A design for vocabulary supporting activities for NT2 students at College Zuid.

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Abstract

The language level of Dutch as a second language (NT2) students when they move to regular secondary education is often insufficient, resulting in lagging performances in school subjects. At College Zuid, these lagging performances of NT2 students have been noticed. Therefore, College Zuid introduced a program for additional language support to motivate NT2 students to improve their Dutch language level. Unfortunately, this program has not yet the desired outcome of motivating students to increase their vocabulary level through practicing. Since the NT2 support is an innovative idea of College Zuid (no other schools provide this support), there is no available curriculum for the lessons. Research (Expertgroep Doorlopende Leerlijnen Taal en Rekenen, 2008) states that extra support is important for NT2 students to improve their Dutch language acquisition. However, there is limited to no research done on how extra vocabulary support for NT2 students at a regular secondary school, should be given form so that the support is both useful and motivational. Therefore, this study aimed to investigate on a design for useful and motivational vocabulary activities for NT2 support at College Zuid in Enschede.

Initial criteria for the vocabulary activities were based on the current situation analysis of College Zuid. These criteria were incorporated into eight pilot lessons and these pilot lessons were evaluated using an observation scheme and a final pilot lessons evaluation questionnaire. From the results of this study, it turned out that the students need vocabulary activities that are suitable, relevant, advantageous, motivational and include opportunities to practice words in different contexts. The students of this study have a positive attitude towards learning new vocabulary, which enhanced their motivation. Also, the vocabulary activities have been useful as students successfully learned new vocabulary during the pilot lessons. The study has shown that the language level of the students plays a role in preferences for pace and level of the lessons. The students in this study think Kahoot is a motivational and useful activity to improve their vocabulary knowledge. Also, this study shows that students are motivated for activities like searching the meaning of words and creating sentences with new words. It has been found that students are the least motivated for activities that involve writing stories and writing new words in their vocabulary notebook. This study has found the following design criteria for useful and motivational vocabulary activities: include discovery and word consolidating strategies, track student results, include opportunities to repeat words and strengthen network connections in context, use a combination of a communicative and focus on form approach, include blended work settings, resources and content and the activities should promote cooperative learning, be motivating and be advantageous. For future research on NT2 support, it is recommended to use an experimental and control group or to do a pre- and post-test to get more qualitative data regarding the effectiveness of the activities. Despite the limitations and the scope, this study gives first insights into effective and motivational vocabulary activities for NT2 support at College Zuid. The results of this study proved a baseline for further research on NT2 support.

Keywords: Vocabulary, motivation, development, Dutch as a second language (NT2), portfolio.
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1. Introduction

In this chapter, the rationale for the study, the research questions and the social, scientific and practical relevance of the study are presented.

1.1. Rationale for the study

Due to increased war violence, more refugees came to the Netherlands over the past few years than before (Centraal Bureau voor de Statistiek, 2017). Also, the Netherlands attracts many expats who take their families with them. For all children aged between 5 and 18, who are living in the Netherlands, the same laws and regulations apply to the learning and qualification obligation (Verenigde Naties, Internationaal Verdrag voor de Rechten van het Kind, Artikel 28). The law on secondary education (1963), stipulates that secondary education in the Netherlands should be given in Dutch. To be able to follow education in Dutch, an adequate level of the Dutch language is necessary (Engbersen, Dagevos, Jennissen, Bakker & Leerkens 2015).

The increase in underage refugees and children of expats, entail a growth of students that learn Dutch as a second language (NT2) in the International Transition Classes (ISK) (E. Le Pichon, R. van Erning, & S. Baauw, 2017). Students for whom Dutch is the second language are referred to as NT2 students. ISK are intended for newcomers in the Netherlands who have little or no knowledge of the Dutch language. The newcomers have many different nationalities and can be students who have come to the Netherlands for family reunifications, come from the former Antilles, came to the Netherlands because a parent had a relationship with a Dutch person or stay in a shelter for unaccompanied minor refugees (ISK Groningen, n.d.). The aim of ISK is to teach NT2 students the Dutch language, and to transfer them to regular secondary education within a maximum of three years. Transfer to regular education will take place when the NT2 students are able to adequately integrate in Dutch society. The main problem in the area of efficient transfer to regular secondary education is the language deficiency that the NT2 students face (CED group study, 2009). The language level of the NT2 students at the end of their ISK period is enough to integrate in Dutch society, but often insufficient to be able to keep up with all subjects at regular secondary education (CED group study, 2009). Insufficient vocabulary levels can cause problems regarding subject understandings and obstructs NT2 students in the execution of educational tasks (Saville-Troike, 2012). This negatively influences school successes and as a result, subject performances often lag behind (Bosker & Luyten, 2000).

An adequate language proficiency is necessary for transition to further education and the labour market (Engbersen et al., 2015). Specific attention to vocabulary, after the ISK, is still necessary for NT2 students to improve their Dutch language acquisition (Tesser, 1993). Regular language methods at secondary education are often not enough for the NT2 students to increase their vocabulary levels sufficiently (Inspectie van het Onderwijs, 2016). Paus (2014) indicates in his research that word knowledge is of fundamental importance for language proficiency. Students with a language deficiency get trapped by their limited vocabulary (Verhallen & Verhallen 1994, from Appel & Kuiken 2004). It can be stated that vocabulary is the basis for all parts of language proficiency (Vermeer, 2003; Broekhof & Cohen de Lara, 2006).

In order to reduce the lagging performance of NT2 students in secondary education, subject understanding and therefore adequate language proficiency, is required. Additional time, support and sufficient exposure to the Dutch language are necessary conditions to improve acquisition of the Dutch language (Expertgroep Doorlopende Leerlijnen Taal en Rekenen, 2008). Research shows that there seems to be a language gap between NT2 students and native Dutch speaking students in secondary education (Vermeer, 2003). Native Dutch speaking students are referred to as NT1 students. Since vocabulary plays a major role in language acquisition, it is believed that vocabulary support could
reduce the language gap between NT1 and NT2 students and therefore also reduce the stacking effect on subject performances of NT2 students in school.

Based on the experiences from teachers at College Zuid, it has become clear that NT2 students often struggle to understand subject content and exam questions, because of an insufficient Dutch language proficiency. To reduce the language gap between NT2 students and NT1 students, College Zuid started with an additional program for extra language support for NT2 students in January 2017. The extra support has been an innovative idea as normally there is no paid hour of support for NT2 students at a regular secondary school. This program aims to support and motivate NT2 students to improve their Dutch language level. Enhancing vocabulary knowledge plays a major role in this program, as it has been noticed at College Zuid that most NT2 students have limited vocabulary knowledge. The desired result of the program is to improve the students’ subject understandings and performances as a result of their improved language proficiency and vocabulary levels.

Unfortunately, the NT2 support program at College Zuid has not yet the desired outcome of motivating students to increase their vocabulary level through practicing. Until now, different methods to improve vocabulary knowledge have been tried during the support program. It has been observed by the teacher that the NT2 students were unmotivated to practice their vocabulary using these methods. The students indicated that they were unmotivated because the included activities in these methods were useless, boring, irrelevant or too difficult. Also, no improvement of subject understandings or tests performances have been noticed at College Zuid so far. Until now, there has been no structure for the NT2 program at College Zuid. Therefore, College Zuid requested an exploration of possible motivational activities for vocabulary practice, which in a further state could be implemented within a curriculum or portfolio. This request includes recommendations for implementation of the activities and recommendations for the teachers to support NT2 students.

1.2. Background of the study

This section starts with an explanation of the definitions of the International Transition Class and Dutch as a second language. It also provides background information about education within the International Transition Class and it discusses the influence of some important factors on the learning process of NT2 students.

1.2.1. Education in the International Transition Classes

All children entering the Netherlands when having the school age of five to eighteen, are obliged to attend school. Foreign children having the secondary school age, go to the International Transition Classes (ISK). ISK provide education to children between twelve and eighteen, who are in the Netherlands for less than three years and speak little or no Dutch. The ISK is not an independent form of education, but is linked to an educational institution for secondary education or secondary vocational education (Nuovo Scholengroep, 2015). Classes at the ISK are mainly aimed at learning the Dutch language, so students can participate in regular education after one to three years (Nuovo Scholengroep, 2015). Education within the ISK is organized different than education in regular schools and there are three variants of ISK schools. At full-time ISK schools, students receive education in a separate group. In part time ISK schools, the students follow separate ISK lessons and also follow education at a regular secondary school. The extended school day is the last variant in which education takes place after the regular school time. Most classes of the ISK are small (less than 15 students) and fixed and the schools normally have more staff than a normal school has. ISK education has several typical characteristics that also entail a number of problems (Lowan, 2008).

First, there are no guidelines for placing the NT2 students within an ISK (Veltman, 2010). The organizational form depends on local agreements between school boards and municipalities.
Berendst, Bienfait, Hofstede and Van Der Schaaf (1994) identified the lack of a curriculum as a limiting factor for the ISK quality. There is a great diversity amongst NT2 students which makes it hard to develop a curriculum that suits all profiles (Veltman, 2010). Differentiation on the ISK is mostly done based on age and education level, resulting in different routes. There are three routes, two age classes each: Route one under the age of 16 (transfer to special education or practical education), route one above the age of 16 (transfer to ROC pre-entrance), route two under the age of 16 (transfer to VMBO-b), route two above the age of 16 (transfer to ROC 1 and 2), route three under the age of 16 (transfer to VMBO-k – VWO) and route three above the age of 16 (transfer to ROC 3,4 or VAVO). See figure 1 (Lowan, 2018).

Second, according to Veltman, an important hence difficult factor to determine is the starting level of NT2 students. He also mentioned that little to no guidelines have been formulated for learning outcomes of NT2 students at the ISK. With regard to the learning outcomes, no standards have been formulated which describe, for different profiles, what the inflow level of the NT2 student is, what final level is desired at the end of their ISK period and how the NT2 student is going to achieve this desired level. All these characteristics negatively influence the final level of the NT2 student at the ISK. As a result, the efficient transfer to regular secondary education has become problematic (Inspectie van het onderwijs, 2016b).

1.2.2. Dutch as a second language
The term NT2 (Dutch: Nederlands als Tweede Taal) stands for Dutch as a second language. The majority of the lessons at the ISK focusses on learning the Dutch language. Within NT2 there are four language levels: A1, A2, B1 and B2 (Vermeer, 2003). A2 is the level which is necessary to function properly in daily life. This level is also required for NT2 students to be able to transfer to regular education. B2 is the highest level and when this level is reached, the Dutch language is controlled in such a way that there are no communication problems. Different language levels are set as goals for different educational levels. See figure 2 (Lowan, 2018).
According to Haynes (2007), acquisition of the second language occurs in five stages. The first stage according to Haynes, is the “Preproduction” stage during which learners expand their vocabulary without speaking the language. He describes the second stage as the “Early Production” stage and during this stage, learners will have around 1000 words vocabulary and they use short language forms. The third stage, “Speech Emergence”, is the stage in which learners have acquired around 3000 words and they should be able to speak short sentences and understand short stories with pictures (Haynes, 2007). Learners in the fourth stage, “Intermediate Fluency”, have an active vocabulary of around 6000 words (Haynes, 2007). In this stage, learners can form longer sentences and demonstrate excellent comprehension. The last developing stage is described by Haynes as the “Advanced Fluency” in which the learners are considered as near-native language speakers. The NT2 students of the present study can be categorized in the “Intermediate Fluency” stage, which is comparable to the B1-B2 Dutch level.

1.2.3. Student diversity
The diversity amongst NT2 students is great in terms of level of education, age and country of origin. NT2 students all have different initial situations, motivations, competences and ambitions (Lowan, 2003). NT2 students can be used to a very different writing system or different sounds. In that case, they need to get used to strange sounds and they must learn which letters and sounds differ from their mother tongue (Sterckx, 2000). Also, students may show differences in abilities to deal with unknown situations and contents. There are differences in student behaviour depending on whether the students have to deal with new people, a new environment, a new culture and a foreign language (CEFR, 2018). All these differences ensure that NT2 students need support in different areas and learn the Dutch language at their own pace. In addition, it is of great importance that teachers are able to estimate the language level of the NT2 students, so that the students are offered education at a suitable, tailored level to their skills, without over- or underestimating the students’ abilities (Kuyper, Hoeben & Pijl, 1994).

1.2.4. Transfer to regular education
The ISK is only the first phase of education for NT2 students. After the ISK, NT2 students move on to regular education. As a result of inefficient transfer between both educations, the regular secondary
school does only receive little information about the students (living situation, conditions under which they entered the Netherlands etc.), their level of Dutch and their scores on subjects they followed at the ISK (CED group study, 2009).

The biggest problem related to transfer from the ISK to regular education, is the language deficiency students face (van Hasselt & de Kruyf, 2009). The research of Schuurs and Elshout (2001) has showed that there is a big gap between the judgements of NT2 teachers at the ISK and teachers of regular education about the minimum required language skills for NT2 students for moving on to regular secondary education. This results in insufficient control of the language of instruction at a regular secondary school, which causes that students have troubles understanding the lesson content.

The Education Inspectorate (Dutch: *Inspectie van het Onderwijs*, 2016), mentioned that regular language methods in secondary education are often not enough for the NT2 students. When NT2 students transfer from the ISK to a regular secondary school, language support can be continued in different ways; additional language lessons or a personal language coach are the most common forms in the Netherlands. This support is necessary, as it takes on average four to seven years to reach the language level that is necessary to integrate successfully in education (Hajer, 2016).

### 1.3. Research questions

The purpose of this study is to investigate how additional vocabulary support at College Zuid can be given the best form, to motivate NT2 students, and to improve the NT2 students’ Dutch vocabulary level. This study tries to incorporate different vocabulary activities that are suitable for all NT2 student profiles. The aim of the different vocabulary activities is to investigate what vocabulary activities are motivational and useful for the students to improve their vocabulary learning. This means that the main purpose of this research is to gain understanding of the needs of second language learners and the current situation regarding NT2 support at College Zuid. To gain this understanding, a literature research and a current situation analysis are conducted. The current situation analysis explores the current educational situation regarding NT2 at College Zuid and assesses the needs of NT2 students regarding NT2 support. The outcomes of the current situation analysis will be translated into criteria for useful vocabulary activities to support the vocabulary development of NT2 students at College Zuid.

The main question that is addressed in this research is: “What is a useful design for motivational vocabulary activities, with the aim to improve vocabulary development, for NT2 students at College Zuid?” Sub-questions that go with the main question are: “What are the needs of NT2 students and teachers to be able to improve the current NT2 support?”, “What kind of vocabulary activities are motivational for NT2 students to support their vocabulary development?” and “What kind of vocabulary activities do students think are useful for their vocabulary development?”

The research questions are investigated in an explorative design research. The results lead towards a recommendation for a design for useful and motivational vocabulary activities which are suitable for the NT2 support hour at College Zuid. Based on the final design for activities, recommendations for implementation of the activities within a future curriculum or portfolio are made. This study also gives recommendations on how a portfolio can help teachers to use information about their NT2 students for extra guidance and support.

### 1.4. Social, scientific and practical relevance

This study aims to investigate on a design of motivational vocabulary activities for NT2 students at College Zuid, to improve their Dutch vocabulary development. This study hopes to discover what the problems of NT2 students are regarding vocabulary development, and what support and guidance they need to overcome these problems. Also, this study hopes to find a design for vocabulary activities that
motivate the NT2 students. In this manner, this research could lead towards recommendations and guidelines for a curriculum by developing effective and motivational activities for vocabulary practice of NT2 students. The designed activities for vocabulary practice are expected to motivate the NT2 students to practice their Dutch and take part in the vocabulary activities. The design is expected to contribute positively to the vocabulary learning of NT2 students, their Dutch language proficiency and their subject understandings.

Second, this study hopes to contribute to the language development of NT2 students, which is indicated as a requirement to be able to participate in society (Maa & Timman, 2013). According to Baker (2006) other important reasons for developing Dutch language skills for NT2 students, are: cultural awareness, cognitive development and social, emotional and moral developments such as self-awareness and self-confidence. Also, career perspectives and work are important reasons for developing Dutch language skills (Baker, 2006). The vocabulary activities could be a first step for extra support of NT2 students to further develop their Dutch language skills. On a long term, increased language skills also have a positive impact on cultural, cognitive, social and emotional developments of the NT2 students. This will make it easier for them to participate in society.

Furthermore, this study contributes to the current research into vocabulary support for NT2 students. Until now, research has shown that NT2 students have a language deficiency (Bosker & Luyten, 2000; van Hasselt & de Kruyf, 2009) but almost no research is done on how to reduce this deficiency. Research has only concluded that support is necessary to improve vocabulary knowledge of NT2 students (Hajer, 2016; Inspectie van het Onderwijs, 2016). There is no curriculum for this support as normally there are no extra vocabulary support hours for NT2 students at regular schools. Also, no research is done on the motivation of NT2 students regarding different vocabulary activities. Therefore, this study aims to get initial insights in which vocabulary activities are motivational for NT2 students to improve their vocabulary knowledge. The purpose of this study is to test theories and assumptions found in literature by applying them to a real-life situation at College Zuid. The outcomes of this study are expected to lead towards more knowledge about the possibilities of designing extra vocabulary support for NT2 students at regular secondary education. Also, the outcomes of this study are expected to lead towards more knowledge about the relation between vocabulary activities and motivation. The final design for vocabulary activities is expected to lead towards a standard for vocabulary support for NT2 students. The results could provide NT2 teachers with practical implications to use during NT2 support hours to improve students’ motivations and their vocabulary acquisition. Also, the recommendations for portfolio implementation could provide other regular secondary schools with implications on how to support NT2 students using a portfolio. The first development of activities leads towards a basis for future research and development of a complete curriculum and vocabulary portfolio of which the designed activities can be part of.
2. Theoretical Framework

The theoretical framework consists of two parts: “context of the study” and “previous research”. The first part focuses on explaining the different factors and definitions that are related to learning Dutch as a second language. The second part gives useful information about previous research on NT2 education.

2.1. Context of the study

This section provides information about the important factors influencing vocabulary learning. Common definitions used in this study, are described here. It also discusses different vocabulary characteristics, the importance of vocabulary and different vocabulary learning principles and strategies.

2.1.1. Vocabulary as an aspect of language learning

The concept of vocabulary

Paus (2014) defines the concept of vocabulary as the words and word meanings that are available to a person for speaking and writing. For long, vocabulary has been an overlooked aspect of learning a new language. However, vocabulary as part of language education has become more important over the last years (Van den Nulft & Verhallen, 2009). During the last years, vocabulary moved into a central position as it has been found to be one of the essences of the process of learning a language (Pekka, 2013).

The importance of vocabulary

The research of Miralpeix and Muñoz (2018) has shown that vocabulary is related to the language proficiency of an individual. Paus (2014) indicates that word knowledge and word understanding are of great importance for language proficiency. He also states that vocabulary plays a role in all domains of language teaching. Language education is important for students because they will need language as a social function within the current and future society (SLO, 2018). Vermee (2003) argues that words are the carriers of word meanings and therefore are crucial for transferring the knowledge in education. An adequate level of vocabulary is a prerequisite for good technical reading, which is a prerequisite for understanding a text (Broekhof & Cohen de Lara, 2006). From this research it can be stated that vocabulary is the basis for all parts of language proficiency (Broekhof & Cohen de Lara, 2006).

Vocabulary size and depth

When discussing vocabulary, a distinction is often made between the number of words known and how well these words are known. The relationship between those two depends on how each is conceptualized and measured (Schmitt, 2014). The number of words known is recalled as the size of vocabulary, which is basically counting the known lexical items (Schmitt, 2014). How well the words are known, the depth of vocabulary knowledge, is harder to conceptualize (Schmitt, 2014). A major discussion point in learning vocabulary is the choice between a depth approach or a size approach. Researchers are still bending over the question which approach is most effective (Cöp, 2014).

To increase vocabulary depth, rich instruction is required that gives elaborate attention to a word (Laufer, 2006). Rich instruction activities aim to increase the number of relationships with a word and strengthen the network connections between related words (Laufer, 2006). Laufer mentions in his research that one of the general approaches to conceptualize vocabulary depth relates to what learners can do with the lexical items. He makes a distinction between receptive and productive mastery of an item. Receptive (or passive) vocabulary is being able to recognize and comprehend words when reading or listening (Laufer, 2006). Laufer explains productive (or active) vocabulary as
using words in such a way that they are not only understood, but also produced during speaking or writing. According to him, productive vocabulary knowledge is more difficult to achieve than receptive vocabulary knowledge. An important factor in promoting vocabulary is the principle of cognitive depth: The deeper the processing of a word, the more likely the word will be remembered (Schmitt, 2014).

