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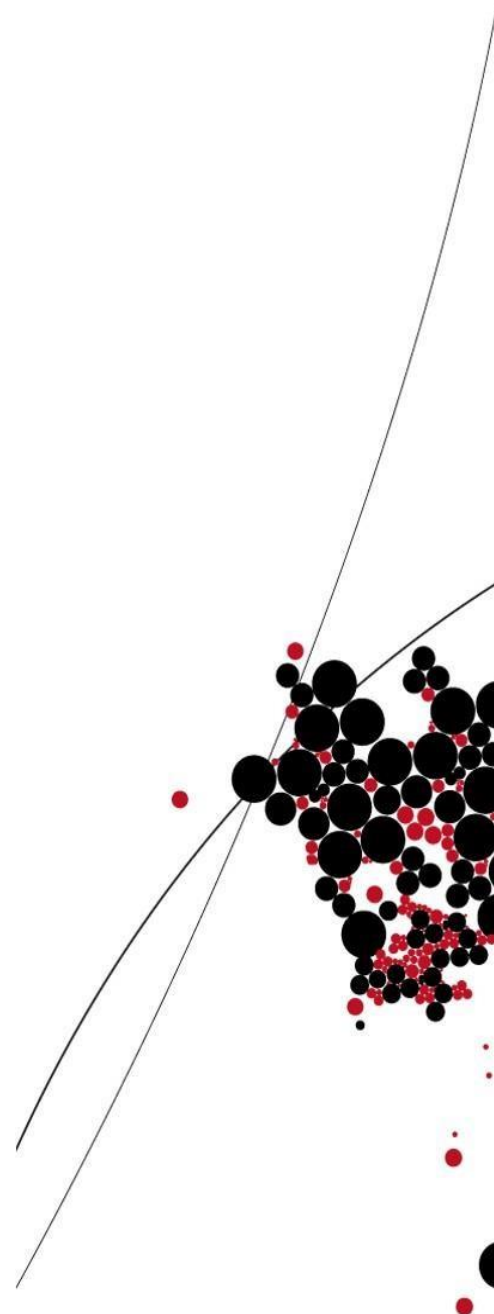


Teaching pre-task planning: using instruction on concept mapping to enhance narrative text quality of elementary school students

Master Thesis
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Summary

Dutch elementary school students experience difficulties in writing organized, high-quality texts, due to poor quality writing education. Text quality could be increased by teaching students to plan their writing, also known as pre-task planning. Here, students make goals and organize the generated ideas for their text. A tool that can stimulate students to organize their ideas is concept mapping. The aim of this study was to find out if instruction on concept mapping and instruction on organizing concepts in a concept map, during the pre-task planning phase, can contribute to the narrative text quality. Therefore, 90 students of the fifth- and sixth grade were assigned to an experimental and a control condition. Students in the experimental condition first got an instruction on how to make a concept map that could be used to write a narrative text with, students then made a concept map and wrote a narrative text with it. A week after this instruction, these students got an instruction on how to organize concepts in a concept map to write a narrative text with, students again made a concept map after this instruction and again wrote a narrative text. Students in the control condition simultaneously wrote narrative texts, but without the support of an instruction. A key finding was that students who received the instruction on concept mapping and on organizing concepts in a concept map wrote higher quality texts than the students who did not receive these instructions. The narrative texts were better organized and were more detailed, meaning that pre-task planning did help these students write better narrative texts. However, looking at the correlation of the quality of the concept maps and the quality of the narrative texts, students had trouble with translating the concept map into a text. Future research should, to increase the results of concept mapping as a pre-task planning activity, focus on instructing elementary school students how to translate a concept map into a narrative text.

Key words: pre-task planning, concept mapping, text quality, elementary school students.

