Deci, E. L., Edward L., Nezlek, J.; Sheinman, L. (1981). Characteristics of the rewarder and intrinsic motivation of the rewardee. *Journal of Personality and Social Psychology, Vol 40(1),* Jan 1981, 1-10. doi:10.1037/0022-3514.40.1.1

Deci, E. L., Schwartz, A. J., Sheinman, L., & Ryan, R. M. (1981). An instrument to assess adults' orientations toward control versus autonomy with children: Reflections on intrinsic motivation and perceived competence. *Journal of Educational Psychology, 73,* 642-65.

Denman, J., Tanner, R., & de Graaff, R. (2013). CLIL in Junior Vocational Secondary Education: Challenges and Opportunities for Teaching and Learning. *International Journal of Bilingual Education and Bilingualism*, Volume 16, Issue3, p.285-300.

Fern, E.F. (2001). Advanced Focus Group Research. Thousand Oaks, Calif.: Sage.

Gruden – Schuck, N., Allen B. & Larson K. (2004). Methodology brief: Focus group fundamentals, extension community and Economic development publications, Iowa State University.

Hidi, S. & Renninger, K. A. (2006). The four-phase model of interest development. *Educational Psychologist, 41 (2)*, 111-127.

Hoepfl, M. (1997). Choosing Qualitative Research: A Primer for Technology Education Researchers. *Journal of Technology Education. Volume 9*. [On-line]. Available: http://scholar.lib.vt.edu/ejournals/JTE/v9n1/hoepfl.html

Kitzinger, J. (1995). Introducing focus groups, BMJ, volume 311.

Kitzinger, J. & Barbour R. (1999). Developing focus group research. Politics theory and practice, London, Sage publications.

Krathwohl, D. R. (2002). A Revision of Bloom's Taxonomy: An Overview. *Theory Into Practice*, 41 (4), 212-218.

Kramer B. (2009). The art of interviewing groups: focus group fundamentals, from http://videos.med.wisc.edu/files/Art_Handout.pdf

Kruger R. (2002). Designing and conducting focus group interviews. in http://www.eiu.edu/~ihec/Krueger-FocusGroupInterviews.pdf

Krueger, R. & M.A. Casey (2000). Focus group: A practical guide for applied research (3rd edition) . Thousand Oaks, Calif: Sage publications.

Larson, K., Gruden – Schuck N. & Allen B. (2004). Can you call it a focus group? Methodology brief, Iowa State University Extension and outreach.

Linnenbrink-Garcia, L., Durik, M.D., Conley, M.C., Barron, K.E., Tauer, J.M., Karabenick, S.A. & Harackiewicz, J.M. (2010). Measuring situational interest in academic domains. Educational and Psychological Measurement. Online First, published on March 3, 2010.

Mitchell, M. (1993). Situational interest: Its multifaceted structure in the secondary school mathematics classroom. *Journal of Educational Psychology, 85*, 424-436

Olenchak, F. R. (2010). Lessons learned from gifted children about differentiation. The Teacher Educator, Volume 36, Issue 3, March 2001, pages 185-198. Published online: 20 Jan 2010.

Schiefele, U. (1991). Interest, learning, and motivation. *Educational Psychologist*, 26 (1991) 3 & 4, S. 299-323.

Schratz, M. (1993) Qualitative voices in Educational Research. London: Falmer Press.

Stradling, B. & Saunders, L. (1993). Differentiation in practice: Responding to the needs of all pupils. *Educational Research*, 35 (2), 127-137.

Theisen, T., Loveland, CO. (2002). Differentiated Instruction in the Foreign Language Classroom: Meeting the Diverse Needs of All Learners.

Tomlinson, C. A. (1999). *The differentiated classroom: Responding to the needs of all learners.* Alexandria, VA: Association for Supervision and Curriculum Development.

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed-ability classrooms* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Tomlinson, C. A. (2001). *How to differentiate instruction in mixed ability classrooms* (2nd ed.). Alexandria, VA: Association for Supervision and Curriculum Development.

Wilkinson, Shaun D. & Penney, Dawn, (2013), The effects of setting on classroom teaching and student learning in mainstream mathematics, English and science lessons: a critical review of the literature in England, *Educational Review,* DOI:10.1080/00131911.2013.787971

Williams & Katz (2001). The use of focus group methodology in education: some theoretical and practical considerations, International electronic journal for leadership in learning.

Woolfolk, A., Hughes, M. & Walkup, V. (2013). *Psychology in Education* (2nd Edition). PEARSON Publications.