2.1.2. Second language development

Differences in vocabulary knowledge

There are still huge differences found in vocabulary between native speakers and second language learners in the “Intermediate Fluency” stage (Huizinga, 2005). Vermeer (2003) claims in his research that the biggest bottleneck for NT2 students in education is their low level of Dutch vocabulary. Also, Van den Nulft & Verhallen (2002) state in their research that second language learners normally have a weaker network of words. They know less words and therefore, their network consists of fewer meaningful relationships between words. The language gap that occurs obstruct NT2 students in the execution of educational tasks and therefore influences their school successes (Saville-Troike, 2012). Also, the lack of vocabulary depth can affect the performance of second language learners at school (Van den Nulft & Verhallen, 2002). Broekhof & Cohen de Lara (2006) stated in their research that when students lack vocabulary knowledge, this has a negative influence on their learning performances as they will have troubles understanding the lesson content. When instructions and texts are not understood by students, assignments and exercises cannot be made (Vermeer, 2003). As a result, performances in subjects lag behind (Bosker & Luyten, 2000). Cummins (1978, from Baker, 2001) discovered that second language learners need circa two years to become fluent in the second language in situations where basic language skills are needed. The tasks in education are much more abstract than the tasks that a learner has to deal with within other environments, and these skills take the learner up to seven years (Baker, 2001). This fact causes that students that have been learning a second language for a couple of years, can still score low in secondary school. To overcome this problem, the receptive vocabulary of students should be expanded. Productive vocabulary knowledge can be increased by more rehearsal to create a better memory of the knowledge (Laufer, 2006).

To understand how vocabulary learning can be improved, understanding of the learning processes and motivation of NT2 students is necessary. A few important theories regarding second language learning are discussed below.

Second language learning theories

Baker (2001) discusses different theories in his work about the organization of bilingualism in the brains. One of these theories is the Balance Theory. This theory assumes that two languages are like two weights on a scale; when the acquisition of one language increases, the other language decreases. There are some inconsistencies within this theory. It has been shown that there is more than enough space in the brains for two language. Also, the theory assumes that there is no interaction between both languages, but it has been shown in other studies that there is (Baker, 2001).

As an answer to the inconsistencies of the Balance Theory, Cummins (1980, Baker 2001) developed the Common Underlying Proficiency (CUP) model. This model can be shown as an iceberg that shows the two languages separated above the water (speaking) but under the water the two languages are connected (brains). This means that the two languages are not operating apart from each other, but they are connected through one central system. The CUP is the base for developments of both the first language and the second language. Therefore, any expansion of CUP in one language will have a beneficial effect on the other language.

The CUP model is the bases for the Developmental Interdependence Hypothesis. The Developmental Interdependence Hypothesis (Cummins 1978 from Baker, 2001) states that the
competence in the second language depends on the competence in the first language. This means, the better the development of the first language is, the easier it is to develop a second language.

According to Cummins (1978 from Baker, 2001), there are two kinds of language skills. The Basic Interpersonal Communicative Skills (BICS) and the Cognitive Academic Language Proficiency (CALP). Simple language skills that are needed to communicate and that are supported by context, are part of the BICS skills. More complex and abstract language skills are part of the CALP skills. These skills are not supported by the context. These two language skills are relative concepts as the daily language for one person is academic language for the other and vice versa (Baker, 2001). However, a BICS-CALP matrix can be used to prepare activities for second language learners (figure 3). In this matrix, the horizontal axis represents a continuum from context-embedded to context-reduced and the vertical axis represents a continuum from high cognitively challenging to low cognitively challenging activities. Tasks in the lower left corner are suitable for beginners (context embedded and low cognitively challenging) and tasks in the higher right corner are suitable for advanced learners (reduced context and high cognitively challenging).

Another important theory is the transfer hypothesis. This theory assumes that there is transfer of natural habits of the first language into the second language. The learning process is the change of structures of the first language into structures that fit the second language (Appel & Vermeer, 1996). There are two forms of transfer: positive and negative (Appel & Vermeer, 1996). According to Appel and Vermeer, positive transfer occurs when newly learned habits are equal to the old ones. These habits are learned faster. Negative transfer occurs when parts in the grammar of the first language and second language differ from each other (Appel & Vermeer, 1996). According to the transfer hypothesis, the word order from the first learned language will be transferred to the word order of the second learned language, resulting in wrongly formed sentences. Second language learners will have difficulties learning the word order of the second learned language according to this theory (Appel & Vermeer, 1996).

Motivation

Next to understanding the different learning theories, it is also important to keep in mind that a second language learner is confronted with the same problems as a child that is learning a language: the learner constructs the grammar of the second language based on fragmentary input (Appel & Vermeer, 1996). However, there are some differences between second language learners and children that are learning a language. Second language learners are cognitively developed and therefore able to understand abstract concepts, they already have mental representations of a language and they have different motivations of learning a second language (Appel & Vermeer, 1996).
It is assumed that the motivation of the student significantly influences the success of the student in learning a second language (Baker, 2001). According to the CEFR (2018), the communicative abilities of language learners are not only influenced by their knowledge and skills, but also by individual factors that have to do with personality, like attitudes and motivations. Generally, motivations of learning a second language can be divided into two categories: integrative motivation and instrumental motivation (Baker, 2001). According to Baker, integrative motivation occurs when the learner wants to be included within another language community. When the learner has integrative motivation, he or she wants to participate in, and identify cultural activities. Instrumental motivation occurs when the learner wants to learn a language with a useful purpose such as to find a job, meet requirements or pass an exam (Baker, 2001). Appel & Vermeer (1996) distinguish four different sources of motivational influences of second language acquisition: the learning activity itself, the results of the learning activity (in general when students are more successful in learning they are more motivated to learn), the learning needs of the student and the reward of learning. Baker (2001) also found that attitude towards learning a second language determines the motivation to learn a second language. Johnson (2001) found in his study three attitudes towards learning a new language: attitude towards success, attitude towards the teacher and attitude towards the student’s own country. He stated in his work that when the attitude towards success is high, more effort is put into learning and completing a task. Johnson also speculated that the attitude towards a teacher can influence the attitude towards learning. The last attitude Johnson discussed in his work, is the attitude towards a student’s country of origin. He states that the attitude towards learning a new language is negatively influenced when it is believed by the student that his/her country of origin and mother tongue are more important than the second language.

2.1.3. Supporting vocabulary development

To develop the receptive and productive vocabulary knowledge and to improve vocabulary learning, second language learners can apply various vocabulary learning strategies (VLS) such as guessing, highlighting, making a word list, memorising or translation. Different researchers have different classifications of VLS. O’Malley and Chamot (1990) classify second language learning strategies into meta-cognitive strategies (selective attention, self-monitoring), cognitive strategies (auditory word learning, guessing, grouping words, note-taking, dictionary usage) and social and affective strategies (asking teachers or friends). The research of Schmitt (2014) has demonstrated that the language level of the learners plays a huge role in usage of different VLS. When the language level becomes higher, more complicated activities are included in a learners’ learning strategy. Schmitt (2014) found the following VLS categories: discovery strategies and consolidation strategies, further categorized in: determination strategies, social strategies, memory strategies, cognitive strategies and metacognitive strategies (figure 4).
The research of Rebecca (2003) states that teachers should employ a broad instructional approach that contains a communicative approach combined with a focus on form approach. Communicative Language Teaching (CLT) led to the development of differentiated courses that reflect the different communicative needs of different students (Nunan, 2003). Within CLT, students are given opportunities to interact and use the language in a different context (Nunan, 2003) and VLS as described above can be used for this. According to literature (Richards, 2006), CLT has led to the following major changes (amongst others) in approaches to language teaching, that are relevant for this study:

- Learners should have more choice in content and process of their learning
- Learning should be a social activity
- Teaching should take learner differences into account.

Focus on form instruction occurs when linguistic elements arise in lessons when the focus is on meaning or communication. Focused tasks that are especially designed to use linguistic forms within a context of meaning centred language use, are focused on form activities (Laufer, 2006). In a focus on form approach, students view themselves as the language user and the language as the communication tool (Ellis, 2001). This approach allows variety that meets the needs of all students in the class (Rebecca, 2003).

Van den Nulft & Verhallen (2009) distinguish between four different categories of learning new words to increase vocabulary knowledge: pre-processing, semantising, consolidation and controlling. During the pre-processing of vocabulary, as distinguished by Van den Nulf and Verhallen, prior knowledge of students is activated and they are getting involved with the content or word. Next, semantising is defined as the process of clarifying the meaning of a word. During this process, it is important that the underlying concept and different meaning aspects become clear to the students (Van den Nulft & Verhallen, 2009). The third step, according to Van den Nulft and Verhallen, is consolidation of the word during which the word is practiced so it gets a permanent place in the vocabulary of the student. A common point in vocabulary education is that a word is only remembered if it occurs at least seven times in different contexts (Nulft & Verhallen, 2009). To know whether the process to learn the word was successful, the passive and active knowledge of the word is checked during the last controlling step. Understanding of new concepts can be assessed using different facets according to Wiggins and McTighe (2011). According to them, understanding can be assessed by letting

<table>
<thead>
<tr>
<th>Word Discovery Strategies</th>
<th>Determination strategies</th>
<th>Social strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>analyzing words;</td>
<td>ask classmates;</td>
</tr>
<tr>
<td></td>
<td>guessing meaning from context;</td>
<td>asking teacher;</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Word Consolidating Strategies</th>
<th>Social strategies</th>
<th>Memory strategies</th>
<th>Cognitive strategies</th>
<th>Metacognitive strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>interact with native speakers;</td>
<td>connect word with its synonyms and antonyms;</td>
<td>keeping a vocabulary notebook;</td>
<td>continue to study word over time;</td>
</tr>
<tr>
<td></td>
<td>study and practise meaning in a group;</td>
<td>learn the words of an idiom together;</td>
<td>verbal repetition and written repetition;</td>
<td>skip or pass new words;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>say new words aloud;</td>
<td>word lists, put FL labels on physical objects;</td>
<td>testing oneself with word tests;</td>
</tr>
<tr>
<td></td>
<td></td>
<td>study the sound of a word;</td>
<td></td>
<td>using media (songs, movies, newscast);</td>
</tr>
</tbody>
</table>

*Figure 4 VLS Categories by Schmitt (2014)*
the students explain concepts, principles and processes in their own words, explain or teach it to others and they can show their reasoning. Also, application and adaption of what the students have learned in new contexts is an example. These examples of assessment are suitable for assessing the vocabulary knowledge of the students after the lessons.

**Differentiation**

Second language learners have different learner characteristics and different VLS can be used to address the needs of diverse learners. Differentiated instruction is an example of an approach to instruction that incorporates different strategies (Roy et al., 2013). In order to be able to differentiate, a teacher must be clear on what the students need to know, understand and be able to do at the end of a lesson. Research of Rebecca (2003) showed that teachers are better able to give effective instruction when they know more about their students’ style preferences. Therefore, the teacher needs to be familiar with student differences and preferences and adjusts the content, process or products of the lesson accordingly. Content can be differentiated by focusing on the lessons components and varying them to meet learners’ needs by providing them with different options. Different options can be given for word discovery strategies and word consolidation strategies using the second language learning strategies classified by O’Malley and Chamot or Schmitt. To differentiate based on process, teachers can apply different grouping strategies based on different profiles (Tobin and Tippet, 2012). Product differentiation is differentiation in how students show what they have learned and understood (Tobin and Tippet, 2012).

**Portfolio**

Portfolio usage can enhance differentiation as components can be varied to meet learners’ needs by providing them with different content, and giving them different options on how to show what they have learned. Barret (2001) defines a portfolio as a purposeful collection of students their work, exhibiting the students’ effort, progress and achievement in different areas. Nunes (2004) describes how portfolios can serve as a record, for both teacher and students, of the learners’ progress in the second language. There are two types of portfolios: process portfolios and product portfolios (Venn, 2000). According to Venn, a product portfolio aims to provide the students with the best material to master learning objectives and a process portfolio keeps track of the learning stages and provides a progressive record of student development. According to Venn, there are three steps in portfolio assessment. First, the portfolio content must be identified. Second, evaluation procedures should be developed to keep track of the portfolio contents. And third, there should be a plan to hold portfolio meetings to review the work and progress. Other research (Apple & Shimo, 2004; Wang & Liao, 2008) showed that students have very positive attitudes towards portfolio assessment. Portfolio assessment can increase students’ learning motivation and facilitate students’ learning processes (Axton, 2012).

### 2.2. Contribution of this study

Limited research has been done on how education to NT2 students should be given its best form in order to develop according to their ability. Available research is limited to education at the ISK (Lowan, 2008; Hasselt & Kruyf, 2009), but there is not much research done on how to support NT2 students after the ISK, at regular secondary schools. Most of the available research focusses on identifying the promoting and impeding factors of ISK education (Lowan, 2008; Blom, 2017), the bottlenecks regarding transfer to regular schools (Hasselt & Kruyf, 2009) and addressing the problems NT2 students face at regular schools (Van den Nulft & Verhallen, 2002; Vermeer, 2003; Huizinga, 2005; Broekhof & Cohen de Lara, 2006). There is no research available that focusses on how to reduce these problems through extra support hours and practice at regular schools.
Some research is available on vocabulary learning theories (Appel & Vermeer, 1996; Baker, 2001) that contribute to understanding the learning processes of NT2 students. Also, research has been done on how to learn new vocabulary through activities using different steps and strategies (Van den Nulft & Verhallen, 2009; Schmitt, 2014). However, little research has been conducted in the Netherlands about the effect of different approaches and methods in NT2 education (Appel & Kuiken, 2004). Measures of the effectiveness of different approaches is lacking. Appel & Kuiken (2004) stated in their research that it is complicated to do this kind of research because of the differences in motivation, attitudes and language proficiency that play a huge role in second language acquisition. From small-scale research, a number of recommendations are made for education of second language learners in secondary education (Kennisrotonde, 2018):

- Plan on a more extensive intake and share all relevant information on the student with all teachers
- Provide a permanent supervisor for each individual NT2 student
- Promote contact with Dutch students
- Do not only focus on results but also on the student’s well-being
- Give NT2 students the freedom to perform certain activities in their own language
- Offer rich language in a meaningful context, for example in the context of the subject content
- Offer long-term language support

These recommendations are very general and no recommendations are done on how to give form to extra language support, using activities that include different approaches and methods. Research (Konishi et al., 2014) states that methods that meet the individual needs of second language learners are beneficial in developing a second language. Different sources of motivational influences of second language acquisition have been identified by different researchers (Appel & Vermeer, 1996; Baker, 2001; Johnson, 2001) and meeting the learning needs have been found to be one of them. Also, research shows that the learning activities play a major role in the motivation of students (Appel & Vermeer, 1996). However, little is known about the precise relation between vocabulary activities and motivation of NT2 students.

Because there is no available research on the needs of extra vocabulary support for NT2 students at regular education, the current study assesses the needs of the NT2 students at College Zuid. This study should give insight in which vocabulary activities are useful and motivational for the NT2 students at College Zuid. This study is conducted in the context of College Zuid but as this study includes a very diverse group of NT2 students with various backgrounds and student characteristics, the results of this study can possibly be extended and used for other groups of NT2 students. This research could lead towards more knowledge about the possibilities of extra vocabulary support for NT2 students at other regular secondary schools.
3. **Method**

In this chapter, the method of the study is presented. It includes the research design and model, information on the respondents, an explanation on which instruments were used and which procedures were taken to collect data and it explains how the data was analysed.

3.1. **Research design**

The goal of this study was to explore which vocabulary activities are useful and motivational for NT2 students for the extra hour of NT2 support at College Zuid. Other goals of this research were to provide insights in the needs of NT2 students at regular secondary education, provide suggestions for possible useful vocabulary activities for NT2 support and provide suggestions on how vocabulary development can be supported using a portfolio. To achieve these goals, an exploratory research was conducted. The explorative nature was determined by the need to gain understanding of the needs of the NT2 students and explore which vocabulary activities would be both useful and motivating to meet those needs. This exploratory research aimed to contribute to existing literature by providing information on which vocabulary activities are motivating for second language learners and which activities are useful to meet the goal of the vocabulary support. The scientific goal is to test theories and assumptions in a real-life context and to contribute to more knowledge on the needs of NT2 students, regarding vocabulary support and the motivation of NT2 students regarding different vocabulary activities.

3.1.1. **Context of the study**

There are approximately 32 lesson weeks during which the extra NT2 lessons are taking place. Those 32 weeks are divided into four blocks of eight weeks and this study focussed on developing activities for one block of eight weeks. Each block will include the same design criteria to create a basis for the curriculum and portfolio. However, the kind of activities will vary so the students stay motivated throughout the year.

3.1.2. **Research methods and model**

The research method below was applied to conduct an analysis of the programme design and to answer the research questions of this research.

This research was structured by the model of Reeves (2006). According to Reeves, educational design research has four components: analysis, development, testing and reflection (see figure 5). The line underneath the model indicates continuous evaluation. These components are consistent with recommendations from the Common European Framework of Reference for Language (CEFR, 2018), that state there needs to be a relationship between certain parts when educating language. These parts are: the identification of needs, setting of objectives, definition of the content, selecting or creating materials, organization of the program, teaching and learning methods and evaluation.

This research was divided into four phases (figure 6): **phase 1: Current situation analysis, phase 2: Design and development, phase 3: Implementation and testing and phase 4: Reflection and recommendations**. The first phase of this research consisted of a context analysis of the ISK, a context analysis of College Zuid, a method analysis of previous tried methods, and a NT2 students’ needs analysis. During the second phase of this research, the results of the analyses of the first phase were used to create criteria for the vocabulary activities. Also, literature research (theoretical framework) was conducted to find additional criteria. Criteria of both the analyses and the literature research were used as the input for the development of the vocabulary activities. The criteria were also used as input for an observation scheme, that tested the predictions of all lessons. During the third phase, the vocabulary activities were implemented and tested during eight pilot lessons. All pilot lessons were revised and observed using the observation scheme. At the end of all pilot lessons, a pilot lessons
An evaluation questionnaire was conducted. The fourth phase included the reflection of the findings, answers to the research questions and recommendations for implementation of the activities and usage of the activities in a portfolio or curriculum.

![Design Research Diagram](Image)

**Figure 5 Model educational design research (Reeves, 2006)**

<table>
<thead>
<tr>
<th>Phase 1: Current situation analysis</th>
<th>Phase 2: Design and development</th>
<th>Phase 3: Implementation and testing</th>
<th>Phase 4: Reflection and recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISK context analysis</td>
<td>Development of vocabulary activities</td>
<td>Observations of the pilot lessons</td>
<td>Answers to sub-research questions</td>
</tr>
<tr>
<td>College Zuid context analysis</td>
<td>Development of conjecture map</td>
<td>Results pilot lessons evaluation questionnaire</td>
<td>Final design (answer to main research question)</td>
</tr>
<tr>
<td>Method analysis</td>
<td></td>
<td></td>
<td>Reflection on findings</td>
</tr>
<tr>
<td>NT2 students' needs analysis</td>
<td></td>
<td></td>
<td>Recommendations</td>
</tr>
</tbody>
</table>

**Figure 6 Phases of this research**

3.1.3. Procedure and overview of the phases of this research

As discussed above, this research consisted of four phases, each with their own focus and goals to help answering the research questions. An overview of the four research phases, the research methods and the respondents can be found in figure 7. The students and teachers of College Zuid were contacted prior to the study. The ethics committee of the University of Twente granted permission for this study. The NT2 students and teachers were informed about the current research and were asked to sign an informed consent form.

**Phase 1: Current situation analysis.** The goal of this phase was to identify the current situation regarding NT2 support at College Zuid. This is done in four steps: the ISK context analysis, College Zuid context analysis, method analysis and an analysis of the NT2 students’ needs. Empirical data collection was used to collect this data for the analysis of the current situation. To collect this data, interviews and questionnaires were conducted. Two interviews were conducted, one with the ISK teacher to collect data for the ISK context analysis and one with the NT2 students to collect data for the analysis of the NT2 students’ needs. Two questionnaires were conducted, one for the mentors and subject teachers to collect data for the College Zuid context analysis and one for the NT2 students, to collect data for the NT2 students’ needs analysis. Information on previous tried teaching methods was given...
by the NT2 teacher during a conversation and this information was used for the method analysis. All instruments were used to extract information for the current situation analysis to help answer sub-question 1 and to develop recommendations.

**Phase 2: Design and development.** The goal of this phase was to develop the vocabulary activities for the pilot lessons. A structured literature review (theoretical framework) and the results from the analyses of phase 1, were used to develop criteria for of vocabulary activities. This second phase explains the contribution of the theoretical framework and the current situation analysis of phase 1 to the development of vocabulary activities, using criteria. These criteria also formed a base for the development of an observation scheme for the pilot lessons. Missing information for the motivation of choices for the activities, was collected using a small literature review. Based on these findings, initial vocabulary activities for the eight pilot lessons were developed.

**Phase 3: Implementation and testing.** The goal of this phase was to implement and test the created vocabulary activities to be able to suggest which vocabulary activities are useful and motivational for NT2 students. Empirical data collection was used to collect data during this phase. Data was collecting using observations of all eight pilot lessons and a pilot lessons evaluation questionnaire after the last pilot lesson. These instrumentations were used to extract information about the usefulness of the activities and the motivation of students for answering sub-questions 2 and 3 and to develop recommendations.