Samenvatting

Nederlandse basisschoolleerlingen hebben moeite met het schrijven van georganiseerde en hoge kwaliteit teksten, door een slechte kwaliteit schrijfonderwijs. Wanneer leerlingen leren hoe ze een schrijftaak kunnen plannen kan dit de kwaliteit van de tekst verbeteren. Het plannen van de tekst voor het daadwerkelijke schrijven wordt pre-task planning genoemd. Tijdens deze fase formuleren leerlingen doelen en organiseren ze de gegenereerde ideeën. Een manier om leerlingen te stimuleren om hun ideeën te organiseren is het creëren van een concept map. In dit onderzoek is het effect van concept-mapping op het schrijfproces en product onderzocht. Het doel van dit onderzoek was om te achterhalen of instructie over het maken en organiseren van concept maps, tijdens de pre-task planning fase, kan bijdragen aan de kwaliteit van een narratieve tekst. Negentig leerlingen uit groep 7 en 8 zijn verdeeld over een experimentele en controle conditie. De experimentele conditie kreeg instructie in het plannen van een tekst met behulp van een concept map, vervolgens creëerden de leerlingen een concept map en schreven daarmee een narratieve tekst. Een week later kregen dezelfde leerlingen, een instructie over het organiseren van concepten in een concept map om hiermee een narratieve tekst mee te schrijven. Leerlingen in de controle conditie schreven narratieve teksten, zonder dat zij aanvullende instructie ontvingen. Een belangrijke bevinding is dat leerlingen, die instructie kregen over concept maps en het organiseren van een concept map, een hogere kwaliteit narratieve teksten hadden dan de leerlingen van de controle conditie. De teksten van de leerlingen in de experimentele conditie waren beter georganiseerd en gedetailleerder. Echter, kijkend naar de correlatie tussen de kwaliteit van de concept maps en de kwaliteit van de narratieve teksten, leek het erop dat leerlingen moeite hadden met het vertalen van de concept map naar de narratieve tekst. Toekomstig onderzoek moet daarom focussen op het geven van instructie aan basisschoolleerlingen over hoe ze een concept map kunnen vertalen naar een narratieve tekst.

Steekwoorden: pre-task planning, concept mapping, tekstkwaliteit, basisschoolleerlingen.

Introduction

Writing is an important aspect of learning for students. Students can demonstrate with writing what they have learned, and they can learn from it when they write down knowledge. Besides this, writing is important for communication, since ideas can be shown, and others can be persuaded (Cutler & Graham, 2008; Henkens, 2010; Mason, Kubina, & Taft, 2011). However, Dutch writing education has not been up to standards, meaning that students do not learn enough to become good writers. Henkens (2010) dedicates this problem to the fact that Dutch education is more focussed on the improvement of mathematics and Dutch language. Since writing education has a poor quality, students' writing products have a low quality, leading to underwhelming results (Henkens, 2012). Teachers do not teach their students how they should start writing a text and how they should revise it. Students therefore do not process enough information into their texts and their texts are unorganized (Krikhaar & Bruggink, 2011; Henkens, 2010). These aspects are however important quality aspects for a text. A high-quality text is based on four different aspects, namely: content; organization; sentence construction; and grammar. A high-quality text needs enough information to make it detailed, needs to have a clear organization where events follow each other logically, and needs an error free sentence construction and grammar (Ferrari, Bouffard, & Rainville, 1998; Beauvais, Olive, & Passerault, 2011). When these aspects are not present in a text, the quality is considered low.

Ever since this problem was identified by the Dutch Education Inspectorate, changes were made in writing education (Henkens, 2010). New instructional methods were made, which were devoted to teaching discourse knowledge, which is knowledge about the aspects of writing (Olinghouse, Gillespie, & Graham, 2015). Besides this, more time was being spent on instruction (Krikhaar & Bruggink, 2011). However, these new methods do not give the teachers enough support on how to teach text writing, due to the fact that teachers do not have enough knowledge about it themselves (Henkens, 2010). Students need to be taught about process-oriented writing and teachers need to get an effective approach on how to teach this to their students. The problem now is, without an effective approach for students to learn about writing, that students cannot learn from their writing and texts stay unorganized and undetailed. Important here, is that attention is paid to the instruction (Brindle, Graham, Harris, & Hebert, 2016). This instruction should be focussed on how to start writing it; the pre-task planning phase of writing. During the pre-task planning phase, students prepare the intended writing outcome by generating ideas, generating the composition, and structuring the text (Ellis & Yuan, 2004; Limpo, Alves, & Fidalgo, 2014; Abrams & Byrd, 2016). This can help students with the coherence and the organization of their text, meaning that two aspects of the text quality can increase (Mayer & Alexander, 2011).

Pre-task planning involves generating, expressing, evaluating, and organizing ideas. A tool that can be used to generate and organize ideas is a concept map, which is a graphic organizer (Novak & Cañas, 2006; Machida & Dalsky, 2014). Through concept mapping, creativity can be ensured, which means that the student can generate more ideas (Simper, Reeve, & Kirby, 2016). Furthermore, a concept map can help students see links between concepts that were not visible before (Nesbit & Adesope, 2006), which can help the students with organizing their ideas. This suggests that concept maps can be used as a tool in the pre-task planning phase. Students can generate more ideas for the text and make these ideas more linked with each other, improving the content and organization of the text.

In the current study, concept mapping will be used as a tool to teach students how to plan their writing for them to increase the writing quality of a narrative text. A narrative text is a way for a writer to tell a real or imagined story to an audience, also known as story-telling (Foxworth, Mason, & Hughes, 2017). Concept maps already help the organization of a text, however since it is a predictor for text quality, and since the text quality of Dutch students lacks on organization, the instruction on how to organize concepts in a concept map will also be implemented. This study focusses on gaining insight on how instruction on concept mapping, and instruction on organizing the concepts of a concept map, can help elementary school students in their pre-task planning and

therefore increase the quality of writing on composition and organization. The goal of this study is to create an effective way to teach students how to plan their writing and consequently improve their writing quality.

Theoretical Framework

Writing

Writing is an important form of communication (Barbeiro, 2011). Through writing, someone's ideas and thoughts can be expressed and made accessible, relationships between people can be maintained, and it can be used to influence people (Graham, Gillespie, & McKeown, 2013). By narrative writing, students can tell stories and write about real experiences and events from their imagination. This can also stimulate learning for students, since it can facilitate a deeper understanding of the content (Foxworth, Mason, & Hughes, 2017). However, in order for students to learn from their narrative text, the text needs to have a high quality. Therefore, the text needs to meet certain requirements. First, the composition is important. Students need to have knowledge about what they are writing, since this can lead to more ideas and detailed event telling (Beauvais et al., 2011). Secondly, the organization needs to be clear. This means that the ideas and events logically follow each other up and there are little to no repetitions in the text (Flanagan & Bouck, 2015). Lastly, a high-quality text has an error-free grammar and a clear sentence construction. This is important for the readability of the text itself (Ferrari et al., 1998).

However, writing is a complex and demanding mental task for students (Saddler, Moran, Graham, & Harris, 2004). Narrative texts often do not meet the quality requirements, as described above, making texts difficult to read. Students need to have knowledge about certain things in order for them to write a good narrative text. First, students need to have topic knowledge about what they are writing, this can help the content of the text, since it can make the texts more detailed (Olinghouse et al., 2015). Second, they need to have discourse knowledge. Discourse knowledge is knowledge about the text itself, about the audience they are writing for, and the process of writing (Olinghouse et al., 2015). The process of writing is especially important, since the different phases of this process can help with the composition, organization, and the grammar of the text (Flower & Hayes, 1981). The process of writing exists of three different phases, the pre-task planning phase, the writing phase, and the revision phase (Flower & Hayes, 1981). Writing is complex since it is not a linear process, students have to go back-and-forward through the phases. During the writing phase, students can go back to the planning phase to adjust their planning. Furthermore, students can go back during the revision phase to the writing phase to add new pieces or they can go back to the planning phase to change their initial goal (Flower & Hayes, 1981; Limpo, Alves, & Fidalgo, 2014).

Having to go back-and-forward in this process and needing topic and discourse knowledge can be mentally demanding for students (Saddler et al., 2004). Therefore, narrative texts of students often are unorganized and do not contain correct information (Henkens, 2010). Besides this, the revision phase is often skipped, meaning that errors and problems are not taken care of (Graham, Harris, & Larsen, 2001). This implies that students cannot write high-quality narrative texts. Essential here, is that students start with improving their knowledge about the writing process. Learning the whole process at once is a lot for students. Therefore, it is important to start with the pre-task planning phase. Since the pre-task planning phase can already help the students improve their content and organization. Planning is already used by students; however, the quality of their planning does lack (Mayer & Alexander, 2011), leading to low quality texts. This is due to the students not being able to plan the whole text while writing it, meaning that they only plan small bits of the text, leading to an incoherent text. Pre-task planning can help students with planning the whole text. When concept maps are used during this phase, students can structure the ideas that they have for the text in a graphical organizer. Therefore, students can see all their ideas, link them together, and organize them according to aspects of the text. This tool can help students with writing a more coherent and organized text (Mayer & Alexander, 2011; Beauvais et al., 2011). Besides this,

students can look up information about the text, helping their topic knowledge and leading to a better composition (Olinghouse et al., 2015). When the composition and the organization are already taken care of before writing, students can focus more on the grammar and the sentence construction during the actual writing and during the revision phase (Limpo & Alves, 2013).