**Phase 4: Reflection and recommendations.** The goal of this phase was to reflect on the findings from the pilot lessons observations and the pilot lessons evaluation questionnaire. An answer to the sub-research questions is given and a final design for vocabulary activities is developed to answer the main research question. Another goal of this phase was to suggest recommendations for portfolio usage to support NT2 students. The results of the observations of the pilot lessons and the results of the pilot lessons evaluation questionnaire were evaluated to further improve and revise the developed vocabulary activities. Observations and evaluations were used to answer the sub-research questions and the main research question. A useful design for motivational vocabulary activities is proposed here. Based on the reflection and the results of other phases, recommendations were developed for a vocabulary portfolio and to further improve the design for vocabulary activities for NT2 support.

### 3.2. Respondents

The respondents of this study were all twenty NT2 students at College Zuid that are following the self-implemented NT2 program, the NT2 teacher, an ISK teacher, four mentors of the NT2 students and four teachers of other subjects at College Zuid. Data regarding the background of the NT2 students was collected.

**NT2 students.** The NT2 students, that attend the support hours at College Zuid, were the first respondents interviewed and were also respondents to the first questionnaire. The students could provide information about the problem of the current NT2 support and their attitude towards learning Dutch as a second language. In the questionnaire they were asked about their needs regarding NT2 support. The students were selected for the NT2 support hours based on their Dutch language level and how long they were attending education at College Zuid. All twenty students that were selected for the NT2 support hours by College Zuid were selected as participants for this study. The twenty NT2 students all have different backgrounds, different ages, country of origins, mother tongues, educational backgrounds and they all have been for a different period of time in the Netherlands. Some of the background characteristics of the students have been investigated. Students came from seven different countries and had, on average, the age of fifteen. All student characteristics can be found in table 1 below.
Table 1 Student characteristics

<table>
<thead>
<tr>
<th>Student</th>
<th>Class</th>
<th>Age*</th>
<th>Gender</th>
<th>Country of origin</th>
<th>Mother tongue</th>
<th>Other language spoken at home</th>
<th>Arrival</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>ZU3M2</td>
<td>17</td>
<td>F</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>2</td>
<td>ZU3M1</td>
<td>16</td>
<td>M</td>
<td>Afghanistan</td>
<td>Dari</td>
<td>Dutch</td>
<td>2015</td>
</tr>
<tr>
<td>3</td>
<td>ZU3M1</td>
<td>15</td>
<td>F</td>
<td>Poland</td>
<td>Polish</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>4</td>
<td>ZU3M3</td>
<td>15</td>
<td>F</td>
<td>Curacao</td>
<td>Papiamento</td>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>5</td>
<td>ZU1M2</td>
<td>12</td>
<td>F</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>6</td>
<td>ZU3M4</td>
<td>16</td>
<td>M</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>7</td>
<td>ZU2M2</td>
<td>15</td>
<td>M</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>8</td>
<td>ZU1E1</td>
<td>13</td>
<td>M</td>
<td>Indonesia</td>
<td>Indonesian</td>
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<td>2015</td>
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<td>15</td>
<td>F</td>
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<td>Arabic</td>
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<td>2015</td>
</tr>
<tr>
<td>10</td>
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<td>17</td>
<td>M</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2015</td>
</tr>
<tr>
<td>11</td>
<td>ZU3M3</td>
<td>16</td>
<td>M</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>12</td>
<td>ZU1E1</td>
<td>13</td>
<td>M</td>
<td>Indonesia</td>
<td>Indonesian</td>
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<td>2016</td>
</tr>
<tr>
<td>13</td>
<td>ZU1E1</td>
<td>13</td>
<td>F</td>
<td>South Africa</td>
<td>English</td>
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<td>2017</td>
</tr>
<tr>
<td>14</td>
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<td>F</td>
<td>Syria</td>
<td>Arabic</td>
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<td>19</td>
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<td>F</td>
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<tr>
<td>20</td>
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<td>F</td>
<td>Syria</td>
<td>Arabic</td>
<td></td>
<td>2016</td>
</tr>
</tbody>
</table>

* = Age at September 1st 2018

**NT2 teacher.** The second questionnaire respondent was the NT2 teacher, who is the initializer of the NT2 support and responsible for the lesson activities. The NT2 teacher could provide information about the current NT2 support and clarify important lesson aspects. The NT2 teacher also clarified her teaching methods, previous methods used during the NT2 support hours and her view on the needs of the NT2 students.

**ISK teacher.** The second person interviewed was the (Dutch language) ISK teacher. The ISK teacher could provide insights into the teaching methods at the ISK and the transfer between the ISK and College Zuid. She could also share her experience with teaching NT2 students and share her thoughts about possible improvements of NT2 support at College Zuid. The Dutch language teacher was chosen as a respondent because this subject at the ISK has the most similarities with teaching the NT2 support hours at College Zuid.

**Mentors.** The third questionnaire respondents were the mentors of the NT2 students, who play an important role in the school career of NT2 students. All mentors of NT2 students were asked to fill in the questionnaire. Only four mentors agreed to participate in the research by filling in the questionnaire. The mentors of the NT2 students could provide information on to what extend mentors are aware of the background and Dutch language level of their NT2 students. They were also asked to answer some questions about portfolio recommendations to get insights on their attitude towards NT2 support using a portfolio.

**Teachers.** The fourth questionnaire respondents were selected subject teachers of NT2 students, for which subjects NT2 students indicated to have the least vocabulary knowledge and subject understanding. These subjects followed from the interviews that were held at the beginning of the study. The teachers that teach these subjects to NT2 students were selected to fill in the questionnaire. Teachers that give the subject in English were disregarded from being a participant as
this study focusses on learning the Dutch language. Only four subject teachers agreed to participate in the research by filling in the questionnaire. The subject teachers could provide insights in their teaching strategies to support NT2 students in their classes. They were also asked about their observations on Dutch language level of their NT2 students and how NT2 support could possibly be improved at College Zuid.

Figure 7 lists this study’s (sub-) research questions and links them to individual data collection methods and respondents. It shows which methods and respondents, in which phase, contributed to answering the research questions of this study.

<table>
<thead>
<tr>
<th>Research phase</th>
<th>Phase 1: Current situation analysis</th>
<th>Phase 2: Design and development</th>
<th>Phase 3: Implementation and testing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research method</td>
<td>Interviews</td>
<td>Questionnaires</td>
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<tr>
<td>Goal of research method</td>
<td>ISK Context analysis</td>
<td>Method analysis</td>
<td>NT2 students' needs analysis</td>
</tr>
<tr>
<td>Respondents</td>
<td>ISK teacher (n=1)</td>
<td>NT2 teacher (n=1)</td>
<td>NT2 students (n=20)</td>
</tr>
</tbody>
</table>

Research Question: “What is a useful design for motivational vocabulary activities, with the aim to improve vocabulary development, for NT2 students at College Zuid?”

Sub-research question 1: “What are the needs of NT2 students and teachers to be able to improve the current NT2 support?”

Sub-research question 2: “What kind of vocabulary activities are motivational for the NT2 students to support their vocabulary development?”

Sub-research question 3: “What kind of vocabulary activities do students think are useful for their vocabulary development?”

Recommendations

![Figure 7 An overview of research questions, phases of the study, research methods and respondents](image)

### 3.3. Instrumentation

#### 3.3.1. Phase 1: Current situation analysis

**ISK context analysis**

*Interview with ISK teacher.* Some lessons have been observed at the ISK in Enschede. After the observations, an interview was conducted with the Dutch language teacher at the ISK (appendix A). This interview was developed to get an initial insight in the teaching methods and strategies used at the ISK for teaching NT2 students. First, questions were asked to gather missing information about education at the ISK to better understand where the NT2 students transferred from, for example “Which method do you use?” and “How are students divided into classes? Is this by age? Dutch level? How long the student has been at the ISK?” Then, this instrument asked questions about the ISK teachers’ perceptions about information sharing between the ISK and College Zuid, like “What information about the NT2 students at the ISK should be shared with regular education?” In addition, the ISK teacher was asked about her perceptions about possibilities to improve NT2 support at College Zuid. Questions like “Which tips do you have for vocabulary education at regular education?” were asked. These answers were used to develop recommendations for NT2 support.
College Zuid context analysis

Questionnaire with mentors, the NT2 teacher and subject teachers. This questionnaire (appendix B) consisted of one closed question and ten open questions. First, questions were asked about the teachers’ teaching experience and strategies and whether they teach different to NT1 and NT2 students, for example “Do you take NT2 students into account in class explanation? Yes, how do you do this?” These questions were meant to get initial ideas about the differentiation of teacher in lessons with NT2 students. Then, this instrument asked questions to gather information about the classroom observations of NT2 students, regarding their language gap, for example “Do you notice during your lessons that NT2 students have problems understanding the lesson content? If so, how do you notice this?” These questions were asked to gather information about the vocabulary knowledge of NT2 students and the perceptions on a possible gap between NT1 and NT2 students. Also, questions like “In which areas could you improve NT2 support according to you?” were asked to collect information on the perceptions of teachers on the possible improvement of NT2 support at College Zuid. The outcomes of the questionnaires were used to for the current situation analysis at College Zuid and to find some additional recommendations to improve NT2 support at College Zuid.

NT2 students’ needs analysis

Interviews with NT2 students. The interview questions were consulted with the NT2 teacher, to make sure the NT2 students would understand, which lead to adjustments in phrasing and formulation of questions. All students were asked five open questions. The interview for NT2 students can be found in appendix C. First, questions were asked regarding the NT2 student’s attitude towards learning Dutch, like “Do you find it important to continue to develop Dutch? Why?”. These questions aimed at finding a possible relation between the attitude and motivation of the students. This instrument asked questions like “What would you like to do to improve Dutch?” to find the needs and motivation of the NT2 students regarding NT2 support.

Questionnaires with students. To determine to what extend NT2 students have problems with subject understanding and motivation to practice vocabulary, a questionnaire for the students was developed. The questionnaire questions were consulted with the NT2 teacher, to make sure the NT2 students would understand, which lead to adjustments in phrasing and formulation of questions. The questionnaire for NT2 students can be found in appendix D and consisted of thirteen statements with a five-point Likert scale, two questions with multiple options, two closed questions and two open questions. This questionnaire examined the student’s attitude and motivation regarding the NT2 support hours and vocabulary practice and statements like “I think it’s important to get an extra NT2 lesson for an hour” were given. It examined the students’ feelings about the influence of practicing and enhancing vocabulary on their subject understandings and performances in statements like “I think that improving my vocabulary will ensure that I understand the curriculum of the subjects better”. Also, this questionnaire was developed to give an initial idea about what aspects of learning the Dutch language students find difficult, for example “During which subject do you read or hear the most words that you do not yet understand?” Finally, the students were asked about their preferences regarding vocabulary practice in the two closed questions, for example “I prefer working... alone? In a group?”. The outcomes of the questionnaires were used to gain deeper understanding of the current situation and the outcomes were also used to understand the needs and wishes of the NT2 students. To better orient the second language activities, style preferences of the students have also been asked in this first student questionnaire.

3.3.2. Phase 2: Design and development
The research method used in this phase, is a literature review. No instruments were used to conduct the literature review.
3.3.3. Phase 3: Implementation and testing

**Observations of the pilot lessons**

*Observation scheme*. The developed activities were tested during eight pilot lessons in eight weeks. During the lessons, the activities were performed and actions and behaviour of students were observed using an observation scheme that was based on predictions (appendix F). The criteria for vocabulary activities as a result from phase 1 were taken as the input for the observations. It was observed how these criteria led to the desired outcomes of answering the research questions. For all lesson activities, it was checked whether the expectations were met. Based on the results, recommendations were done.

**Results pilot lessons evaluation questionnaire**

*Questionnaires with students*. The last lesson (lesson eight) was used to evaluate the whole testing period through a final questionnaire for the students (appendix G). This questionnaire intended to investigate to what extend the students were motivated to learn new vocabulary through the developed activities and to what extend the students themselves thought the activities contributed to their vocabulary development. The questionnaire contained a mix of open and closed questions. First, this instrument asked questions about learning strategies of the students, for example “If you see a word you don’t understand when reading a text, then?” These kinds of questions are asked to give insights in the learning strategies the students use when learning new vocabulary. Next, the instrument asks questions about the perceptions of the students about the pilot lessons, for example “Do you think that different vocabulary activities, as we used during the lessons, help to practice and remember new words?” The questionnaire asks for all activities, how useful and motivational the students thought they were, on a five-point Likert scale, to find an answer on sub-research question 2 and 3. Results were also used to develop recommendations for future research, NT2 support and usage in a portfolio.

3.4. Data analysis

The data that was generated from this study included qualitative and quantitative data. During phase 1, the current situation analysis, data was gathered through interviews with the ISK teacher and the students and a questionnaire amongst NT2 students and teachers and mentors. The interviews were qualitative in nature and contributed to getting initial insights of the current situation at College Zuid, teaching strategies at the ISK and first ideas on how to improve the support at College Zuid. The outcomes of the interviews contributed to finding an answer to sub-research question 1 and giving recommendations for usage of a portfolio. The questionnaires also tried to answer sub-research question 1 and were used to develop recommendations for usage of a portfolio. Also, the student questionnaires were used to give an initial idea about the attitude of the NT2 students towards learning Dutch and the NT2 support. The responses from the questionnaires were analysed by computing percentiles for each question.

During the design and development phase, a literature review was conducted. Important findings were translated into criteria for the vocabulary activities. The results of phase 1 were also translated into criteria. These criteria together were used to develop vocabulary activities and an observation scheme.

During the implementation and testing phase, quantitative data was gathered during the last pilot lessons, from the students in the form of a questionnaire. The pilot lessons were given and observed using an observation scheme that was developed based on the predictions. Observations were done to see if the pilot lessons reached their goals of motivating students. The observations contributed to finding an answer to sub-research questions 2 and 3.
During the fourth phase, reflection and recommendations, the questionnaires and observations of the pilot lessons were analysed to discover motivation and vocabulary improvement and based on this; the research questions of this research were answered. The results of the observations of the pilot lessons and the final questionnaire were used to further develop and revise the initial vocabulary activities. Based on the outcomes, recommendations for future research, NT2 support and usage of a portfolio were developed.
4. Phase 1: Current situation analysis

Before starting the development of vocabulary activities, an analysis is needed to become familiar with the context of the study, and the needs of the NT2 students and teacher. This chapter seeks to find an answer to the first sub-research question “What are the needs of NT2 students and teachers to be able to improve the current NT2 support?” through a current situation analysis of the ISK context, College Zuid context, methods and NT2 students using interviews and questionnaires.

4.1. ISK context analysis

The context of the ISK is analysed through an interview with the Dutch language teacher at the ISK in Enschede. Findings are discussed below.

The questions asked at the ISK can be found in appendix A. From the answers and observations, it has been identified that different teaching methods are used at the ISK. Regular methods are used for students that are transferring to regular education within a year. Normally, the students are differentiated based on route, grade and age, as explained in the theoretical framework. But, differentiation within classes at the ISK is done in different forms. In some classes, the students follow education on their own level, which means they all work individually on their own exercises. In other classes, the students are divided into groups based on their level. In these groups they receive different activities or some groups can skip the introduction. The lowest level group always receives extended instruction. Also, differentiation based on transfer level is done: a student who transfers to VMBO uses another method than a student who transfers to HAVO. Tests are available for all methods. Next to the subject tests, TOA tests for the Dutch language are performed. These tests indicate what the Dutch level of the student is.

The ISK has personal information about their students based on their background (including traumas and family reunification). The ISK indicated it is important that this information is also shared with the regular secondary school. According to the ISK, students have difficulties with vocabulary and reading comprehension. This should be extendedly trained at the secondary school. The ISK indicated it would be a good approach if the students receive a list with important words for all subjects so they can prepare for the lessons. In this case, students can focus on the content within the lesson more as they have less trouble understanding the words. At the ISK, a word notebook is used to write down unfamiliar words. One of the main advice points for vocabulary support at regular education is using different activity forms and methods.

4.2. College Zuid context analysis

The NT2 context at College Zuid is analysed through a first conversation with the director and the NT2 teacher and questionnaires for the mentors, the NT2 teacher and subject teachers. The most important findings and outcomes of the questionnaires are discussed below.

Transfer to regular education (from ISK to College Zuid)

The results of the questionnaire showed that all mentors are aware of the NT2 students in their class and their ethnical background. Only 50% (n=2) of the mentors are aware of the Dutch level of the NT2 students. Only 50% (n=2) of the mentors are aware of the transfer documents that are available at College Zuid. However, the mentors that are aware of these documents have not read them. These transfer documents available at College Zuid have been analysed for this study, and it has been observed that only little information about the students is exchanged. The transfer documents included information about the exams NT2 students did at the ISK, including scores. However, the scores are not translated to the grading system of a regular secondary school which makes it unreadable for teachers at College Zuid. Therefore, these documents were not usable for this study.
The observations on the bad transfer between the ISK and College Zuid are in line with the findings about transfer to regular education as discussed in the background of the study.

**Differences in vocabulary knowledge**

The vocabulary difference between NT1 and NT2 students, as explained in the theoretical framework, has also been noticed at College Zuid. It has been noticed by both mentors and subject teachers that the NT2 students recognize less words, than NT1 students. The teachers indicated that they notice that some of the students don’t understand the introduction, have difficulties understanding a word or context, or don’t understand questions on the exam. One of the teachers noticed the backlog of NT2 students because of totally wrong answers to questions asked in homework assignments and on the exam. Also, difficulties to understand words and subject matter, and difficulties with formulating sentences are noticed. When performing tests or practicing exercises in class, the NT2 students work long on one question. Two teachers (50%) notice a backlog in reading comprehension and all teachers (100%, n=4) notice a backlog in vocabulary. During teacher-student conversations about failed homework assignments and exams, most students indicated to have difficulties with understanding exam questions because of unfamiliar words.

**Supporting vocabulary development**

All mentors agree that NT2 students should be extra supported in school to develop their Dutch language skills. The NT2 teacher believes reading proficiency can be enhanced by using simpler texts and more visualisation within texts when practicing the Dutch language. According to the NT2 teacher, NT2 support could be improved by using specific vocabulary didactics for NT2 students. According to the subject teachers that filled in the questionnaire, NT2 support at College Zuid could be improved by using a vocabulary notebook that is regularly checked by different subject teachers. Other suggestions are more one on one guidance, practicing vocabulary and formulation and usage of a dictionary more often. If support is offered in the form of a portfolio, the teachers would like to see different writing and vocabulary exercises that can be checked. Wordlists for every subject and exercises for answer formulation are also suggested.

**Differentiation**

The result of the questionnaire showed that the all subject teachers and the NT2 teacher uses didactics differently in a class with NT2 students. The NT2 teacher checks whether the NT2 students understood the explanation after a general introduction, but the vocabulary approach is the same as in a class without NT2 students. All teachers try to use words that are understood by the NT2 students and they explain difficult words. Also, they check if the students actually understood the concepts. Differentiation is done by most of the subject teachers (75%, n=3). When differentiating within a class with NT2 students, the teachers give the NT2 students more individual attention or more time to complete an assignment. Also, one of the teachers places the NT2 students in front of the class, so extra explanation can be easily given.

**Portfolio**

All mentors have a positive attitude towards the development of a portfolio. Their suggestions for a portfolio are: include an overview of motivation and progress of the NT2 students and include glossaries of difficult words for all subjects. If support is offered in the form of a portfolio, the NT2 teacher believes the portfolio should include a glossary of all the words the students need for every subject, including synonyms.
4.3. Method analysis
There are no records of the implemented methods that are tried during the NT2 hours. Therefore, for the method analysis, the NT2 teacher was asked to tell about the experiences so far. This teacher is the only teacher at College Zuid who gives and has given this extra hour of NT2 support. Her experiences are described below.

College Zuid started with vocabulary training using ‘Muiswerk’, which is an online learning platform for regular students with a few activities especially designed for NT2 students. Usage of ‘Muiswerk’ during the support hour wasn’t effective for learning vocabulary as there were some ICT related problems with the program. The ICT problems caused that the students were not able to use the program properly; they couldn’t practice the words. In addition, the troubles with the program had a negative influence on the motivation of the students. Also, the learning platform didn’t give the students the opportunity to use the words in reality, as the words were only practiced on the screen. As a result, words were not practiced within a context, which, according to research, is a very important aspect of learning new vocabulary. Another limiting factor that was noticed while using the program, was the lack of student motivation. ‘Muiswerk’ only works well if students are willing to practice at home. At that moment in time, students were not motivated to do anything at home and therefore ‘Muiswerk’ was not effective.

Another method that has been tried for the support hours is usage of the ‘De slimme nieuwslezer’. This online webpage offers short pieces of actual news items. The news items are made for anyone who wants to improve their language skills. All articles are automatically classified according to reading level. There is extra support on word level and exercises are generated to test the knowledge of the Dutch language. Exercises consist of dictations and dragging words. The text within ‘De slimme nieuwslezer’ has been found too difficult for the NT2 students. The NT2 students recognized many unfamiliar words while reading the news items and therefore were not able to understand the content. Also, training of words within ‘De slimme nieuwslezer’ was not possible at that time. Unless the difficulty level, this approach has been identified as a possible item to include in the vocabulary activities, as students are motivated to read about actual news items.

The last approach that has been tried during the extra hour of NT2 support, is the vocabulary training method of ‘Nieuw Nederlands’. The purpose of this method is to offer methods to learn Dutch in the areas of culture, language, integration, participation and exploration of the labour market. The vocabulary training method of ‘Nieuw Nederlands’ was found super boring by the students. Also, this method didn’t give an opportunity to track the results of the students, which is really important during the extra support hours. The method is created for native Dutch students and therefore not suitable for NT2 students. Students were not motivated to practice the exercises. The positive aspect of this method was that words are clustered by subject, which makes it easier to place the words in a context.

4.4. NT2 students’ needs analysis
To find an answer to sub-research question 1, the needs of the NT2 students are assessed by an interview and a questionnaire. Important findings and outcomes of the interview and questionnaire are given below.

The importance of vocabulary
The results of the questionnaire show that 61.9% (n=13) of the students think the extra NT2 hour is important for them, 95.2% (n=20) of the students think it is important to increase their vocabulary, 85.7% (n=18) believe that they will understand the subject content better when their vocabulary has increased and 76.1% (n=16) of the NT2 students think their grades will improve when their vocabulary level has increased. However, 71.4% (n=15) of the students do believe their
vocabulary level is high enough to understand subject content and about half of the students (57.1%, n=12) believe their vocabulary level is high enough to understand the course books. For the NT2 students, vocabulary learning is most important for the subjects: biology, history and economics. Also, they indicated that within these subjects they encounter the most words they don’t understand yet.

**Vocabulary knowledge**

The short conversations with all students showed that they all have troubles regarding understanding of subject content within their classes. They confirmed that misunderstanding of words and a lack of vocabulary is the main cause for them to not understand subject content or exam questions. This is in line with what literature already concluded in the theoretical framework. The complete overview of the questions and answers to the questions on vocabulary knowledge can be found in appendix C. It can be concluded from the interviews with the students that reading and vocabulary of the Dutch language are considered as the most difficult parts of learning Dutch.

**Supporting vocabulary development**

Most students read or watch YouTube videos to practice their Dutch. Some students consider the NT2 hour as extra practice and are not practicing extra at home. To improve their Dutch language skills, most students are willing to read and write more in Dutch, talk more in Dutch and practice to increase their vocabulary. The students indicated that others can help them learning Dutch by explaining words to them, and correct them when they are using the wrong words.

**Motivation**

All students think learning Dutch is important because they are living in the Netherlands and they’re following education in Dutch. From this, it can be concluded that in this study, the students have both integrative and instrumental motivation as explained in the theoretical framework. The students indicate that they want to be included in the Dutch community but they also recognize the importance of learning the Dutch language for their school carrier.

Based on the results of the questionnaire regarding student’s motivation on learning vocabulary, 75% (n=15) of the students indicated that they are motivated to improve their Dutch language proficiency, 70% (n=14) of the students is motivated to use a portfolio during the NT2 lessons and about half of the students (57.1%, n=12) are willing to spend extra time on making assignments for their vocabulary portfolio.

**Differentiation**

Regarding lessons activities, 38.1% (n=8) of the students prefer to work alone whereas the other 61.9% prefer to work in groups. 47.6% (n=10) of the students prefer to work from a book, 38.1% (n=8) prefer to use a computer and the other 14.3% (n=3) prefer to use separate work sheets during the NT2 hour. 42.8% (n=9) of the students like to read Dutch books, 66.7% (n=14) like to watch Dutch video’s, 71.4% (n=15) like practical assignments and only 14.3% (n=3) of the students like presenting. All students indicated that they would appreciate extra explanation of words during the subjects. Also, they want teachers to motivate them, speak slower during their explanations and test their vocabulary knowledge of words. Most students indicated that they prefer to focus on vocabulary during the NT2 hours (71.4%, n=15).
5. Phase 2: Design and development

*Important conclusions from literature, motivations for design components and the predictions for the observation scheme are presented here. All the important conclusions are translated into criteria for the vocabulary activities. Based on these criteria, the vocabulary activities were developed.*

5.1. Criteria development

5.1.1. Important conclusions from literature review (theoretical framework)

*The most important conclusions from the theoretical framework are summarized in the table (table 2) below. “Topic in theoretical framework” indicates the sections of the theoretical framework where the conclusions were based on. “Number final table” indicates in which final criteria of the table at the end of this section, this specific criterion is integrated.*

<table>
<thead>
<tr>
<th>Topic in theoretical framework</th>
<th>Important conclusions</th>
<th>Design criteria</th>
<th>Criteria number final table</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student diversity</td>
<td>Great student diversity requires students to learn at their own pace</td>
<td>Differentiated support</td>
<td>13</td>
</tr>
<tr>
<td>Vocabulary size and depth</td>
<td>Rich instruction is required to enhance vocabulary depth</td>
<td>Rich instruction</td>
<td>5/6/7</td>
</tr>
<tr>
<td></td>
<td>It is not clear whether the size approach or depth approach is more efficient in learning new vocabulary</td>
<td>Size and depth approaches</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Rehearsal is necessary to increase productive vocabulary knowledge</td>
<td>Multiple encounters of vocabulary knowledge</td>
<td>6</td>
</tr>
<tr>
<td>Differences in vocabulary knowledge</td>
<td>Second language learners have a weaker network of words, which negatively effects their performance in school</td>
<td>Possibilities to broaden the network of words and meanings</td>
<td>5</td>
</tr>
<tr>
<td>Motivation</td>
<td>The attitude of the student determines the motivation of the student to learn a second language, and influences the success of the student in learning the second language</td>
<td>Enhancement of students’ positive attitudes towards learning Dutch</td>
<td>8</td>
</tr>
<tr>
<td>Supporting vocabulary development</td>
<td>The language level of the students plays a role in usage of different vocabulary learning strategies</td>
<td>Suitable vocabulary learning strategies for all students</td>
<td>11/12/13</td>
</tr>
<tr>
<td></td>
<td>Consolidation should occur 7 times in different contexts</td>
<td>Enough consolidation opportunities of words in different contexts</td>
<td>7</td>
</tr>
<tr>
<td>Differentiation</td>
<td>When teachers know more about their students’ style preferences, they are better able to more effectively orient the second language instruction</td>
<td>Activities based on students’ preferences</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Instructional methods that incorporate individual experiences may benefit second language learning</td>
<td>Differentiation based on students’ experiences</td>
<td>13</td>
</tr>
<tr>
<td>Portfolio</td>
<td>Portfolio assessment has a significant positive impact on students’ vocabulary skills</td>
<td>(Portfolio recommendations) Portfolio assessment</td>
<td>-</td>
</tr>
</tbody>
</table>
5.1.2. Important conclusions from phase 1: Current situation analysis

The most important conclusions from the analyses of phase 1 are summarized in the table (table 3) below. In table 3 below, “Section of phase” indicates the sections of this phase where the conclusions were based on. “Number final table” indicates in which final criteria of the table at the end of this section, this specific criterion is integrated.

Table 3 Criteria for the vocabulary activities based on ISK context analysis, College Zuid context analysis, method analysis and the NT2 students’ need analysis.

<table>
<thead>
<tr>
<th>Section of phase</th>
<th>Important conclusions</th>
<th>Design criteria</th>
<th>Criteria number final table</th>
</tr>
</thead>
<tbody>
<tr>
<td>ISK context analysis</td>
<td>Usage of different activity forms and methods</td>
<td>A variation of activities and methods</td>
<td>11/12</td>
</tr>
<tr>
<td></td>
<td>Share personal information about students</td>
<td>(Portfolio recommendations) An interface for information sharing</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Give students a word list for all subjects</td>
<td>(Portfolio recommendations) An option for teachers to upload word lists</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>More meetings and discussions based on successes and bottlenecks regarding education</td>
<td>(Portfolio recommendations) A discussion interface for both teachers and students</td>
<td>-</td>
</tr>
<tr>
<td>College Zuid context analysis</td>
<td>Not all teachers are aware of the Dutch level of students or the available transfer documents</td>
<td>(Portfolio recommendations) An interface for sharing documents</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Students have a lack of word understanding, vocabulary and formulation</td>
<td>Activities to enhance word understanding, vocabulary knowledge and formulation</td>
<td>1/2</td>
</tr>
<tr>
<td></td>
<td>Students don’t understand the context of the words</td>
<td>Activities to broaden context understanding</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Suggestions for the portfolio include: different writing and vocabulary exercises, wordlists and exercises for answer formulation</td>
<td>(Portfolio recommendations) Different writing, formulation and vocabulary exercises</td>
<td>-</td>
</tr>
<tr>
<td>Method analysis</td>
<td>ICT problems</td>
<td>A mix of resources</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Lack of student motivation</td>
<td>Motivational activities</td>
<td>8/13</td>
</tr>
<tr>
<td></td>
<td>Words not placed in context</td>
<td>Possibilities to practice words in context</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Training of words not possible</td>
<td>Plenty of opportunities to practice words</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Too difficult</td>
<td>Different levels</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Boring content</td>
<td>Advantageous and exciting content</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>No opportunity to track results</td>
<td>(Portfolio recommendations) A possibility to track student results</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>Content is not relevant for all students</td>
<td>Relevant activities for all students (differentiation on educational aspects)</td>
<td>9/13</td>
</tr>
<tr>
<td>NT2 students’ needs analysis</td>
<td>Vocabulary is considered as a difficult part of learning Dutch</td>
<td>Activities that make vocabulary learning easier</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Not much practicing of Dutch at home</td>
<td>Homework assignments</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>Students are willing to improve their Dutch by reading, speaking and practicing vocabulary</td>
<td>Reading and speaking activities</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>Students have mixed preferences for learning alone or in groups</td>
<td>Different work settings</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Students have mixed preferences for educational resources</td>
<td>Different resources</td>
<td>12</td>
</tr>
</tbody>
</table>

Based on the tables above, a final overview of the design criteria for the vocabulary activities is developed. The final criteria overview consists of thirteen criteria, which are categorized in ‘vocabulary activities’, ‘vocabulary as an aspect of language learning’, ‘second language development’ and ‘supporting vocabulary development’. These categories are consistent with the sub-chapters of the theoretical framework to make the relations clear. All design criteria from the tables above are part of the final criteria overview, however, some of them are clustered. For example, the criteria ‘multiple encounters of vocabulary’ is consistent with ‘plenty of opportunities to practice words’ and therefore taken together as one criterion. Also, the criteria of ‘suitable vocabulary learning strategies for all students’ can be reached by differentiating on settings, resources and preferences and needs and therefore this criterion can be left out of the final criteria overview. Going through all criteria like this, gave the overview of the final thirteen criteria for the vocabulary activities (table 4). In tables 2
and 3 (last columns: criteria number final table), it can be seen which criteria from the different analyses are clustered into the list of final criteria in the overview of table 4.

Table 4 Criteria overview for vocabulary activities

<table>
<thead>
<tr>
<th>Vocabulary activities</th>
<th>Vocabulary as an aspect of language learning</th>
<th>Second language development</th>
<th>Supporting vocabulary development</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>5. Strengthen word network</td>
<td></td>
<td>10. Homework assignments</td>
</tr>
<tr>
<td>2. Enhancing context understanding</td>
<td>6. Plenty of opportunities to practice words</td>
<td>9. Advantageous and relevant content</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>12. Work with different resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>13. Differentiation on students’ preferences and needs</td>
</tr>
</tbody>
</table>

All conclusions and criteria that are related to portfolio usage are not considered as a design criterion for this research, but are discussed directly in Phase 4: Reflection and recommendations.

5.2. Development of vocabulary activities

5.2.1. Additional motivations for design of vocabulary activities

The development of the vocabulary activities is based on the design criteria explained above. Some additional motivations for design components are discussed below. These motivations are based on aspects that are already discussed in the theoretical framework.

The developed vocabulary activities have taken the EU guidelines for Modern Weird Languages (Dutch: Moderne Vreemde Talen) as starting point. These guidelines state that teachers should promote, encourage and support the learners of all levels in their own situations to learn the language. According to the EU guidelines, students should have the ability to make effective use of the learning opportunities that are offered within the educational setting, such as: understanding the meaning of an assigned task, cooperating effectively in pairs and small groups and to use the learned language quickly, actively and often, using available materials. The designed activities make sure that the meaning is clear and blended settings are used to learn the language. Also, the enhanced vocabulary knowledge will lead to an overall better understanding of assigned tasks in other classes. Within the designed activities, vocabulary is developed by searching the definition of new words in dictionaries and on the internet. Vocabulary development is also enhanced by offering words with accompanying visual elements. Students are asked to learn/memorize the word lists, including words and their definitions or meanings, that are created during the lessons. In some activities construction of mind maps is used to develop the students’ vocabulary. These methods of enhancing vocabulary development are all mentioned within the document of CEFR (2018).

No single second language learning strategy fits an entire class full of different students. Therefore, the design for activities should enhance differentiation. As mentioned before, differentiation can be done on product, process and content. In the design, all lessons will have one or more forms of differentiation. Content differentiation will be done on subject activities and the scope of an activity (number of exercises). Process differentiating will be done by varying in whole class, small group and individual activities. Product differentiation will be done through different assessments types and resources.
Based on the literature research that covered the section “supporting vocabulary development” of the theoretical framework, it has been chosen to use CLT in combination with focused tasks. Based on the theoretical framework and the student’s preferences that followed from the questionnaire, it is chosen to use different activities for the lessons. All activities will be a combination of both focus on form instruction and communicative approaches. Examples of this type of exercises are matching synonyms, gap texts and matching translations, all in a communicative setting.

5.2.2. Overview of all developed activities of the pilot lessons

The section below contains an overview of the activities that were performed during different lessons. The content of the lessons can be found in appendix E. An overview of the different design criteria that were included in the lessons, can be found in table 5 and an overview of the expected mediating processes of the lessons can be found in table 6.

Lesson one (90 minutes)

During this first lesson, the main goal for the students was to notice unfamiliar words for them in a text from a textbook. The first NT2 lesson was based on checking the students’ current vocabulary level. The NT2 students were given a text from a Dutch textbook and were asked to underline all words that were unfamiliar for them. After having read the text, they were given the assignment to write a letter to a family member explaining the text. After the first attempt, the unknown words were explained in a group discussion. After the explanation, the students were asked to write a second letter to another family member. To enhance learning, students were asked to write down the unfamiliar words in their notebooks, including a description of the meaning of these words.

Lesson two (90 minutes)

The second lesson involved the first 60 words of the Amsterdamse Woordenlijst. The students were introduced to the words on the list through a handout. The 60 words were divided over five shorter lists of twelve words each, which were all assigned to a group of four students. First, the students were asked to copy the words from their list on a separate paper. Next, they were asked to underline the words which they were not familiar with. After having underlined the words, the students were asked to form a group with the other students who received the same word list. Within the group of four, students were asked to write down the meanings of all twelve words in their list. Group members got the task to explain words to each other to provide others with the meaning of words they were not familiar with. In addition, when there was a word in the list that no one of the group members was familiar with, the teacher explained the word using semantising. After having provided all students with the meanings of all words in their lists, students had to discuss on the words and place the words in a context, making up a sentence. When all groups had developed sentences for the words of their lists, they were asked to present the words to the group. Some of the sentences that were proved to be new or difficult for the students were written on the board.

Lesson three (45 minutes)

The main objective of this lesson was to enhance students’ comprehension of the vocabulary words by providing them with different contexts. Another aim was to motivate the students by playing a game. During this lesson, the students were introduced to the next 40 words of the Amsterdamse Woordenlijst. For homework, the students were all assigned two words of which they had to search the meaning and with which they had to form a sentence. To make the sentences, they were allowed to use the subject book or the internet. Based on the student’s homework, gap sentences were developed. During the lesson, all students had to work on their own to fill in the gaps in the sentences. After a while (approximately 10 minutes) they were allowed to discuss the sentences with their
neighbours. When 20 minutes were over, the sentences were discussed in class. Students who thought to have found the right answer were asked to read the sentence, including the word that was filled in, out loud. The other students were allowed to comment on the given answers and the right answers were discussed.

The second half of the lesson, the students played a game. The aim of the game was to give students another possibility to place the newly learned words in a different context. The game was called “inside-outside circle”. For this game, the students had to make two circles of students. The inner circle of students had to stand against each other’s back as the outer circle of students were facing the students in the middle. The students in the inner circle were given cards containing the words that they had prepared for homework and discussed during the first half of the lesson. The students in the outer circle had to form sentences with the shown words. The students rotated clockwise and when all students had formed sentences with all words, the students in the inner circle swapped place with the students in the outer circle. Assessment took place in the form of application and adaption of what the students had learned in a new context, as the same words were used during the different activities.

Lesson four (45 minutes)

Again, the students were introduced to some new vocabulary words from the Amsterdamse Woordenlijst. This time, words from the Biology and Economics section were used as the input for the lesson. The students were given a list of twelve biology or economics related words. During this lesson, the students received different vocabulary activities. The activities aimed to consolidate new vocabulary for retaining. The vocabulary activities were two crosswords and an exercise about synonyms. The crosswords contained ten definitions which the students had to combine with the right words. The other questions consisted out of thirteen words and synonyms which they had to connect to each other. Students should have the opportunity to recall meanings of a word, since the effort involved in recalling, has a higher chance that the word will be remembered (Nation, 2001). Assessment was done by making the students explain concepts, principles and processes. Differentiation was done on content as the students could choose the activity based on subject interest. This lesson was especially designed to discover whether students thought that vocabulary tasks play an important part in acquiring new vocabulary knowledge.

Lesson five (45 minutes)

This lesson is based on the game “30 seconds”. For the lesson, the students got one minute to explain the words instead of the original “30 seconds” used within the popular game. All students were asked to explain the words from the cards to check word understanding. The words that were used for the game were words that were encountered during previous lessons. This game was especially dedicated to playing a game as the research of Konishi et al. (2014), states that approaches in the form of guided play or a game promote superior learning, retention and academic achievement. For the game, two pairs were paired together in a group of four. Each group was given a pile of cards containing words. Each group member had one minute to explain as many words as possible from the cards of the pile to the others in the group. While explaining the words, the students were not allowed to mentioned the word itself. They could give the meaning of a word, a sentence in which the word could be used or a synonym. After one minute, the groups had to switch and the other group had to guess as many words as possible form the cards. Every round, only one student was allowed to explain the words to the other group members. The group that had guessed the most words right was the winner.
Lesson six (45 minutes)

For this lesson, a writing activity was prepared, but no specific theme was determined yet. This lesson was devoted to checking the words in the students’ notebooks and explaining the difficult words to them. During this lesson, it was actually checked whether the students really understand the words they had written down. After having checked the notebooks of the students, a writing task was developed based on a theme that came to mind. As one of the students came with the idea of a thriller theme and different words related to this were discussed and written down on the whiteboard. This is done according to the principle of associations: When students are asked to learn new words, relate them to other words and their experiences so word associations are reinforced (Sökmen, 1997). The homework assignment for the next lesson was to write an exciting story of at least 100 words, using at least five of the words that were written down on the whiteboard. This lesson, the assessment was done through interpretation of new words through storytelling.

Lesson seven (45 minutes)

The aim of this lesson was to check the vocabulary knowledge of the students to see if the previous lessons had been effective. During the first fifteen minutes of the lesson, the stories were discussed and one story was read out loud. The rest of this lesson, the students played an interactive game called Kahoot with the vocabulary words they learned during previous lessons. Ismail et al., (2017) states that using games as part of vocabulary activities can help to memorize words. Therefore, this game has been introduced to the pilot lessons. Three different Kahoot games were played to observe the student’s knowledge of words they had seen and practiced before and their knowledge of new words. The Kahoot games included questions with both a receptive nature and a productive nature. Two Kahoot games contained eight questions of which half of the questions were based on describing what was shown on a picture. The first Kahoot game included words that were discussed during earlier NT2 hours and the other game included words from the ‘Amsterdamse woordenlijst’ that were not discussed yet.

Lesson eight (45 minutes)

This lesson was devoted to a short vocabulary test with four different kind of questions. The questions consisted of gap texts, synonyms, antonyms and meanings of different words. The words were shown on top of the test, so the students could choose from them. Understanding of assessment is done by application and adaption of what the students have learned in a new context. After the test, the students filled in the questionnaire about motivations and preferences regarding the different vocabulary activities.