Pre-task planning

In writing education little attention is given to pre-task planning (Flanagan & Bouck, 2015). Therefore, it is not surprising that most students do not plan their writing (Ciullo & Mason, 2017). To start using pre-task planning for writing, teachers need to get ideas how to teach this to their students. Pre-task planning can be defined as the phase during which the writer formulates writing goals, generates ideas, and organizes these in order to facilitate the writing itself (Ellis & Yuan, 2004; Limpo et al., 2014). The pre-task planning phase precedes the actual writing phase. Two types of planning can be distinguished in this phase, process planning and text planning. Process planning focusses on the processes that facilitate the completion of the text. This is where the goals are being made for the text and it is decided which strategies are going to be used. Text planning focusses on the content of the text and the ideas that are being used. Here, the organization and the composition of the text is generated. Both processes are part of the pre-task planning phase (Ellis & Yuan, 2004). The text planning is especially important for the quality of the text, since this is focused on the composition and the organization of the text (Mayer & Alexander, 2011; Beauvais et al., 2011). Therefore, this study focusses on the text planning of pre-task planning.

During pre-task planning, students can focus more on important aspects that precede writing, such as organization and composition. This can help students since they do not have to do this during the writing phase (Ellis & Yuan, 2004). Besides this, students can determine the topic, find information about the topic, and pick important concepts to write about, instead of doing this during the writing phase (Ojima, 2006; Abrams & Byrd, 2016; Olinghouse et al., 2015). Students can therefore focus more on different aspects of writing during the actual writing phase, such as the grammar and the sentence construction (Limpo & Alves, 2013). Since the composition, organization, and topic knowledge have already been planned before the writing phase, cognitive demands are reduced during writing. This assures that students can write more effortlessly and write higher quality texts, since more time is being spend on the quality requirements (Flanagan & Bouck, 2015; Machida & Dalsky, 2014; Ojima, 2006; Ferrari et al., 1998). Several studies have shown that because of pre-task planning, students started to use more accurate language and wrote more fluent texts (Kroll, 1990; Ellis & Yuan, 2004; Hayes & Nash, 1996). A disadvantage of pre-task planning is the extra time that is needed in order to write a text (Ojima, 2006). However, pre-task planning can increase the writing quality significantly, meaning that less time needs to be spend on remedial teaching for writing.

Pre-task planning can be done and taught by different activities. Teachers can let their students have a brainstorm session, alone or with others, and let them write their ideas on paper (Flower & Hayes, 1980). A more common used instructional method for pre-task planning is the use of concept maps in the classroom. This has been done by several studies in order to measure the effect of pre-task planning on text quality (e.g. Ojima, 2006; Flanagan & Bouck, 2015; Machida & Dalsky, 2014). However, this is often studied in high school and college, while this study focusses on elementary school students. Concept maps are graphic organizers, which can help the student with generating ideas and concepts for the text and help them visualize the text. Meaning that it can help them with the text planning of pre-task planning. Furthermore, the concept map helps the student organize the text, due to the links that make connections between ideas visible. However, elementary school students do need more support in making a concept map (Chang, Sung, & Chen, 2002), therefore this study focusses on providing students with support on the making of an organized concept map.

Concept mapping

A concept map can be defined as a graphical or schematics device for representing a set of concepts, sub-concepts, and relations between concepts (Flanagan & Bouck, 2015; Marculcu, Karakuyu, & Dogan, 2013). Concept maps are typically used to represent knowledge in an organized way (Nesbit & Adesope, 2006; Novak & Cañas, 2006). Concept maps represent knowledge in the form of nodes and labelled lines. Nodes represent concepts or important terms and the lines are used to denote a relationship between the nodes. Concept maps are considered to be a tool for learning, since concepts/key terms and the links are made explicit (Nesbit & Adesope, 2006). By constructing a concept map, students are forced to think about the concepts and ideas represented and the relations between them. For writing a text, generating these ideas can help students with the content of the text, making the text more detailed since more ideas are being made. Students are stimulated to think about the organization of the concepts and ideas in an interrelated framework (Novak & Cañas, 2006). This can also aid text writing for students, since the organization is already thought out. The organization can transfer to the text, making it more coherent.