<table>
<thead>
<tr>
<th>Design criteria</th>
<th>Lesson 1</th>
<th>Lesson 2</th>
<th>Lesson 3</th>
<th>Lesson 4</th>
<th>Lesson 5</th>
<th>Lesson 6</th>
<th>Lesson 7</th>
<th>Lesson 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Enhancing vocabulary knowledge</td>
<td>✪</td>
<td>✩</td>
<td>✩</td>
<td>✧</td>
<td>✧</td>
<td>✤</td>
<td>✤</td>
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<tr>
<td>2. Enhancing context understanding</td>
<td>✪</td>
<td>✩</td>
<td>✩</td>
<td></td>
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<td></td>
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<tr>
<td>3. Making vocabulary development easier</td>
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<td></td>
<td></td>
<td>✩</td>
<td></td>
</tr>
<tr>
<td>4. Size and depth approaches</td>
<td>✩</td>
<td>✩</td>
<td>✩</td>
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<td></td>
</tr>
</tbody>
</table>
5. Strengthen word network |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
6. Plenty of opportunities to practice words |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
7. Possibilities to practice words in context |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
8. Enhancement of positive attitudes |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
9. Advantageous and relevant content |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
10. Homework assignments |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
11. Work in different settings |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
12. Work with different resources |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |
13. Differentiation on students’ preferences |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |  &middot; |

Table 6 Overview of the mediating processes per lesson

<table>
<thead>
<tr>
<th>Mediating process</th>
<th>Lesson 1</th>
<th>Lesson 2</th>
<th>Lesson 3</th>
<th>Lesson 4</th>
<th>Lesson 5</th>
<th>Lesson 6</th>
<th>Lesson 7</th>
<th>Lesson 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Students engage in activities</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
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<tr>
<td>B. Homework assignments are made</td>
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<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
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</tr>
<tr>
<td>C. Students finish the activities in the class</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
</tr>
<tr>
<td>D. Students use word discovery strategies</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
</tr>
<tr>
<td>E. Students use consolidating strategies</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
</tr>
<tr>
<td>F. Demonstration of idea and answer sharing</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
<td>·</td>
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</tr>
<tr>
<td>G. Students have a positive attitude towards the activities</td>
<td>·</td>
<td>·</td>
<td>·</td>
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<tr>
<td>H. Students have the feeling the activities are advantageous</td>
<td>·</td>
<td>·</td>
<td>·</td>
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</tbody>
</table>
5.3. Development of observation scheme for pilot lessons evaluation

The prediction overview (figure 8) is based on the design criteria and shows prediction of how the designed activities stimulate processes that lead to the desired outcomes of the vocabulary activities, which are the aims of this research. The symbols behind the design criteria, mediating processes and intended outcomes indicate in which lessons these play a role (see symbols before all lesson descriptions above). The predictions are evaluated during the pilot lessons, using the observation scheme (appendix F). The observable interactions and students’ artefacts that are in the mediating processes box are based on the expectations of processes that will happen during the lessons (see lesson descriptions above) and are based on literature. The column “design criteria” of figure 8 represents table 5 and the column “mediating processes” of figure 8 represents table 6.

Students who have high motivation are expected to make an effort to be engaged in class (Funda, 2017), therefore ‘students engage in activities’ is chosen as one of the observable interactions. Johnson (2001) stated that when the attitude towards success is high, more effort is put into learning. Therefore, ‘homework assignments are made’ and ‘students finish the activities in the class’ are taken as observable interactions of the observation scheme. Because different vocabulary learning strategies enhance vocabulary learning of students (Schmitt, 2014), the observable interactions ‘students use word discovery strategies’ and ‘students use consolidating strategies’ are added to the observation scheme. Slavin (2011) states that helping others in activities, activates behaviours that will result in learning. Therefore, ‘demonstration of idea and answer sharing’ is part of the mediating processes. Last, the student artefacts ‘students have a positive attitude towards the activities’ and ‘students have the feeling the activities are advantageous’ are added to the observation scheme as obviously these artefacts will lead to the intended outcome of students that find the vocabulary activities both motivational and useful.
When the vocabulary activities are designed to enhance vocabulary knowledge, it is expected that this will lead to enhanced vocabulary knowledge through engagement in activities. When the vocabulary activities are enhancing context understanding, it is expected that students will engage in activities and that they will use word discovery strategies to understand the context and find the meaning of a word they don’t know. Also, demonstration of idea and answer sharing can be expected. Making vocabulary development easier will probably also make students engage in activities, make them finish the activities in class and make them have a positive attitude towards the activities as they easily learn new vocabulary. Size and depth approaches will make students use word discovery strategies and consolidating strategies as more activities will be included to learn new vocabulary. Strengthen the word network can be done by demonstration of idea and answer sharing, for example by conducting a word map. Plenty of opportunities to practice words can be reached by using different consolidating strategies. Possibilities to practice words in a context can also be done using idea and answer sharing. Offering opportunities to broaden the network in a context is expected to positively influence the vocabulary knowledge, because practicing in different context is necessary for the consolidation process to be successful. Enhancement of positive attitudes results in more motivation and therefore, it is expected that students are engaged in activities, will do homework assignments, finish the activities in class and have a positive attitude towards the activities. When content is advantageous and relevant, it is also expected that students are engaged in activities, homework assignments are made and students finish the activities in class because they know they the content is important. When differentiation is done on different settings, different resources and students’ preferences, it is expected that students will be engaged in activities, and will do their homework.
assignments. This is expected because differentiation will make the activities useful for all student profiles. They will demonstrate ideas and share answers and they are expected to be motivated to do the activities.

When students are engaged in activities, this shows that activities are indicated as relevant by students. Also, this will most likely lead to increased vocabulary knowledge as students are enhancing their learning processes. When homework assignments are made, this shows that students are motivated to do the assignments (as they have to be made in their free time) and that the activities are indicated as relevant by them. When activities are finished in the class this also indicates that the students have a positive attitude towards success and therefore motivated to finish the activities in the lessons. This also enhances vocabulary knowledge. As mentioned before, when students use word discovery strategies and word consolidating strategies this will positive influence the vocabulary knowledge of the students. Also, different discovery strategies and different consolidating strategies can enhance the motivation of students as they have the opportunities to use the strategies, they prefer themselves. Demonstrations of ideas and answer sharing will lead to enhanced vocabulary knowledge as students are able to exchange their knowledge. When students have a positive attitude towards the activities, this will increase their motivation. When students have the feeling the activities are advantageous this will also increase their motivation and this will give the students a feeling that the activities are useful.

5.4. Practical contribution of the criteria and observation scheme
As stated before, the most important conclusions from literature and the current situation analysis are translated into criteria for the vocabulary activities. The questions of the questionnaires for both students and teachers, cover all important aspects regarding vocabulary support for NT2 students. Therefore, in other contexts or at other schools, these questionnaires can be used to discover the needs of NT2 students and teachers, to develop criteria for vocabulary activities. Right now, it has been assumed that the needs that followed from this study are generalizable for all groups of NT2 students because vocabulary support at normal secondary schools is not yet implemented. For the criteria, this means that when developing vocabulary activities for NT2 students, these criteria should be incorporated in the activities. The observation scheme could serve as an evaluation tool to evaluate the impact of the created vocabulary activities, just as was done in this study.
6. Phase 3: Implementation and testing
The goal of this third phase was to test and evaluate the created vocabulary activities of the pilot lessons to be able to suggest which vocabulary activities are useful and motivational for NT2 students and find an answer to sub-research questions 2 and 3. This describes the results of the observations and the pilot lessons evaluation questionnaire. The observations and the results of the questionnaire are discussed and evaluated in chapter 7.

6.1. Implementation assumptions
Some assumptions were needed for the input of the vocabulary activities. The motivation for these assumptions is discussed below.

Words from the “Amsterdams woordenlijst” have been chosen to be the input for the vocabulary activities, because at the start of this research, the teachers hadn’t provided the vocabulary lists for the subjects yet. Also, the NT2 teacher was wondering whether students would understand subject content better if they have the words from this list in their vocabulary. This word list consists of 1600 words that have a high frequency in the school content in secondary school. This list is created with the following aim: If students know the words well, they will be able to better understand the textbooks. It is assumed that the words of this list will motivate students to learn, because they see the words often in lessons or textbooks.

Bloom and Markson (1998) found that students around the age of twelve learn about twelve new words per day at school. Twelve unfamiliar words make a good balance between exposure to new words and retaining them. It is assumed that not all words are new for all students in the NT2 class because the class is so diverse. Since the words chosen are part of the “Amsterdams woordenlijst”, it is assumed that part of the class has already been exposed to some of these words. This means the students can learn these words faster. Therefore, for some lessons it has been decided to use more than twelve words. It is assumed that the students read the words before the lesson and practice them after the lesson.
6.2. Observations of the pilot lessons

Below, the implementation of the activities of the pilot lessons are explained and predictions and observations are evaluated. Observations regarding mediating processes can be seen in table 7.

* Lesson one (90 minutes)

**Vocabulary knowledge**

During this first lesson, it was observed that quite a few words were unfamiliar to a lot of students. After explaining and discussing the unfamiliar words, it was observed that students were able to explain the text better. The mediating process of demonstration of ideas answer sharing led to enhanced vocabulary knowledge.

**Motivation**

Not all students decided to write down all the words in their notebooks. When it was asked why they didn’t write down the words they answered that they already knew the word and its meaning or that they would remember the words without having to write them down. It was observed that students were not really motivated to do the activities. Not all students were engaged in the activities and they also didn’t finish the activities in the classroom.

**Supporting vocabulary development**

Students were challenged to use different strategies during the lesson. It was observed that the guessing strategy was used by many of the students, with which the meaning of unfamiliar words was guessed based on the context. Also, social word discovery strategies were used by using classmates or the teacher for the meaning of words. As a word consolidation strategy, cognitive strategies were used by some students, by writing the words down in their vocabulary notebook.

** Lesson two (90 minutes)**

It was observed that the students found the writing exercises of putting the word in a context, rather difficult. Some groups were not able to form sentences whereas others only wrote down very basic and short sentences. All groups were engaged in the activities but not all groups finished the activities on time.

**Vocabulary knowledge**

After the lesson activities, individual students showed enhanced vocabulary knowledge as a result of discussions and answer sharing. Increased vocabulary knowledge was observed, as individuals were able to form sentences using the words, they underlined at first as unfamiliar. There were only a few words that needed to be discussed in front of the whole group, when no one in the group knew the meaning of a word. When students were discussing on the answers and possible sentences of the activities, they were demonstrating enhanced vocabulary knowledge.
Motivation

It was observed that students were engaged in the activities during the lesson, but not all students were engaged to use their notebooks. Process differentiation in groups had a positive influence on the motivation of the students and limited encouragement was needed to finish the activities in the class.

Supporting vocabulary development

It was noticed that students prefer to ask the meaning of words to the teachers or other students over using a dictionary. Almost all groups managed to find the meanings of new words themselves through discussions within the group, which are social word discovery strategies. Consolidation activities were incorporated in this lesson by giving multiple opportunities to practice the meaning of the words. This is also done by giving opportunities to broaden the word network by providing context. From the observations it could be concluded that answer sharing in discussions was an important part of this lesson.

Differentiation

Enhanced process differentiation was part of this lesson as the activities were divided into different settings; an individual part, a small-group part and a whole class presentation of the results. Process differentiation showed demonstration of ideas and answer sharing and also led to demonstration of enhanced vocabulary knowledge.

Lesson three (45 minutes)

Vocabulary knowledge

Demonstration of enhanced vocabulary knowledge was noticed, as new concepts were discussed and learned. When discussing the right answers of the gap text, most of the students seemed to have found the right answers that belonged to all the gaps. It was observed that the students formed sentences using the game, using examples that were already discussed during classes. Other formed sentences were rather short.

Motivation

It was observed that students were motivated to do the activities, as it was a mix of different activities that all did not take too much time. It seemed that the activities in different settings were valued by the students. Also, the activities were noted as motivational and relevant by the students. Students were engaged in the activities, and the homework assignments were made by almost all students.

Supporting vocabulary development

The autonomy of the students was stimulated by letting them search for the meaning of a word themselves (Lowan, 2018). Using the dictionary was used as a good word discovery strategy to search for the meaning or synonyms of new words. The gap text allowed the students to guess the meaning from the context.

Differentiation

In this lesson, the enhanced process differentiation was an important design element as the activities were done using different class settings and different resources. This led to demonstration of idea and answer sharing as well as demonstration of enhanced vocabulary knowledge. After a while, students were allowed to work in small groups so they could negotiate on the right answers of the activity.
Lesson four (45 minutes)

Vocabulary knowledge

After all students discussed the words for the crossword with their neighbours, they all had above 80% of the words correct. After having made the crosswords, it was observed that the matching exercises were performed pretty well. Increased vocabulary knowledge has been observed by the high percentage of correct answers. It looked like it was easier for the students to match synonyms together, when the meaning of the words was already discussed.

Motivation

An important element of this lesson was to enhance the students’ positive attitudes. It was observed that most students were motivated to fill in both crosswords and all words, even if they were not following the subject, or knew the words already. It seemed they liked puzzling to get the right words in the crossword. It was observed that students felt that the activities were advantageous as subject words were used. Also, everyone was engaged in the activities and they were finished on time.

Lesson five (45 minutes)

Vocabulary knowledge

The game enhanced demonstration of answer sharing and the intended outcome, that was also observed by a few students, was discussions that demonstrated enhanced vocabulary knowledge. However, it was observed during this lesson that the students had difficulties to correctly explain the words on the cards that were discussed during previous lessons. Some students really showed enhanced vocabulary knowledge during the game, whereas other still had difficulties explaining the words on the cards using their own words and sentences. To explain the words on the cards, different consolidation strategies were used by the students. It was necessary to correct the students a few times because of wrong word orders, like explained in the transfer theory.

Motivation

It was observed that students were motivated to do the activities and all students were engaged in the activities. Therefore, the activities were noted as motivational and students had a positive attitude towards the vocabulary activities.

Supporting vocabulary development

This lesson was devoted to a game-wise learning strategy. This lesson gave the students opportunities to broaden the word network in a context. Students had a positive attitude towards this lesson. However, they had to include the context themselves and this was rather difficult for most students.

Lesson six (45 minutes)

Vocabulary knowledge

Not all students wrote down words in their vocabulary notebooks. Most students were able to explain the words they had written down in their notebooks. It was observed that the discussion on a new topic, enhanced vocabulary knowledge. Everyone was involved in exchanging ideas and discussing on the topic in the class.

Motivation

It was observed that students were motivated to take part in the lesson activity as ideas where shared within in the group. Also, it seemed like the lesson was valued by the students due to another setting as they were used to (no assignments, but a classical discussion). All students were engaged in the activity and they had a positive attitude towards the lesson.
Lesson seven (45 minutes)

Vocabulary knowledge

Enhanced vocabulary was noticed. It was observed that the homework assignment was really difficult for the NT2 students. Some students already contacted the teacher beforehand, to tell that they were not able to do the writing exercise. A few students did really well, some other wrote stories with a lot of mistakes, like messing up word order, as explained by the transfer theory (Appel & Vermeer, 1996).

Motivation

The students were very motivated to answer the questions in Kahoot and be the quickest. The tool provides insights in the results of the other students and students are willing to help each other and provide each other with the correct answers. Homework assignments were not made by everyone and therefore, the assignment was not observed as a motivational activity for all students.

Differentiation

Another design element of this lesson was working with different resources as different Kahoot games were given after a writing assignment. It was observed that the mix of resources was valued by the students; they all had a positive attitude towards the lesson.

Lesson eight (45 minutes)

Vocabulary knowledge

Students had difficulties with the gap texts and finding synonyms in sentences. The gaps and synonyms were not indicated in the questions and the students couldn’t relate them their selves. Therefore, the test was adapted a little bit and it was told before where the gap in the sentence was and for which word, they had to find a synonym. This lesson showed that some students increased their vocabulary knowledge, as some other still had difficulties with some questions. All students were engaged in the lesson and finished the activities on time.
Table 7 Overview of observed mediating processes

<table>
<thead>
<tr>
<th>Mediating process</th>
<th>Lesson 1</th>
<th>Lesson 2</th>
<th>Lesson 3</th>
<th>Lesson 4</th>
<th>Lesson 5</th>
<th>Lesson 6</th>
<th>Lesson 7</th>
<th>Lesson 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Students engage in activities</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>B. Homework assignments are made</td>
<td></td>
<td>●</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Students finish the activities in the class</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>D. Students use word discovery strategies</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>E. Students use consolidating strategies</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>F. Demonstration of idea and answer sharing</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>G. Students have a positive attitude towards the activities</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>H. Students have the feeling the activities are advantageous</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

As can be seen when comparing table 6 and 7, not all predictions were observed during the pilot lessons. Differences between predictions and observations and possible reasons for these differences are discussed in chapter 7.

6.3. Pilot lessons evaluation questionnaire

During the last pilot lesson, the pilot lessons evaluation questionnaire was given to all NT2 students that took part in the pilot lessons. During this lesson, fifteen students were present. The questionnaire aimed to find an answer to sub-research question 2 and 3 by evaluating on the content of the pilot lessons. The questionnaire can be found in appendix G and the results are discussed and evaluated in chapter 7.
7. Phase 4: Reflection and recommendations

The goal of this study was to investigate how additional vocabulary support at College Zuid could be given the best form, to motivate NT2 students and to improve the students’ vocabulary knowledge. To reach this goal, research-questions were developed and tackled in the previous discussed phases of this study. Implications of the findings of the three phases, the research questions, and the answers to these questions as a result of this study, are discussed below.

7.1. Reflection on the findings of this study

7.1.1. Importance of vocabulary

Finding: Students find vocabulary support important to improve their Dutch language skills and to understand subject content better.

Most of the students that filled in the questionnaire (93.3%, n=14) believed that they would understand the subject content of different courses better when they receive a glossary of every subject including difficult words and new concepts. It was observed during the lessons that students have a positive attitude towards Dutch society and learning the Dutch language. From the questionnaire it can be concluded that most of the students are aware of the limitations they face when their Dutch vocabulary knowledge is not sufficient. This is in line with the findings of SLO (2018) that students need vocabulary as a social function in society. Also, students indicated that they believed vocabulary support is necessary for them to enhance their vocabulary knowledge to understand subject content better. It can be said that the need to enhance students’ positive attitudes towards learning Dutch was met. 93.3% (n=14) of the students thought the vocabulary activities that have been tried during this pilot test helped them to learn and practice new words. 66.7% (n=10) of the students thought the learned words were important for them to learn, which meets the need of relevant content.

7.1.2. Vocabulary knowledge

Finding: Students have successfully learned the new vocabulary words that were discussed during the pilot lessons.

Ismail et al. (2017) states that using games as part of vocabulary activities can help to memorize the new words. Therefore, it was also expected that after the games, increased vocabulary knowledge could be observed. The results of the Kahoot games clearly show a difference between the results of the game that included new words and the one that included previous faced words. On the first Kahoot game that included previous discussed words, the students scored an overall performance of 80.91% total correct answers. On the second Kahoot game, the students scored an overall performance of 57.58% total correct answers. Therefore, it seemed like practicing the words during the NT2 hours increased the student’s vocabulary knowledge.

Finding: Discussions between students on the activity generated and enhanced vocabulary development by extending knowledge of new context.

Different consolidations strategies and demonstration of idea and answer sharing were expected during the lessons that involved different possibilities to practice words in a context. During all lessons, it was observed that students exchanged ideas and knowledge. It was observed that students had higher percentages of correct answers after discussing tasks with their classmates. It was expected and observed that discussing unfamiliar words had a positive influence on the context understanding of an activity. This is in line with the findings of Slavin (2011), who found that co-operating behaviours will result in learning.
7.1.3. Motivation

Finding: There is a positive attitude towards learning new vocabulary.

Students believed that enhanced vocabulary knowledge after the activities might result in better learning and subject understanding in their classes, which shows there was a positive attitude towards the vocabulary activities.

Finding: Lessons that include ‘informal’ (games, no assignments) lesson settings are valued by students and students were engaged in these activities and finished the activities.

Game-based learning activities were expected to engage students in the activities and enhance the positive attitudes of students towards vocabulary learning. This was also observed during the lessons. For example, all students were very motivated to take part in the Kahoot activities. They all wanted to be the quickest and answer the questions correctly. This is in line with the developer’s evaluation of the tool in which it was concluded that high motivation comes from the competitive aspect of the tool. In general, there was no encouragement needed for all activities that had a positive influence on the student’s motivation. It was observed that motivation influenced the success of the students in learning Dutch, which is in line with the conclusions from the current situation analysis and is also in line with the study of Baker (2001). In general, enhancement of positive attitudes was met due to the different work settings and resources that were used during the pilot lessons. Also, different discovery strategies and different consolidating strategies enhanced the motivation of students as they had the opportunities to choose the strategies themselves.

7.1.4. Supporting vocabulary development

Finding: The biggest bottleneck for NT2 students in education is their low level of Dutch vocabulary.

This was indicated by the students during the NT2 students’ needs analysis and also observed by different subject teachers. This finding is in line with the research of Vermeer (2003).

Finding: The language level of students plays a role in preferences for pace and level of the lessons.