Concept maps are believed to facilitate learning often (Marculcu et al., 2013), and therefore often used in education. Students' prior knowledge and new information can be connected in the visual representation, which ensures that new information is better understood (Marculcu et al., 2013; Ojima, 2006). A concept map can also scaffold the organization of this knowledge. This can be done when students are organizing the information into different domains and when it is linked to other information. This also helps the student with organizing the new information with prior knowledge (Novak & Cañas, 2006; Yen, Lee, & Chen, 2012; Marculcu et al., 2013; Ritchhart, Turner, & Hadar, 2009). In the present study concept mapping will be used as a way to stimulate planning in the context of narrative writing. In concept mapping for writing, the concepts are ideas and events that happen in the narrative text.

Concept mapping is beneficial for the pre-task planning of students and therefore it is also beneficial for the writing quality of students (Ojima, 2006; Abrams & Byrd, 2016). Concept maps can help with the text planning of pre-task planning, meaning that concept maps are useful for the organization and the composition of the text. Students can use concept maps to plan their whole text before writing it, making their texts more coherent than when they only plan small bits during the actual writing (Machida & Dalsky, 2014). The organization of the concept map is related to the organization of the text. When the organization of the concept map is clear, the student has already determined the organization of the text. This makes the text more coherent and less repetitive (Flanagan & Bouck, 2015; Machida & Dalsky, 2014; Ojima, 2006). Since the quality of concept maps is determined by the content and the organization (Cañas, Novak, & Reiska, 2015), and these aspects are important for the quality of the text, this study attempts to find out if a high-quality concept map correlates with a high-quality text.

Besides this, concept mapping can ensure creativity (Simper et al., 2016). With creativity, more ideas can be generated, improving the composition of the text (Mayer & Alexander, 2011; Abrams & Byrd, 2016). Furthermore, a study of Flanagan and Bouck (2015) showed that concept mapping during pre-task planning indeed helped students generating more ideas, but students also produced more supporting details and less relevant information was skipped from the text. Ojima (2006) states that the construction of a concept map for writing starts with an exploration of the domain. This is the topic that the students have to write about. Once the domain is set, ideas and events that are relevant to the domain can be further explored. This implies that students have to explore the content of the text and determine the general concept. When the general concept is chosen, the other ideas can be organized according to the aspects or the events of the text. These clusters of ideas can then be added to the concept map itself, linked with the general concept (Novak & Cañas, 2006; Ojima, 2006). Clusters of ideas of the concept map can be linked with each other by cross-links, to show how different ideas or events are related with each other (Novak & Cañas, 2006).

A downside of the use of concept maps for pre-task planning can be that young students have difficulties with making concept maps from scratch on their own (Chang et al., 2002). Students who generated their own concept map, did not do better than the control group, who did not use a

concept map. Students need to have guidance with making a concept map. Although a concept map already supports students in organizing a text, additional instruction on organization can help these students writing an even more coherent narrative text. This is also needed since texts of Dutch elementary school students are often unorganized. This study makes use of guidance in the form of instruction on how to organize concepts in a concept map. A concept map can be organized in the aspects of the text or in the events of a text.

Current study

The aim of this study is to find out if instruction on concept mapping and instruction on the organization of concepts in a concept map, during the pre-task planning phase, can contribute to the narrative text quality, and therefore, form a way for teachers to improve writing education. In the present study, elementary school students were divided among two conditions, an experimental and a control condition. Students in the experimental condition received two consecutive interventions, which served as pre-task planning. The first intervention being an instruction on the making of a concept map in order to write a narrative text. After this instruction students made their own concept map and wrote a narrative text with it. The consecutive intervention also consisted of an instruction, this one being focused on organizing the concepts of a concept map, which was again used to write a narrative text. After this instruction students again made their own organized concept map and wrote a narrative text with it. Students in the control condition did not receive these instructions and wrote narrative texts without the use of these pre-task planning tools. The aim of this study is to investigate the effect of the use of instruction on a concept map and the instruction on organizing concepts in a concept map on the writing quality of elementary school students. To examine this effect, the following research question was proposed:

RQ: "To what extent does the instruction about concept mapping and instruction about organizing the concepts in a concept map, during the pre-task planning phase, contribute to the quality of narrative writing of elementary school students?"

Three sub-questions were suggested to answer the research question. The first sub-question was:

SQ1: "What is the effect of instruction on a concept map on the quality of narrative writing?"

Research already pointed out that students increase their narrative writing quality when they start using concept maps to write narrative texts. However, these studies focussed on high school and college students who are second language learners, while this study focusses on elementary school students who are first language learners. Therefore, this study makes use of the instruction on how to concept map in order to write a narrative text, to guide the elementary school students. It is expected that the instruction on a concept map and the use of the concept map itself will help the students, from the experimental condition, write texts with a higher quality and therefore outperform students from the control condition.

The second sub-question was:

SQ2: "What is the added value of instruction on organizing concepts of a concept map?"

Chang et al. (2002) stated that elementary school students have difficulty with the making of a concept map. Therefore, this study will incorporate instruction on how to organize concepts in a concept map for the experimental condition. The teachers of the experimental condition will teach the students to organize concepts according to the aspects of the text, such as characters, places, and events. Since organization is an important aspect of text quality, this instruction will help the students write more organized texts. Therefore, students will write more higher-quality texts than the texts that were written with the use of concept maps before this instruction.

The last sub-question was:

SQ3: "To what extent is there a correlation between the quality of the concept map and the quality of a narrative text?"

Since the quality aspects of a concept map, structure and content, are similar to the quality aspects of a narrative text, organization and composition, it is expected that a higher quality concept map can predict a higher quality text. To determine if this expectation is true, an analysis of the

correlation between the quality of the concept map and the quality of the narrative text will be explored during this study.

Method

Design

This study had a quantitative quasi-experimental design. The effect of instruction on the use of a concept map and of instruction on organizing concepts in a concept map, during the pre-task planning phase, on the quality of narrative writing of elementary school students was measured. Students in the experimental condition received two consecutively interventions during this study. The first was the use of an instruction on the use of a concept map for writing a narrative text, and the second intervention was an instruction on organizing the concepts in a concept map in different events or aspects of the story and use this concept map to write another narrative text. The second intervention followed a week after the first intervention. The students in the control condition did not receive these interventions for writing their narrative texts.

Participants

The respondents of this study were 90 fifth- and sixth-grade students from four classes of an elementary school in the Netherlands. The age of these students ranged from 10 to 13 years old, with a mean age of 11.72 years ($SD = 0.69$). In total, 46 female students and 44 male students participated. In the experimental condition, 40 students participated, of which 19 students were male and 21 students were female. The mean age of the students in the experimental condition was 11.85 years ($SD = 0.75$). In the control condition, 50 students participated, of which 25 were male students and 25 were female students. The mean age of the students in the control condition was 11.62 years ($SD = 0.62$). Upfront of this study, active consent of the parents of the students was asked since the students are all under aged.

Materials

Writing task

After receiving the instruction, students received the writing task for the corresponding text. Students were free to find a subject within these writing tasks. The writing tasks were the same for both the students for the experimental and the control condition. The task of the first text was: "A problem at vacation". The task of the second text was: "A problem at school". The third task of the text was: "A detective story".

However, whenever students experienced difficulties thinking about a story line within the context of the given subject, they received writing prompts. These prompts were listed in the lesson plans that were received by the teachers. Each lesson had a set list of prompts, that were given to students from both conditions. The teacher showed these prompts on the screen after the instruction. An example of such writing prompt for the first task was: "A family member who disappeared on vacation". An example of a writing prompt of the second lesson was: "The cancelling of the school camp". An example of a writing prompt for the third task was: "A thief who broke into the school". For the writing task self, the students received line A4 paper to write their narrative text on.