The vocabulary activities tested during this research seemed to be useful to improve the student’s vocabulary knowledge. For the majority of the students (84.6%, n=11), the level of the support hours was perfect. 15.4% (n=2) thought the level of the support hours was too low for them. However, one of the students that indicated that the level was too low responded with the comment that vocabulary support is desirable anyways. The tackled words during the lessons were not always new for everybody and the opinions on difficulty of the words differ (37%, n= 6 think the new words were difficult whereas 33.3%, n=5 think the new words were not difficult). 53.3% (n=8) of the students had enough moments to practice the newly learned words, and 33.3% (n=5) of the students gave a neutral answer. For only 13.3% (n=2) of the students the practice moments for the new words were not enough. This is in line with the conclusion from the theoretical framework that great student diversity requires students to learn at their own pace.

Finding: The diversity of students plays a role in preferences for vocabulary activities and learning strategies.

A notebook was provided to all the NT2 students so they could write down unknown words. During classroom observations, it was noted that not all students actively used the notebook. This is in line with the results of the questionnaire: only 66.7% (n=10) of the students thought the notebook helps them to remember and learn new words. Most of the students (80%, n=12) stated that they do not write down all difficult or unknown words in their notebooks as some words are easily remembered without writing them down. According to Ismail et al., (2017) a dictionary is one of the
most important references for new learners in learning new vocabulary. It has been found that learners who look up unknown words in a dictionary remember the words better than learners who did not use a dictionary (Laufer, 2006). Schmitt (2014) found that successful vocabulary learners are making notes more often and are using the dictionary more often. The research of Laufer and Schmitt are in line with the observations in the classroom. It has been found that the HAVO students wrote down more words in their notebooks. Also, the students with a higher Dutch level used the dictionary more often during the NT2 hours. This also shows alignments with the CUP model; any expansion of CUP in the first language, will have a beneficial effect on the other language. The older NT2 students and the NT2 students that had a higher education level, learned new vocabulary quicker during the pilot lessons.

Finding: The active vocabulary of the students after these pilot lessons is not enhanced enough to be able to explain the meaning of new words or add context to the new words themselves.

The more context the student receives, the greater the chance that the student learns to use the word (Lowan, 2018). Therefore, it was expected that students’ vocabulary knowledge would be enhanced by providing them with different contexts. In general, it was observed that writing exercises and forming sentences with new words were found rather difficult. Also, including context to words or explaining new words, was rather difficult for most students. It was observed during the lessons that the students had difficulties to correctly explain the newly learned words. Matching synonyms was easier after the students knew the meaning of words. For some students it was difficult to perform the crossword as there was no context provided. From the current situation analysis, it was concluded that rehearsal is necessary to increase active vocabulary knowledge and that was observed during the lesson activities as well. For the students in this study, context embedded and low cognitive challenging tasks are more suitable than context reduced and high cognitive challenging tasks. The findings of this study are in line with the findings of Laufer (2006), who stated that active vocabulary knowledge is more difficult to achieve than passive vocabulary knowledge. That has also been found in this study.

Finding: Students try to guess the meaning of new words from the context.

The majority of the students (86.7%, n=13) indicated in the questionnaire that they recognize new words while reading a text. During the first classroom observation, it was observed that not all students underline the words of which they don’t know their meaning. This might be, because the students are mostly able to understand the context of a story by guessing what the meaning is of a word they don’t know. This is also in line with the answer on the next question; almost half of the students (46.7%, n=7) stated that they try to guess the meaning of a new word from the context. This has been observed during the lessons as well.

Finding: Students prefer getting the meaning of new words, instead of searching for the meaning themselves.

Going deeper into remembering the meaning of words, all students stated in the questionnaire that it is easier to remember a word when the meaning of it is known. From the questionnaire, it seemed that students remember words better when they ask the teacher compared to searching for the meaning of a word in a dictionary. 80% (n=12) of the students indicated that they find it easier to remember words when they have asked the teacher for their meanings. Only 60% (n=9) thought it is easier to remember new words when they have searched the meaning of them in a dictionary. This is in line with the observations; most students asked the teacher or other students for the meaning of words, instead of searching for them in the dictionary. Students prefer asking for the meaning of words because they receive the translations faster than when they have to search in the dictionary. Also, some students indicated that they found the description in the dictionary rather difficult so they still wouldn’t understand the meaning of the word. The conclusion from the current situation analysis was
that rich instruction is required to enhance vocabulary depth. In this case, instruction can be seen as the explanation of the meaning of new words and it can be concluded that this enhanced remembering of the words.

7.1.5. Differentiation
Finding: The vocabulary activities of the pilot lessons are valued by the students because of differentiation on process, product and content.

Process differentiation in groups had a positive influence on the motivation of the students, as was also stated in the research of Rebecca (2003). One of the conclusions from literature in the theoretical framework, was that teachers are able to make second language instruction more useful when they know their students’ preferences. This is in line with the findings of the classroom observations. The needs that followed from the NT2 students’ needs analysis included different working settings and different resources. These needs were met during the vocabulary activities.

7.2. Discussion sub-research questions
The found answers to the research questions of this study are discussed in the sections below.

7.2.1. Answer to sub-research question 1: “What are the needs of NT2 students and teachers to be able to improve the current NT2 support?”
This answer followed from phase 1, the current situation analysis and is discussed in chapter 5. For the students, the activities have to make vocabulary learning easier. Besides, the activities need to be a mix of reading and speaking in different work settings and with usage of different resources. For the students, the vocabulary activities should be suitable and relevant for all student profiles and levels. Besides, the activities should be advantageous, exciting and motivational. Students benefit from plenty of opportunities to practice words in different context, using a variation of activities. Teachers need an interface for sharing documents in order to improve NT2 support. This makes sharing of writing, formulation and vocabulary exercises easier and it will be better controlled. Also, important documents on the background of students and word lists need to be shared.

7.2.2. Answer to sub-research questions 2: “What kind of vocabulary activities are motivational for NT2 students to support their vocabulary development?”
This answer followed from phase 2: design and development and phase 3: Implementation and evaluation. In question twenty of the questionnaire, students were asked to indicate their feelings regarding usefulness for the different activities (gap texts, circle activity in class, word notebook, crosswords, synonyms, “30 seconds”, writing stories, searching for word meanings, creating sentences with new words and Kahoot). The results of the last question on student’s motivation regarding the activities showed again that students are the most motivated by playing Kahoot as a vocabulary activity (see figure 9). Students are also motivated to search for the meanings of new words and to create sentences with the newly learned words. Students are the least motivated for activities that involve writing stories and writing new words in their vocabulary notebook. The reason for a lack of motivation for writing stories could be that the students have difficulties thinking up a good story. Also, there are different processes involved in writing a good story in Dutch, namely: thinking up a story, translating the story from their own language to Dutch and then writing it down in Dutch while they have to think about grammar and formulation as well as the new vocabulary words that were introduced to use in the story.

As mentioned before, process differentiation and different grouping strategies were valued by the students and had a positive influence on their motivation. Also, game-based learning was very motivational for the NT2 students in this study. Because using a notebook was not noted as a
motivational activity by most of the students, it might be a good idea to let the students decide themselves whether they wanted to use the notebook to write down unknown words. It has been observed that discussions had a positive effect on the motivation of the students and therefore all activities should include a social aspect, like discussing answers in small groups, a whole-group discussion or small presentations.

According to the transfer hypothesis (Appel & Vermeer, 1996) NT2 students have difficulties learning the word order of the second learned language. The NT2 teacher already indicated this in the beginning of the research and this has also been noticed during the vocabulary activities of this research. These activities were also indicated as the least preferred activities in the questionnaire. This could be because the students had more difficulties with the performance of those activities (e.g. 30 seconds and writing exercise). The results of the questionnaire are in line with the observations that were done during the pilot lessons.

7.2.3. Answer to sub-research questions 3: “What kind of vocabulary activities do students think are useful for their vocabulary development?”

This answer followed from phase 2: design and development and phase 3: Implementation and evaluation. According to the final questionnaire, 60% (n=9) of the students indicated that reading and writing of words help them better to learn new words, whereas 40% (n=6) preferred listening and speaking of the new words to learn them. In question nineteen of the questionnaire, students were asked to indicate their feelings regarding usefulness for the different activities (gap texts, circle activity in class, word notebook, crosswords, synonyms, “30 seconds”, writing stories, searching for word meanings, creating sentences with new words and Kahoot). The results of the questionnaire showed that Kahoot was considered as the activity that was most useful for vocabulary acquisition (twelve students thought it was useful, see figure 10). The “30 seconds” game was considered as the least useful for learning new vocabulary (only three students thought it was useful). Also, the crossword puzzle was not considered as a very useful activity, seven students thought it was not useful or not very useful. This could be explained by a lag of context around the given words. The results of the questionnaire are in line with the observations that were done during the pilot lessons.

Most of the students found it easier to remember a word when they asked the teacher for the meaning of the word. Therefore, useful activities should provide the meaning of the unknown words already. Also, useful activities should include more consolidation opportunities than the activities than were part of the pilot lessons. When more consolidation opportunities and more context is provided, active knowledge of the students will be activated and activities will be noticed as more useful. For
students that understand the words faster, more abstract words can be provided for them to learn whereas the other students get more opportunities to practice the old words.

7.3. Answer to the main research question

The main research question that was addressed in this research is: **“What is a useful design for motivational vocabulary activities, with the aim to improve vocabulary development, for NT2 students at College Zuid?”** The developed design followed from answering the sub-research questions first and is discussed in the section below.

7.3.1. Final criteria for design

The designed vocabulary activities were confirmed to be useful during observations of the lessons, the Kahoot game and the final questionnaire. After the pilot lessons, final criteria for the vocabulary activities for NT2 support at College Zuid have been developed. The final criteria list includes fourteen criteria, which are divided over three categories. The categories are structure, activities and differentiation. The table (table 8) below shows the final design criteria for motivational vocabulary activities.

The final criteria are based on the criteria that were taken as the input for the vocabulary activities. The criteria for the vocabulary activities were adjusted a little bit based on the observations of the pilot lessons and the results of the pilot lessons evaluation questionnaire. “Homework assignments” were not noted as motivational during the pilot lessons and therefore are not taken as a criterion for the final design. It might be better to practice the new words during more activities in the lessons. “differentiation based on students’ preferences” is reformulated to “blended content” as preferences can be on settings, resources and content. “Enhancement of positive attitudes” is reformulated to “motivating”. It was observed that students already had a positive attitude towards learning new vocabulary, which had a positive influence on their motivation. However, there are more aspects than only attitude that influence the motivation of students (e.g. chance of success, the activity itself or the teacher). Therefore, motivation can be enhanced in different ways. “size and depth approaches” is not included as a criterion as this is already met by offering opportunities to repeat the words and practice in a context. It has been observed that vocabulary development is made easier by using different word discovery and word consolidating strategies (e.g. asking the teacher for the meaning of words) and also vocabulary knowledge and context understanding is enhanced by using vocabulary learning strategies. Therefore, these word discovery strategies and word consolidating strategies have been found to be more suitable criteria for the vocabulary activities that have vocabulary knowledge and context understanding as an output. “Track student results” is added as a criterion, as it has been observed that is important to know the level of all students. Last, “cooperative learning” is included as a criterion, as it was observed that this was an important factor for the enhanced vocabulary knowledge and the motivation of the students. This leads to the following final criteria (table 8).
### Table 8 Final criteria

<table>
<thead>
<tr>
<th>Structure criteria</th>
<th>Activities criteria</th>
<th>Differentiation criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Word discovery strategies</td>
<td>Opportunities to repeat words</td>
<td>Blended work settings</td>
</tr>
<tr>
<td>Word consolidating strategies</td>
<td>Opportunities to strengthen network connections</td>
<td>Blended resources usage</td>
</tr>
<tr>
<td>Track student results</td>
<td>Opportunities to practice words in context</td>
<td>Blended content</td>
</tr>
<tr>
<td></td>
<td>A communicative approach</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A focus on form approach</td>
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<tr>
<td></td>
<td>Promote cooperative learning</td>
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<tr>
<td></td>
<td>Be motivating</td>
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<tr>
<td></td>
<td>Be advantageous and relevant</td>
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</tbody>
</table>

Based on the observation scheme and the results of the lessons, a design for the vocabulary activities is developed, based on the design criteria above (figure 11).

#### 7.3.2. Final design

This final design schema shows how the different categories and criteria are related to each other. The purple boxes indicate the final criteria for the design, whereas the blue boxes indicate how these criteria are incorporated within the designed activities.

Pre-processing and semantising should be done using word discovery strategies, in a homework assignment or at the start of a lesson. Subject content should be used as the input for the homework assignments and lessons and new words should be pre-processed. The lesson activities should focus mainly on consolidation of the new words, using different word consolidation strategies. The activities should focus on both size and depth of vocabulary, and during the lessons there should be the opportunity to repeat words and strengthen the word network. This should be done by providing appropriate tasks and easy access of word meanings. Also, active and passive knowledge of...
words should be enhanced in activities that provide a context. This can be done during a mix of listening, reading, speaking and writing activities. The activities should be advantageous and motivating. This can be achieved by providing activities that are related to subject content and providing opportunities for differentiation. Differentiation should be done by blended work settings, blended resource usage or blended content. In the controlling step, the student’s results will be checked. In vocabulary activities, this can be done by explanation, application or adaption. The activities should all take place in a communicative setting with a focus on form approach that enable opportunities to interact.

7.4. Recommendations
The section below will give an overview of the recommendations that can be done after this research, for teachers to increase their ability to support NT2 students and for implementation of the activities in a portfolio. It will also discuss implementations and recommendations for future research.

7.4.1. Recommendations for the NT2 support hour
The results have showed that the majority of the students indicated that they found the lessons motivational and useful for their vocabulary practice. However, there are some recommendations for future NT2 support hours.

First, not all students found that there were enough possibilities to practice the new words. Therefore, it is recommended to practice the same words in more activities before learning new words. It could be an idea to make the wordlists a little longer and practice a wordlist over two hours of NT2 support (in two weeks). For the students that learn quick and know some words already, there is the opportunity to skip words and continue working, as for the others there are more activities to practice the same words. It was observed that the students found the writing exercises of putting the word in a context, rather difficult. It was also observed that students have difficulties explaining words that were treated before. This shows that the word network of this new words is not expanded enough yet to actively use the word. More consolidation options, in the form of homework assignments, could overcome this problem.

Second, the lesson activities of the NT2 hours should have more differentiation options. Using the subject glossaries would enhance differentiation within the lessons, as students can pair up per subject or education level to perform activities. When using glossaries that are provided by the subject teachers, the NT2 students have the possibility to work on words that are important for them, on their own level and at their own pace. Students can only take part in more demanding vocabulary activities when they are able to use the new vocabulary words in different contexts. In this research, it has been found that most students were not able yet to take part in demanding activities like writing a story. Therefore, it can be recommended to use more context activities with the new words first, before giving students assignments in which they have to write their own stories. Also, it would be a good idea to introduce more differentiation options in the lessons. For example, introduce three different options to perform an exercise during the lessons from not demanding to a demanding activity. Students could choose the activity they want to perform. In this case, students that still have difficulties to use words in context can choose for a less demanding activity whereas students that have broadened the word network already can choose for a more demanding activity.

7.4.2. Recommendations for implementation of a portfolio
The ISK teacher indicated that transfer of student is based on their Dutch language level, but there are no specific guidelines. Also, a lot of information that is available at the ISK is not communicated to the teachers at College Zuid. The questionnaires of the teachers, also indicated that not all of them are aware of the presence of transfer documents. To enhance document and information sharing, the
portfolio should include an option to upload and share important documents. When a portfolio is developed, teachers from the ISK should be able to add important documents to the portfolio, which are accessible for all teachers at College Zuid. This will have a positive influence on the transfer efficiency from the ISK to College Zuid. Shared documents should include documents about the students’ background and documents containing all learning outcomes of the different subjects, including information on the student’s Dutch language level and advice on how to support them. Right now, teachers indicate that they don’t do enough to support NT2 students. Advice documents can help teachers to better understand the needs of the students so they can give tailored support. Also, specific behaviour of the students (like being always late or maybe depressed etc) and family situations should be communicated. Teachers can upload the subject glossaries in the portfolio as well.

One of the recommendations that is done by Kennisrotonde (2018) is offer long-term language support. At College Zuid this is not feasible, as there is only one class of NT2 support and every year there are new students coming in that need the support. Therefore, a portfolio could help to offer language support to students who already finished the extra hours of NT2 support in an earlier year. The portfolio can include different vocabulary activities which can be performed in the student’s own time for different subjects. Feedback can then be given by different subject teachers so the workload is spread and students can still receive feedback on their portfolio assignments. The assignments can be specifically dedicated to different subjects. A discussion interface would be useful too. This can enhance the communication between NT2 students and between NT2 students and teachers. This discussion interface can also be used by the supervisor of the NT2 student, if students can give updates on their wellbeing.

The EU guidelines for Moderne Vreemde Talen considers the planning of self-directed learning. This includes: raising awareness among learners of the current state of their knowledge, setting up feasible and valuable goals, selection of materials and self-assessment. When activities are being tracked within a portfolio, this will raise the awareness of the students’ knowledge level. Reflection activities within the portfolio can help to increase the students’ ability of self-assessment. Self-assessments and student reflection of the vocabulary design can be incorporated in the portfolio. This could very well be combined with personal activities and exercises that in this way also give some personality or background information on the students.

7.4.3. Limitations and recommendations for further research
This research gives first insights into the design of motivational vocabulary activities for NT2 students. As mentioned before, no guidelines or design had been developed for NT2 support at College Zuid and this research serves as a first step towards development of a lesson curriculum. The sample size of this research was very small, as it only focused on one group of twenty NT2 students. Therefore, it is hard to generalize the findings to other groups of students and other schools. However, the group of students has been so diverse that it probably has covered all different learning profiles. Because no pre-test was done at the beginning of the year, it was not possible to measure the improvement of vocabulary knowledge as a result of the designed activities. Also, there was no experimental group or control group, so it is hard to measure the effectiveness of the design.

Differentiation has only been done really basic in this research. The reason for this was the time constraint and the aim to identify the activities that would be suitable for everyone. In a later stadium, for all lesson activities there should be more options for differentiation based on vocabulary knowledge and level to better serve the needs of all students. This gets already easier by using subject content as the input for the lesson activities.
For further research, it would be recommended to include two groups of NT2 students, of which one already has received a year of NT2 support. In this case, the groups can be seen as an experimental group and a control group. This makes it easier to investigate the effectivity of the design based on quantitative analysis. Right now, only qualitative data is gathered and the effectiveness is evaluated through observations. For further research, it is recommended to do a pre and post-test to see if vocabulary knowledge has improved. Words from the glossaries can be used for these tests as the words can be easily tested.

7.5. **Final conclusions**

The main aim of the present explorative design study was to find a useful design for motivational vocabulary activities. Despite the limitations and the scope, this research gives first insights into useful and motivational vocabulary activities for NT2 support at College Zuid.

A problem analysis, a literature review and a needs assessment were evaluated for its alignment with the content of the vocabulary activities, and the needs of NT2 students and teachers at College Zuid. To identify the problems and needs of the current NT2 support, analysis of previous methods, two interview and two questionnaires were performed. To design the vocabulary activities, the problems and needs were translated into criteria for the activities. The created vocabulary activities were tested during pilot lessons. The implementation and evaluation of the pilot lessons resulted in identification of several important aspects regarding NT2 support. Discussing and reflecting on these observations, finally led to the proposed design for motivational vocabulary activities for NT2 students. The results of the study have been discussed by several key concepts such as vocabulary knowledge, motivation and differentiation. The following elements are criteria for the proposed design: include discovery and word consolidating strategies, track student results, include opportunities to repeat words and strengthen network connections in context, include blended work settings, resources and content and the activities should generate new word forms, be motivating and be advantageous. In addition to these design elements, recommendations are done for the NT2 support hour, general support for NT2 students and implementation of the vocabulary activities in a portfolio.

The present study has shown that the vocabulary activities help students to remember words better. It has been shown that such a diverse group of NT2 students prefer different work settings, resources and activities. Generalization is difficult because of the small scope of this study and more research should be done in different groups. The design of vocabulary activities of this study has been proven useful for vocabulary learning and it gave a first insight in what kind of activities are motivational for NT2 students. This research is a first step that future research on NT2 support can build upon. This study hopes to give initial insights in the needs of NT2 students and their teachers. Also, it hopes to contribute to improvement of NT2 support at regular secondary schools by providing possible vocabulary activities for NT2 students and suggestions on portfolio usage.
References


Axton, K. J. (2012). The Role of Portfolios in Student Motivation. VISEO, 42, 23-42.


Paus et al. (2014) Portaal (4e druk). Bussum: Coutinho


Appendixes

Appendix A: ISK interview

Welke methode gebruiken jullie?

We gebruiken veel verschillende methodes op de ISK. Voor Nederlands gebruiken we DISK (leerjaar 1 + 2, jong), LOWAN Start pakket (leerjaar 1 starters), Taskcompleet (leerjaar 1 + 2, oud) en reguliere methodes, zoals Nieuw Nederlands. Deze methodes we in bij leerlingen die binnen een jaar geschakeld worden.

Hoe worden leerlingen opgedeeld in klassen? Gaat dit per leeftijd? Nederlands niveau? Hoelang leerling op ISK zit?

De Leerlingen worden verdeeld in route, leerjaar en leeftijd. We hebben route 1 onder de 16 (uitsroom speciaal onderwijs of praktijkonderwijs), route 1 boven de 16 (uitsroom combitraject, ROC pre-entree), route 2 onder de 16 (uitsroom vmbo-b), route 2 boven de 16 (uitsroom ROC 1, 2), route 3 onder de 16 (uitsroom vmbo-k t/m vwo) en route 3 boven de 16 (uitsroom ROC 3, 4, vwo).

Hoe wordt er gedifferentieerd in de klassen?


Worden er toetsen afgenomen? Zo ja, welke en wanneer? Wordt er iets gedaan met de uitkomsten van deze toetsen (zo ja, wat)?

Voor elke methode zijn toetsen beschikbaar. Deze worden afgenomen en de resultaten worden in Magister gezet. Daarnaast worden er TOA-toetsen voor Nederlands afgenomen. Deze geven aan op welk niveau de leerling zit op het gebied van Nederlandse taal. Er wordt getoetst voor luisteren en lezen.

Welke informatie over de NT2 leerlingen op de ISK (dat van belang is voor goede begeleiding) zou gedaan moeten worden met het reguliere onderwijs? Denk aan achtergrond, schoolresultaten, andere bijzonderheden etc.

Ik denk dat het belangrijk is om zoveel mogelijk informatie te delen met het reguliere onderwijs. We hebben te maken met een bijzondere, kwetsbare en onzeker doelgroep. In eerste instantie hebben de meeste leerlingen veel meegemaakt (denk aan trauma’s, gezinsverhoudingen, etc.), maar daarnaast is natuurlijk ook de taal een probleem. De informatie die op de ISK bekend is van een leerling, zou gedaan moeten worden met het reguliere onderwijs.
Welke tips heb je voor docenten op het reguliere onderwijs?

Leerlingen hebben moeite met woordenschat en begrijpend lezen. Het onderdeel begrijpend lezen komt natuurlijk niet alleen bij Nederlands voor, maar bij alle vakken. Hierin moeten de leerlingen echt getraind worden. Ze moeten leren hoe ze informatie uit een tekst halen. Dit wordt uiteraard ook op de ISK gedaan, maar ze hebben er zo veel baat bij als dit ook in het regulier onderwijs wordt getraind.

Op welke manier zouden VO docenten NT2 leerlingen kunnen begeleiden tijdens vaklessen?

Het zou goed zijn dat de leerlingen vooraf een lijst met belangrijke woorden krijgen, zodat zij zichzelf kunnen voorbereiden op de les. De leerling hoeft dan minder moeite te doen om de woorden te begrijpen tijdens de les en kan zich volledig focussen op de inhoud van de les. Daarnaast hebben NT2-leerlingen extra tijd nodig.

Op welke manier zouden we het extra uurtje NT2 kunnen invullen zodat NT2 leerlingen hier het meeste van opsteken (op het gebied van taalondersteuning)

Uitbreiden woordenschat en trainen begrijpend lezen.

Welke manieren gebruiken jullie om woordenschat van NT2 leerlingen te verbreden en verdiepen?

Elke dag nieuwe woorden aanleren, het bijhouden van een woordenschrift, strategieën aanleren, het aanleren van gebruik woordenboek.

Welke tips heb je voor woordenschat onderwijs op het reguliere onderwijs?

Maak gebruik van verschillende werkvormen. Het is moeilijk om alle woorden te onthouden als het woord wordt uitgelegd en zij vervolgens moeten schrijven. Het blijft beter hangen als er wordt gewerkt met activerende werkvormen (bijvoorbeeld een kleine presentatie geven, een poster o.i.d. maken met uitleg over het woord, 30 seconds met nieuwe woorden en ga zo maar door.)

Hoe gaan jullie om met kinderen met totaal andere achtergronden? Worden die opgedeeld? Per leeftijd, niveau of iets anders? En waarom?

Er wordt met de indeling van leerlingen geen rekening gehouden met achtergrond. Deze leerlingen komen allemaal bij elkaar in de klas.

Hoe kan volgens jou de overgang van de ISK naar het reguliere onderwijs verbeterd worden?

Meer overleg, het bespreken van succesen tussen scholen, kennis van elkaar gebruiken, bij elkaar op school of in de klas kijken (voor docenten regulier onderwijs én docenten ISK), betere overdracht.
Appendix B: Teacher questionnaire

1. Heb jij als docent ervaring met het lesgeven aan NT2 leerlingen?

   Markeer slechts één ovaal.

   [ ] Ja
   [ ] Nee

2. Pak jij de didactiek als docent anders aan in een klas met NT2 leerlingen, in vergelijking met andere klassen? (Ja/Nee) Zo ja, wat gaat er anders?

   ________________________________

3. Pak jij de differentiatie als docent anders aan in een klas met NT2 leerlingen, in vergelijking met andere klassen? (Ja/Nee) Zo ja, wat gaat er anders?

   ________________________________

4. Houd je in de lesuitleg rekening met NT2 leerlingen? (Ja/Nee) Zo ja, op welke manier doe je dat?

   ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________

5. Merk je tijdens jouw lessen dat NT2 leerlingen een achterstand hebben op de lesstof? (Ja/Nee) Zo ja, waar merk je dat aan?

   ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________

6. Merk je tijdens jouw lessen dat NT2 leerlingen problemen hebben om de lesstof te begrijpen? (Ja/Nee) Zo ja, waar merk je dat aan?

   ________________________________
   ________________________________
   ________________________________
   ________________________________
   ________________________________
7. Merk je tijdens jouw lessen dat NT2 leerlingen een achterstand hebben op het gebied van leesvaardigheid? (Ja/Nee) Zo ja, waar merk je dat aan?


8. Merk je tijdens jouw lessen dat NT2 leerlingen een achterstand hebben op het gebied van woordenschat? (Ja/Nee) Zo ja, waar merk je dat aan?


9. Op welke vlakken zou NT2 begeleiding op school verbeterd kunnen worden volgens jou?


10. Op welke vlakken zou NT2 ondersteuning wenselijk zijn volgens jou (om de NT2 leerlingen in jouw lessen beter te kunnen begeleiden)?


11. Als ondersteuning in de vorm van een portfolio wordt aangeboden, wat zou er volgens jou absoluut in het portfolio moeten terugkomen?
## Appendix C: Student interviews

1. Wat zijn je ervaringen bij het leren van Nederlands?

<table>
<thead>
<tr>
<th>Number</th>
<th>Spreken</th>
<th>Luisteren</th>
<th>Schrijven</th>
<th>Lezen</th>
<th>Woordenschat</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS2HV1</td>
<td>Een beetje moeilijk. Ik vind het soms moeilijk om zinnen te maken</td>
<td>Gaat wel goed</td>
<td>Moeilijk</td>
<td>Soms moeilijk, soms niet</td>
<td>Moeilijk</td>
</tr>
<tr>
<td>FS2M21</td>
<td>Niet zo goed</td>
<td>Goed</td>
<td>Goed</td>
<td>Niet zo goed</td>
<td>Niet zo goed</td>
</tr>
<tr>
<td>FS1HV1</td>
<td>Ik spreek zoveel mogelijk NL</td>
<td>Ik wil graag opletten</td>
<td>Ik schrijf appjes naar iedereen met NL</td>
<td>Ik lees op het internet maar er zijn woorden die moeilijk zijn</td>
<td>Ik ben daar niet de beste in maar ik doe m'n best</td>
</tr>
<tr>
<td>FL1E11</td>
<td></td>
<td></td>
<td>Dit vind ik het lastigst maar als ik leer dan is het beter</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MS2M21</td>
<td>Aangestreept</td>
<td>Aangestreept</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FS3H11</td>
<td>Goed</td>
<td>Goed</td>
<td>Goed</td>
<td>Goed maar niet zo goed als de andere</td>
<td>Goed</td>
</tr>
<tr>
<td>MIIE13</td>
<td>Ik kan wel goed spreken</td>
<td>Ik kan wel goed luisteren</td>
<td>Ik kan wel goed schrijven</td>
<td>Ook lezen gaat het goed</td>
<td>Woordenschat ben ik niet zo goed in</td>
</tr>
<tr>
<td>FZ1E11</td>
<td>Goed, maar soms zei ik iets fout</td>
<td>Goed als de persoon niet te snel praat</td>
<td>Goed maar soms de zinnen zijn een beetje fout</td>
<td>Goed</td>
<td>Vind ik wel moeilijk</td>
</tr>
<tr>
<td>MIIE11</td>
<td>Vind ik een beetje lastig</td>
<td>Het gaat goed bij lezen</td>
<td>Ik kan goed goed lezen maar niet zo snel</td>
<td>Vind ik ook een beetje lastig</td>
<td></td>
</tr>
<tr>
<td>MIIE12</td>
<td>Spreken is wel goed</td>
<td>Luisteren is goed</td>
<td>Ik vind schrijven wel een beetje moeilijk</td>
<td>Lezen is goed</td>
<td></td>
</tr>
<tr>
<td>MA3M11</td>
<td>Makkelijk</td>
<td>Makkelijk</td>
<td>Makkelijk</td>
<td>Matig</td>
<td>40%</td>
</tr>
<tr>
<td>FS3M21</td>
<td>Niet zo goed</td>
<td>Een beetje goed</td>
<td>Ik ben niet zo goed met grammatica</td>
<td>Een beetje goed</td>
<td>Ik vind het moeilijke onderdeel</td>
</tr>
<tr>
<td>FC3M31</td>
<td>Ik heb geen probleem met spreken</td>
<td>Ik begrijp niet iedereen omdat sommige mensen te snel praten</td>
<td>Ik ben heel goed in spelling</td>
<td>Ik kan makkelijk lezen maar ik haat tekstopdrachten</td>
<td>Woordenschat vind ik niet zo moeilijk om te leren</td>
</tr>
</tbody>
</table>
**MS3M31** Toen ik in Nederland kwam kon ik niet goed spreken maar nu wel

**MS3M41** Zin maken is een beetje moeilijk maar door oefenen wordt makkelijker

**MS1M21** Ik dacht dat het moeilijk was maar is makkelijk

**FP3M11** Makkelijk Makkelijk Makkelijk Tussenin Tussenin

**FS3H21** Het lukt wel, maar ik kan niet zo snel praten Heel goed Ik vind het moeilijk Het is makkelijk Ik heb een probleem bij woordenschat

**FS1M21** Normaal Een beetje moeilijk Makkelijk Normaal Normaal

**MS3M42** Goed Goed Goed Moeite in

2. Wat doe jij nu zelf aan het bijspijkeren van NL?

<table>
<thead>
<tr>
<th>Number</th>
<th>Opmerking</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS2HV1</td>
<td>Niks</td>
</tr>
<tr>
<td>FS2M21</td>
<td>Nieuws kijken</td>
</tr>
<tr>
<td>FS1HV1</td>
<td>Zoveel mogelijk op het internet lezen en goed opletten tijdens de les en vragen stellen of youtube</td>
</tr>
<tr>
<td>FL1E11</td>
<td>Thuis praat ik nederlands</td>
</tr>
<tr>
<td>MS2M21</td>
<td>Nederlands op youtube videos bekijken</td>
</tr>
<tr>
<td>FS3H11</td>
<td>Ik kijk nederlandse youtube filmpjes</td>
</tr>
<tr>
<td>MI1E13</td>
<td>Nederlands kanaal kijken, meer nederlands spreken</td>
</tr>
<tr>
<td>FZ1E11</td>
<td>Ik kijk samen met mijn gezin jeugdjournaal</td>
</tr>
<tr>
<td>MI1E11</td>
<td>Nederlands tv kijken</td>
</tr>
<tr>
<td>MI1E12</td>
<td>Lezen</td>
</tr>
<tr>
<td>MA3M11</td>
<td>Bij leren</td>
</tr>
<tr>
<td>FS3M21</td>
<td>Ik lees nederlands boeken</td>
</tr>
<tr>
<td>FC3M31</td>
<td>Ik lees nederlandse boeken</td>
</tr>
<tr>
<td>MS3M31</td>
<td>Extra Nederlandse lessen krijgen</td>
</tr>
<tr>
<td>MS3M41</td>
<td>Ik zit op school</td>
</tr>
<tr>
<td>MS1M21</td>
<td>Als het om beter te worden mijn droom is havo halen</td>
</tr>
<tr>
<td>FP3M11</td>
<td>Ik zit op school</td>
</tr>
</tbody>
</table>
3. Wat zou jij willen doen om Nederlands te verbeteren?

<table>
<thead>
<tr>
<th>Number</th>
<th>Opmerking</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS2HV1</td>
<td>Meer lezen en spreken</td>
</tr>
<tr>
<td>FS2M21</td>
<td>Meer lezen en woordenschat</td>
</tr>
<tr>
<td>FS1HV1</td>
<td>Veel lezen</td>
</tr>
<tr>
<td>FL1E11</td>
<td>Boeken lezen</td>
</tr>
<tr>
<td>MS2M21</td>
<td>Wat meer Nederlands leren</td>
</tr>
<tr>
<td>FS3H11</td>
<td>Lezen</td>
</tr>
<tr>
<td>MI1E13</td>
<td>Alleen mijn woordenschat door veel woorden schrijven enzovoort</td>
</tr>
<tr>
<td>FZ1E11</td>
<td>Nederlandse boeken lezen en schrijven woorden die ik niet kent</td>
</tr>
<tr>
<td>MI1E11</td>
<td>Vaaker Nederlands met mense praten en meer Nederlandse boeken lezen</td>
</tr>
<tr>
<td>MI1E12</td>
<td>Nederlands praten</td>
</tr>
<tr>
<td>MA3M11</td>
<td>Meer lezen</td>
</tr>
<tr>
<td>FS3M21</td>
<td>Contact met Nederlandse mensen</td>
</tr>
<tr>
<td>FC3M31</td>
<td>Meer boeken lezen</td>
</tr>
<tr>
<td>MS3M31</td>
<td>Contact hebben met Nederlandse kinderen</td>
</tr>
<tr>
<td>MS3M41</td>
<td>Meer leren en met mensen praten</td>
</tr>
<tr>
<td>MS1M21</td>
<td>Als wat ik kan doen ik blijf doorzetten tot ik havo haal</td>
</tr>
<tr>
<td>FP3M11</td>
<td>Nederlandse televisie kijken</td>
</tr>
<tr>
<td>FS3H21</td>
<td>Ik zou veel Nederlands praten</td>
</tr>
<tr>
<td>FS1M21</td>
<td>Naar de bibliotheek</td>
</tr>
<tr>
<td>MS3M42</td>
<td>Meer Nederlands praten</td>
</tr>
</tbody>
</table>

4. Hoe kunnen anderen je helpen bij het verbeteren van Nederlands?

<table>
<thead>
<tr>
<th>Number</th>
<th>Opmerking</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS2HV1</td>
<td>Praten</td>
</tr>
<tr>
<td>FS2M21</td>
<td>Samen praten</td>
</tr>
<tr>
<td>FS1HV1</td>
<td>Bij uitleggen (het woord)</td>
</tr>
</tbody>
</table>
FL1E11 Meer NL praten en als ik een woord niet snap uitleggen
MS2M21 Bijvoorbeeld dat ik altijd Nederlands spreek
FS3H11 Meer nederlands praten
MI1E13 Door te testen voor mijn woordenschat
FZ1E11 Als ik iets niet snapt dan kunnen zij het uitleggen
MI1E11 Om mij meer aandacht te geven
MI1E12 Veel nederland met mij praten
MA3M11 Verbeteren tijdens praten
FS3M21 Met verhalen lezen
FC3M31 Meer met mij praten of omgaan
MS3M31 Ik hoop dat ik iets fout zeg de anderen gaan verbeteren
MS3M41 Als zeg ik iets fout hij gaat het gelijk verbeteren
MS1M21 Extra tijd geven
FP3M11 Extra uitleg
FS3H21 Extra uitleg
FS1M21 Nederlands
MS3M42 Nederlandse mensen of weet ik veel nederlands met me praten

5. Vind je het belangrijk het Nederlands te blijven ontwikkelen? Waarom?

<table>
<thead>
<tr>
<th>Number</th>
<th>Opmerking</th>
</tr>
</thead>
<tbody>
<tr>
<td>FS2HV1</td>
<td>Ja</td>
</tr>
<tr>
<td>FS2M21</td>
<td>Ja</td>
</tr>
<tr>
<td>FS1HV1</td>
<td>Ja want ik woon hier nu</td>
</tr>
<tr>
<td>FL1E11</td>
<td>Ja, omdat dan ben ik beetter in begrijpend lezen en dat is belangrijk.</td>
</tr>
<tr>
<td>MS2M21</td>
<td>Ja want dan word makkelijker om te spreken</td>
</tr>
<tr>
<td>FS3H11</td>
<td>Ja, dan wordt mijn Nederlands veel beter</td>
</tr>
<tr>
<td>MI1E13</td>
<td>Nou eigenlijk niet echt want ik blijf in Nederland alleen maar voor 4 jaar.</td>
</tr>
<tr>
<td>FZ1E11</td>
<td>Ja, want ik wil met mensen betere praten in het nederlands.</td>
</tr>
<tr>
<td>MI1E11</td>
<td>Ja omdat als ik terug naar nederland of naar een nederlandse spreken lang gaat dan kan ik al nederlands met anderen praat</td>
</tr>
<tr>
<td>MI1E12</td>
<td>Ja want dan wordt het beter</td>
</tr>
<tr>
<td>MA3M11</td>
<td>Ja omdat ik met duure woorden wil praten</td>
</tr>
<tr>
<td>MS3M21</td>
<td>Ik vind echt belangrijk om mijn nederlands te blijven ontwikkelen, zo kan ik goed genoeg met meer nederlands praten bijvoorbeeld. Met het gemeente, dokter.</td>
</tr>
<tr>
<td>--------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>FC3M31</td>
<td>Ja, zo kan ik meer socialiseren zo kan ik beter met mensen omgaan</td>
</tr>
<tr>
<td>MS3M31</td>
<td>Ik hoop dat ik zo snel mogelijk de nederlandse taal goed kennen</td>
</tr>
<tr>
<td>MS3M41</td>
<td>Ja om sneller te begrijpen en verstaan</td>
</tr>
<tr>
<td>MS1M21</td>
<td>Ja want ik wil havo halen ik ga als aandoen ik ga nooit opgeven ik heb een droom en die moet ook gebeuren ik wil mijn droom waar maken ik ga als aan doen</td>
</tr>
<tr>
<td>FP3M11</td>
<td>Ja, omdat ik hier blijven wonen in</td>
</tr>
<tr>
<td>FS3H21</td>
<td>Het is heel belangrijk, om te kunnen verder leren en omdat ik in Nederland woon</td>
</tr>
<tr>
<td>FS1M21</td>
<td>Ja, daarom</td>
</tr>
<tr>
<td>MS3M42</td>
<td>Ja, want ik ga achter mijn toekomst aan in het nederlands</td>
</tr>
</tbody>
</table>
Appendix D: Student questionnaires

**NT2 Onderzoek - leerling**

1. Ik vind het belangrijk om een uur extra NT2 les te krijgen *Markeer slechts één ovaal.*

   1 2 3 4 5  
   Oneens ☐ ☐ ☐ ☐ ☐ Eens

2. Ik vind het belangrijk om mijn woordenschat te verbeteren *Markeer slechts één ovaal.*

   1 2 3 4 5  
   Oneens ☐ ☐ ☐ ☐ ☐ Eens

3. Ik denk dat het verbeteren van mijn woordenschat ervoor gaat zorgen dat ik de lesstof van de vakken beter begrijp *Markeer slechts één ovaal.*

   1 2 3 4 5  
   Oneens ☐ ☐ ☐ ☐ ☐ Eens

4. Ik denk dat mijn cijfers hoger worden als mijn woordenschat verbeterd *Markeer slechts één ovaal.*

   1 2 3 4 5  
   Oneens ☐ ☐ ☐ ☐ ☐ Eens

5. Mijn woordenschat is goed genoeg om de uitleg van de vakdocenten te begrijpen *Markeer slechts één ovaal.*

   1 2 3 4 5  
   Oneens ☐ ☐ ☐ ☐ ☐ Eens

6. Mijn woordenschat is goed genoeg om de tekst in het lesboek te begrijpen *Markeer slechts één ovaal.*

   1 2 3 4 5  
   Oneens ☐ ☐ ☐ ☐ ☐ Eens
7. Ik ben gemotiveerd om mijn Nederlands te verbeteren. 

Markeer slechts één ovaal.

1 2 3 4 5
Oeneens ☐ ☐ ☐ ☐ Eens

8. Een portfolio is een persoonlijke map waarin jouw opdrachten komen te staan. Zo kun je snel zien wat je geleerd hebt en wat je nog lastig vindt. We gaan een portfolio gebruiken om je woordenschat te verbeteren. Ik ben gemotiveerd om de opdrachten voor dit portfolio te maken.

Markeer slechts één ovaal.