At the start of the study, both students from the experimental condition and the control condition received a starting instruction from their own teacher. This instruction served to determine the starting point of the narrative text quality of the students. For the students this instruction was meant to encourage the prior knowledge. During this instruction, the teacher presented the basics of a narrative text, explaining aspects of a narrative text and remembering the students about their grammar and interpunction. Students in the control condition received this basic instruction three times, after each instruction they were given the writing tasks and were asked to write their text

based on this instruction. Students in the experimental condition received additional instructions that supported their writing process by means of a concept mapping task and specific instruction on how to organize the concepts in concept maps.

Concept map

The students in the experimental condition received an instruction on concept mapping during the second and third lesson. This instruction served to familiarize the students with a concept map and encourage their prior knowledge. For the students this instruction was to learn how to generate and select ideas with a concept map to write a narrative text with. The teacher started the instruction with presenting them with the creation of a concept map according to a known story of the students. The teacher modelled how a concept map could be made with a text and encouraged the students to think with the teacher about how to create a concept map. Each student was provided with a blank A4 sized paper and was instructed to create a concept map on the topic of the narrative text. For an example of a concept map after the second and after the third instruction, consult Appendix D.

Organizing concepts in a concept map

The students from the experimental condition received an instruction on how to organize concepts in a concept map. This instruction served to familiarize the students with organizing a concept map. For the students this instruction was to learn how to organize a concept map in order to write an organized narrative text with. The teacher started the instruction with the creation of a concept map that had organized clusters of concepts according to a known story. These concepts were organized according to aspects or events of a known story to the students, this organization depended on the teacher. The teacher modelled how concepts in a concept map could be organized and asked the students to think with the teacher on how this organization could be done best.

Lesson plan

The teachers received lesson plans for all three lessons. These lesson plans contained the instructions that they had to give to their students and the different materials that were needed during the lessons. These lesson plans can be found in Appendix C.

Quality of text

The narrative texts were scored on the overall quality of the text, which is based on: the content; organization; sentence construction; and the grammar (Ferrari et al., 1998). All narrative texts have been scored based on the rubric (shown in Appendix A) of the National Assessment for Education Progress, which focussed on these four aspects (Persky, Dane, & Jane, 2003). Although it is not expected that the sentence construction and grammar will benefit from the use of concepts maps, since it is an aspect of the quality of a text, it was analysed in this study to get the overall quality of the text. According to the NAEP, a good text is based on the following aspects: the development of ideas, in which the details and the complexity of the ideas are important; the organization of the ideas, in which the text structure and the coherence is important; and the language facility, where the sentence structure and the grammar are considered (Mazany, 2017). Both the texts of the experimental and the control condition were scored with this rubric. A higher score indicates a higher-quality narrative text, a text with a good composition, a clear organization, and error free language. The content was scored based on the way the story is presented, from (1) *very brief* to (6) *well-developed with descriptive details*. Ferrari et al. (1998) stated that content is important for a text, since good texts have more knowledge in them and are more detailed. The organization was based on how the events of the story were related to each other, from (1) *no control over organization* to (6) *events are well connected and tie the story together*. The organization is important for a high-quality story, since those stories consist of a logical structure (Ferrari et al., 1998). The sentence construction is scored on the choice of words and sentence structures, from (1) *no control over sentence formation and inaccurate word choice* to (6) *varied sentence structure and*

specific word choices. Grammar was scored based on this rubric according to the number of errors made, from (1) *characterized by misspellings, missing words, incorrect word order, and errors* to (6) *exhibits control over sentence boundaries, errors in grammar and spelling do not interfere with understanding*. A high-quality text has lower error rate on grammar and sentence construction (Ferarri et al., 1998). All four aspects were individually scored, meaning that the scores ranged from 4 points to 24 points maximum. The rubric has been used in other studies (e.g. Kim, Schatschneider, Wanzek, Gatlin, & Otaida, 2017).

Concept map quality

To assess the quality of the concept map, a coding scheme was created (shown in Appendix B). The content of the concept map was scored according to three different aspects. The first aspect was the presence of a general concept, where concept maps got 0 points if there was no general concept, and 1 point if there was a general concept. The second aspect was the presence of links, where the student got 0 points if no concepts were linked, 1 point if some concepts were linked, and 2 points if all concepts were linked with the general concept or with a sub-concept. The last aspect of the content of a concept map was the levels in the concept map, students got 0 points if the concept map only existed of the general concept. When the map had one level of concepts, meaning that there was a general concept and all other concepts were linked with the general concept, 1 point was awarded. Two points were awarded when two levels of concepts were present, meaning that there were concepts linked with the general concept and that their concepts had other sub-concepts linked to them. When there were more than two levels, 3 points were awarded.