1 2 3 4 5
Oeneens ☐ ☐ ☐ ☐ Eens

9. Ik zou extra tijd willen besteden aan het maken van de opdrachten voor mijn portfolio.

Markeer slechts één ovaal.

1 2 3 4 5
Oeneens ☐ ☐ ☐ ☐ Eens

10. Voor welke vakken is het verbeteren van je woordenschat het meest belangrijk? Je mag 2 vakken aankruisen.

Vink alle toepasselijke opties aan.

☐ Nederlands
☐ Biologie
☐ Natuurkunde
☐ Scheikunde
☐ Geschiedenis
☐ Wiskunde
☐ Aardrijkskunde
☐ Economie


☐ Nederlands
☐ Biologie
☐ Natuurkunde
☐ Scheikunde
☐ Geschiedenis
☐ Wiskunde
☐ Aardrijkskunde
☐ Economie
12. Hoe denk jij dat leraren je kunnen helpen om een vak beter te begrijpen?

13. Wat zou jij het liefst oefenen tijdens het extra NT2 uur?

14. Ik werk liever:
   *Markeer slechts één ovaal.*
   - Alleen
   - In een groepje

15. Ik werk liever:
   *Markeer slechts één ovaal.*
   - Uit een boek
   - Op de computer
   - Op losse werkbladen


<table>
<thead>
<tr>
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17. Ik vind het leuk om filmpjes te kijken (in het Nederlands) *Markeer slechts één ovaal.*

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18. Ik vind het leuk om praktische opdrachten te maken *Markeer slechts één ovaal.*

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<th>4</th>
<th>5</th>
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19. Ik vind het leuk om voor de klas te staan om iets te presenteren *Markeer slechts één ovaal.*

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<th>4</th>
<th>5</th>
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<th>Eens</th>
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</table>
Ik vind het belangrijk om een uur extra NT2 les te krijgen

Ik vind het belangrijk om mijn woordenschat te verbeteren

Ik denk dat het verbeteren van mijn woordenschat ervoor gaat zorgen dat ik de lesstof van de vakken beter begrijp

Ik denk dat mijn cijfers hoger worden als mijn woordenschat verbeterd

Mijn woordenschat is goed genoeg om de uitleg van de vakdocenten te begrijpen
Appendix E: Content lesson activities

Text from textbook, lesson 1
2. Vertel wat je gelezen hebt. Doe dat in de vorm van een brief aan je neef.

Beste Neef,

Vandaag las ik een verhaal. Ik denk dat jij het ook leuk vindt. Het gaat over


Groetjes,


Enschede, ........................

Beste Oom,

Vandaag las ik een verhaal. Het gaat over een rapper. Ik wil er graag over vertellen, want ik weet dat u van rap houdt. Het artikel gaat over

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Meer hartelijke groet, .................................

Klaar? Lever je stencils in bij de docent.
Words (schooltaalwoorden), lesson 2

algemene
schooltaalwoorden

aanbieden
aandachtig
aan de weet komen
aangezien
annahemen (veronderstellen)
aantekening
aantonen
aantreffen
aanvankelijk
aanwezig
aanwijzing
achterblijven
actie
actief
adviseren
afb. (afbeelding)
afgeven
afhankelijk zijn van
afkorting
afsluiten
afspreek
afvragen (zich)
afwisselen
afzonderlijk
algemeen
allemaal
alsof
behoeft hebben aan
behooren (zou moeten)
behooren (bij / tot)
beëindigen (de)
belang
benodigde
benoemen
bereceneren
bereiken
beschrijven
beslist
bespreken
bestaan uit
bevestigen
bevinden (zich)
bewering
bezighouden met
(zich)
bezitten
bladzij
blijk geven van
blijkbaar
blijken (uit)
blok
bovenstaand
breuk (getal)
bruikbaar
centraal
communicatie
communiceren
compleet
contact
dankzij
datgene
Words (schooltaalwoorden), lesson 3

deksel
denken om
dienen
dienen als
dienen voor
direct
doel
doelstelling
doordat
doorgaan
doorlezen
door middel van
(d.m.v.)
doorwerken
drogen
duidelijk maken
duwen
dwars
echter
eenmaal
een rol spelen
eindigen bij
eindigen met
enorm
enzovoort (enz.)
erachter komen
evaren
evenals
eveneens
eventueel
fel
gaan om
garanderen
geburen
gebruik
gebruik maken van
gedachte
gedurende
geheugen
geregel
aeschikt

Gap tekst, lesson 3
Let op, sommige woorden komen niet voor, andere woorden moet je vaker invullen. Noteer in een schrift de nummers met daarachter het woord.

deksel - direct - dienen voor - doordat - door middel van - drogen - doel - duidelijk maken - dwars - rol spelen - echter - eenmaal

1. Doe even de ..... op de pan, anders wordt het eten koud.
2. Kom je ...... of moet je eerst nog wat andere dingen doen?
3. Er is een .... verband tussen nat worden en het feit dat het regent.
4. Een paraplu ………. bescherming, het zorgt ervoor dat je niet nat wordt.
5. ……. ik een paraplu gebruik, word ik niet nat.
6. …………opdrachten kun je trainen in het gebruik van de goede werkwoordsvorm.
7. Je moet de bladeren van de boom ……………, daarna kun je ze in je schrift plakken.
8. Het .... van deze gatentekst is, kijken of je de woorden weet te plaatsen.
9. Met gebaren wil hij …………. dat verderop een ongeluk gebeurd is.
10. Die jongen gedraagt zich ………..., hij wil totaal niet luisteren.
11. De kast staat …… de kamer in, je moet er helemaal omheen lopen om bij de deur te komen.
13. Vandaag is er gewoon school, morgen ………..gaan de lessen niet door.
14. Heb jij dat vaker gezien of is het nog maar ………….gebeurd?
15. Het is nu ………….een feit dat het in Nederland vaak regent.
### Synoniemen – verbind de woorden die hetzelfde (of bijna hetzelfde) betekenen

<table>
<thead>
<tr>
<th>Synoniemen</th>
<th>Synoniemen</th>
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<tr>
<td>Belasting</td>
<td>Berekening</td>
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<td>Begroting</td>
<td>Geldheffing</td>
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<tr>
<td>Bestemming</td>
<td>Beheer</td>
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<tr>
<td>Advertentie</td>
<td>Aankondiging</td>
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<td>Aankoop</td>
<td>Eindpunt</td>
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<tr>
<td>Administratie</td>
<td>Aanschaf</td>
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<td>Benodigdheden</td>
<td>Ader</td>
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<td>Amfible</td>
<td>Aanstekelijk</td>
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<td>Besmettelijk</td>
<td>Microbe</td>
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<tr>
<td>Bescherming</td>
<td>Spullen</td>
</tr>
<tr>
<td>Bacterie</td>
<td>Gedeelte</td>
</tr>
</tbody>
</table>
Crosswords, lesson four

biologie

Across / horizontaal

1. Wat je nodig hebt om iets te doen of te maken
2. Gemakkelijk over te dragen aan anderen
3. Samensmelten van twee cellen waardoor nieuw leven ontstaat
4. Buisje in je lichaam waar bloed doorheen gaat

Down / verticaal

1. Gewerveld dier dat meestal een deel van zijn bestaan in het water en een deel op het land doorbrengt
2. Onderdeel van iets
3. Eencellig kleinste levend wezen dat zich snel vermenigvuldigt
4. Ervoor zorgen dat er niets gebeurt, dat het veilig is
5. Een factor vormen die een gebeurtenis of handeling (bijna) onmogelijk maakt
6. Het stromen van het bloed via hart en longen
Words used during 30 seconds, lesson five

Belasting, benodigdheden, aankoop, bescherming, begroting, amfibie, bestemming, besmettelijk, advertentie, bloedvat, administratie, aandachtig, fel, afkorting, duwen, blok, communiceren, centraal, doel, gebeurtenis, geheugen, gedachte, deksel, bacterie, achterblijven, belemmering, afbeelding, binnenlands, enorm, bloedsomloop, algemeen, arbeidsmarkt, afdeling.
**Writing task, lesson six**

Opdracht:
Schrijf een spannend verhaal waarin je minstens 8 woorden gebruikt uit de les van 4 december, zie foto in de app groep. Je verhaal moet ingeleverd zijn uiterlijk maandag 10 december om 17.00 uur.

Uitvoering:
Typ hieronder eerst je naam (voornaam + achternaam) en je klas. In de regel daaronder typ je de titel van je verhaal en daarna het verhaal zelf. Iedereen typt zijn verhaal in dit document, je kunt dus ook de verhalen van anderen lezen. Je mag geen zinnen overnemen uit andere verhalen, daar controleer ik op.
Gebruik Calibri of Arial, grootte 11 punt.
Veel succes!

**Kahoot, lesson seven**

Q1: Wat wordt er afgebeeld op het plaatje?

- 'Bespreken'
- 'Zich bezighouden met'
- 'Zich afragen'
- 'Communiceren'

Q2: Wat wordt er op het plaatje afgebeeld? Kies het antwoord dat het beste past.

- 'Invloed hebben op'
- 'Afwisseren'
- 'Een rol spelen'
- 'Diensten voor'

Q3: Hoe is deze tekening gemaakt?

- Door te 'gummen'
- Door te 'scherpen'
- Door te 'scheuren'
Q4: Welke actie laat dit plaatje zien?

- Registreren
- Toelichten
- Verklaren
- Nogeren

Q5: Wat laat dit plaatje zien? Kies het antwoord dat het beste past.

- Verdeien
- Verplaatsen
- Voorzien
- Wijziging

Q6: Wat is een pagina?

- Een alinea
- Een papier
- Een stukje tekst
- Een bladzijde

Q7: Wat is een samenvatting?

- Het laatste stukje van een tekst
- Een conclusie
- Een verkorte versie van een tekst

Q8: Wat voor oppervlak zien jullie hier? Dit oppervlak is erg ...?

- Ruw
- Glad
- Effen
- Ongeslepen
Q4: Wat zijn dit?

- Schroeven
- Spijkers
- Rinnen

Q5: Wat betekent voortdurend?

- iets wat voortdurend staat
- iets wat blijft veranderen
- iets wat afwijkt
- iets wat blijft duren

Q6: Wat is GEEN synoniem van verhinderen?

- Belemmeren
- Helpen
- Tegenwerken
- Voorkomen

Q7: Wat is dit? Een spuit met daaraan een ...

- Een priknaald
- Een speld
- Een naald

Q8: Wat is een meting?

- iets dat wordt beslist om een doel te bereiken
- iets dat wordt gemeten
- Een straf
Q1: Wat zien jullie op het plaatje?

- Een vermenigvuldiging  
- Een breuk  
- Een geheel getal  
- Een som  

Q2: Wat zien jullie op het plaatje?

- Rechthoeken  
- Vierkanten  
- Blokken  

Q3: Wat zien jullie op het plaatje? De bakjes hebben allemaal een ...?

- Dov  
- Donker  

Q4: Deze kleuren zijn allemaal heel ...?

- Flits  
- Pastel  
- Foli  
- Licht
Q5: Wat is **GEEN** synoniem van aandachtig?

- Met belangstelling  
- Het zijn allemaal synoniemen  
- Met aandacht  
- Met interesse

20 sec

Q6: Wat betekent adviseren?

- Het geven van raad en advies  
- Het geven van je mening  
- Het afrekenen van iets

20 sec

Q7: Wat betekent hanteren?

- Omgaan met  
- Leren  
- Wachten

20 sec

Q8: Wat is een synoniem van internationaal?

- Waar één land mee te maken heeft.  
- Waar verschillende landen mee te maken hebben  
- Landelijk  
- Binnenlands

20 sec

**Vocabulary test, lesson eight**

aanbieden - aantonen - aantreffen - adviseren - achterblijven - afwisselen - afsluiten - zich afvragen

1. Deze test laat zien dat mijn theorie klopt.
2. Nu ik er beter over nadenk, weet ik niet of de theorie klopt.
3. Misschien kan mijn docent me raad geven.
4. Hij heeft tenslotte vaak gezegd dat hij helpen wil.
5. Ik stop maar even met nadenken en ga eerst wat maken.
   Te lang hetzelfde doen is niet goed.
afzonderlijk - algemeen - alsof - belang - beslist - bewering - blijkbaar - bruikbaar

1. Iedereen weet ervan, het is vrij ............ bekend.
2. Ik ga verdienen met deze actie, ik heb er dus ..........bij dat je meedoet.
3. Dat is gisteren afgesproken, het is dus ....... dat je het doet.
4. Nou dat is een foute ......, die uitspraak van jou klopt niet.
5. Een mixer is zeker ....... om een cake te bakken, dacht je van niet?

Wals woord gaat bij de zin? Herschrijf de zin met dat woord en:

Wals woord gaat bij de zin? Herschrijf de zin met dat woord en:
dankzij - direct - doel - dwars - echter - evenals - eveneens - eventueel - fel

1. Die boom is net zo groot als dat huis.
2. Vanwege jouw opmerking gaat het toch goed.
3. Misschien kun je die opdrachten nog een keer maken?
4. Het is regenachtig, maar ik ga toch nu weg.
5. Het is mijn bedoeling de woorden goed te leren.
6. Dat latje moet je haaks op de plank timmeren.

geregeld - geschikt - gewoonlijk - gunstig - helaas - gesloten Welke woord is tegenovergesteld aan de zin?

1. Dat gebeurt maar heel zelden.
2. Gelukkig heb ik het overleefd.
3. De politiepost is ook ’s avonds open.
4. Dit pincent is niet bruikbaar voor deze opdracht.
5. De omstandigheden voor dit experiment zijn heel negatief.
6. Het is chaos, de organisatie maakt er een potje van.
### Appendix F: Pilot lessons observation scheme

<table>
<thead>
<tr>
<th>Design criteria lesson 1</th>
<th>Observable interactions</th>
<th>Student artefacts</th>
<th>Observed outcomes</th>
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<tbody>
<tr>
<td>1. Enhancing vocabulary knowledge</td>
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<tr>
<td>2. Enhancing context understanding</td>
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<tr>
<td>5. Strengthen word network</td>
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<tr>
<td>7. Possibilities to practice words in context</td>
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<tr>
<td>9. Advantageous and relevant content</td>
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<th>Student artefacts</th>
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<td>1. Enhancing vocabulary knowledge</td>
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<tr>
<td>4. Size and depth approaches</td>
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<tr>
<td>5. Strengthen word network</td>
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<tr>
<td>6. Plenty of opportunities to practice words</td>
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<tr>
<td>7. Possibilities to practice words in context</td>
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<td>9. Advantageous and relevant content</td>
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<tr>
<td>11. Work in different settings</td>
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<td>4. Size and depth approaches</td>
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<td>5. Strengthen word network</td>
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<td>6. Plenty of opportunities to practice words</td>
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<td>7. Possibilities to practice words in context</td>
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<tr>
<td>8. Enhancement of positive attitudes</td>
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<tr>
<td>10. Homework assignments</td>
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<td>11. Work in different settings</td>
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<tr>
<td>12. Work with different resources</td>
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<td>8. Enhancement of positive attitudes</td>
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<tr>
<td>9. Advantageous and relevant content</td>
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<tr>
<td>12. Work with different resources</td>
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<td>18. Differentiation on students' preferences</td>
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<tr>
<td>7. Possibilities to practice words in context</td>
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<td>8. Enhancement of positive attitudes</td>
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<tr>
<td>11. Work in different settings</td>
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<th>Observed outcomes</th>
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<tbody>
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</tr>
<tr>
<td>3. Making vocabulary development easier</td>
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<tr>
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<td>7. Possibilities to practice words in context</td>
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<tr>
<td>8. Enhancement of positive attitudes</td>
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<td>12. Work with different resources</td>
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<th>Observed outcomes</th>
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<td>8. Enhancement of positive attitudes</td>
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<tr>
<td>10. Homework assignments</td>
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Appendix G: Final questionnaire

1. Wat heb jij nodig om nieuwe woorden zo te oefenen dat je ze kunt onthouden?
   Markeer slechts één ovaal.
   □ Je moet veel oefenen/leren om de woorden te kunnen onthouden
   □ Je moet de woorden een paar keer lezen om ze te onthouden
   □ Je moet veel oefenen, maar dan vind je het nog steeds lastig om de woorden te onthouden

2. Zie je de woorden die je nog niet kent, tijdens het lezen van een tekst?
   Markeer slechts één ovaal.
   □ Ja
   □ Nee

3. Wanneer je tijdens het lezen van een tekst een woord ziet dat je niet begrijpt, dan:
   Markeer slechts één ovaal.
   □ Zoek je het woord op in het woordenboek
   □ Vraag je de docent wat het betekent
   □ Probeer je uit de context te raden wat het woord betekent

4. Vind je het makkelijker om nieuwe woorden te onthouden als je weet wat ze betekenen?
   Markeer slechts één ovaal.
   □ Ja
   □ Nee

5. Vind je het makkelijker om nieuwe woorden te onthouden als je ze hebt opgezocht in het woordenboek?
   Markeer slechts één ovaal.
   □ Ja
   □ Nee

6. Vind je het makkelijker om nieuwe woorden te onthouden als je aan de docent hebt gevraagd wat ze betekenen?
   Markeer slechts één ovaal.
   □ Ja
   □ Nee

7. Denk je dat verschillende woordenschat activiteiten, zoals we gebruikt hebben tijdens de lessen, helpen om nieuwe woorden te oefenen en te onthouden?
   Markeer slechts één ovaal.
   □ Ja
   □ Nee
8. Denk je dat je de lesinhoud van verschillende vakken beter begrijpt als je van te voren een woordenlijst krijgt met daarop de moeilijke woorden en nieuwe begrippen?
   Markeer slechts één ovaal.
   □ Ja
   □ Nee

9. Wat denk je dat voor jou het beste werkt voor het leren van nieuwe woorden?
   Markeer slechts één ovaal.
   □ De nieuwe woorden vaak lezen en schrijven
   □ De nieuwe woorden vaak luisteren en spreken

10. Denk je dat het bijhouden van een woordenschrift helpt om nieuwe woorden te leren?
    Markeer slechts één ovaal.
    □ Ja
    □ Nee

11. Schrijf je alle onbekende woorden op in je woordenschrift?
    Markeer slechts één ovaal.
    □ Ja
    □ Nee, sommige woorden onthou ik zonder dat ik ze opschrijf in mijn woordenschrift
    □ Nee, het zijn te veel woorden en dit kost te veel tijd/moeite om ze allemaal op te schrijven
    □ Anders: ________________________

12. Hoe was het niveau van de afgelopen NT2 lessen voor jou?
    Markeer slechts één ovaal.
    □ Te moeilijk (geef bij de vraag hieronder aan waarom je het te moeilijk vond)
    □ Te makkelijk (geef bij de vraag hieronder aan waarom je het te makkelijk vond)
    □ Goed niveau (eventuele tips kun je hieronder aan geven)

13. Toelichting vorige vraag

   __________________________________________
   __________________________________________
   __________________________________________
   __________________________________________

14. Geef aan of je het eens of oneens bent: de meeste woorden waren nieuw voor mij
    Markeer slechts één ovaal.

   1  2  3  4  5
   Eens  □  □  □  □  □  Oneens
15. Geef aan of je het eens of oneens bent: ik vond de nieuwe woorden moeilijk
   Markeer slechts één cijfer:
   
   1 2 3 4 5 
   Eens Oneens

16. Geef aan of je het eens of oneens bent: ik vond de nieuwe woorden belangrijk om te leren
   Markeer slechts één cijfer:
   
   1 2 3 4 5 
   Eens Oneens

17. Geef aan of je het eens of oneens bent: de uitleg van de woorden (betekenis en/of synoniemen) was duidelijk
   Markeer slechts één cijfer:
   
   1 2 3 4 5 
   Eens Oneens

18. Geef aan of je het eens of oneens bent: ik had genoeg momenten om de nieuwe woorden te oefenen
   Markeer slechts één cijfer:
   
   1 2 3 4 5 
   Eens Oneens

19. Geef voor de volgende activiteiten aan, op een schaal van 1-5 (1 = niet nuttig, 5 = super nuttig), hoe nuttig ze zijn voor het verbeteren van je woordenschat (zie ook afbeeldingen hieronder):
   Markeer slechts één cijfer per rij:
   
   Gatenzinnen
   Binnen-buiten cirkel
   Woordenschrift
   Crosswoord
   Synoniemen verbinden
   "30 seconds" spel
   Verhaaltjes schrijven
   Woordbetekenis opzoeken en opschrijven
   Zinnen maken met nieuwe woorden
   Kahoot

20. Geef voor de volgende activiteiten aan, op een schaal van 1-5 (1 = niet gemotiveerd, 5 = super gemotiveerd), hoe gemotiveerd je bent om je woordenschat te verbeteren met deze activiteiten:
   Markeer slechts één cijfer per rij:
   
   Gatenzinnen
   Binnen-buiten cirkel
   Woordenschrift
   Crosswoord
   Synoniemen verbinden
   "30 seconds" spel
   Verhaaltjes schrijven
   Woordbetekenis opzoeken en opschrijven
   Zinnen maken met nieuwe woorden
   Kahoot