The structure of the concept map was scored according to the organization of the concepts in the different events or aspects of the story. Students got 0 points if there was no organization and concepts were randomly placed around the general concepts, 1 point if the concepts were somewhat organized in clusters, but were mostly still randomly placed, 2 points if the concepts were organized in clusters, but there were still some concepts randomly placed, and 3 points if all concepts were organized in clusters.

According to the assigned codes for the concept maps, numerical values were assigned to the concept maps for present aspects. With a minimum of 0 points and a maximum of 24 points. Meaning that a concept map with higher points had a higher quality.

Procedure

During this study, three lessons were given to the students in both conditions. These instructions lasted approximately 15 minutes and the students got 50 to 60 minutes to finish writing their narrative text. If the students could not finish their text in this time frame, they could choose for themselves when they wanted to finish the text during the day.

Before the start of the instructions, the four teachers had a meeting with the researcher. During this meeting, the teachers received the lesson plans that were made for the start of the study and received an explanation about how to teach the lessons. Afterwards, the first lesson was given by the teachers, which served as a pre-test. The students from both conditions first got an instruction to encourage the prior knowledge of the students about writing a narrative text. After this instruction, the students had time to write a narrative text about a problem on vacation.

After a week, the students in the experimental received an instruction from their teacher, according to the lesson plan, about how to create a concept map in order to write a narrative text. The control condition wrote a narrative text at the same time, without the use of a concept map. This was done in order to find out if the developments in the narrative texts in the experimental group were due to the use of a concept map or to time or maturing of the students.

After another week, the students in the experimental condition received an instruction about how to organize concepts in a concept map. At the same time, the control condition wrote their own narrative texts, again without the use of a concept map.

Data Analysis

Quality of the text

The text quality of all narrative texts has been scored according to the used rubric. For the experimental group, the pre-test scores were compared with the post-test scores of the text quality after the concept maps, to see what the effect of the concept maps was. The pre-test scores of the text quality and the post-test scores of the text quality after the concept maps were compared with the post-test scores of the text quality after the organization of the concept maps, to see what the added value of the organization of the concept maps was. All analyses were conducted with SPSS. Since the data was not normally distributed, a Friedman test was conducted in order to analyse whether the interventions ensured a higher text quality. With a Wilcoxon signed-rank test as post-hoc analysis.

Furthermore, the scores of the text quality of the experimental and control group were compared with each other, to see if the development in scores of the experimental condition was due to the interventions or to maturation. Since the data was not normally distributed, a Kruskal-Wallis test was conducted to compare the experimental and control condition with each other.

Roughly ten percent of the narrative texts have been assessed by a second rater, meaning that 27 of the 270 narrative texts have been judged by a second rater to determine the interrater reliability. The Cohen's Kappa was calculated and was .66, meaning that the interrater reliability is substantial.

Concept map

The concept maps were analysed on the content and the structure to assess the quality of the concept map. These scores were analysed and were correlated with the scores of the quality of the text. Therefore, it could be analysed if a better concept map can ensure a higher quality text. These scores were analysed using a Spearman's rank-order correlation in SPSS, since these data were not normally distributed.

Roughly eighteen percent of the concept maps have been judged by a second rater, meaning that 15 of the 80 concept maps have been scored by a second rater to determine the interrater reliability. The Cohen's Kappa was calculated and was .64, meaning that the interrater reliability is substantial.

Results

First, the descriptive statistics of both the experimental condition and the control condition of the text quality will be described. Afterwards, the scores of writing quality of the experimental condition and the control condition will be compared with each other to find out if there is an effect of the used interventions. Then, the scores of the experimental condition will be discussed, to explore the effect of the concept map and the organization on the concept map. This will also include an exploration of the separate aspects of text quality, to determine which aspects have increased the writing quality for the experimental condition. Finally, both the used concept maps of the experimental condition will be analysed to determine if a high-quality concept map can predict a high-quality text.

Descriptive statistics

Shown in table 1 are the descriptive statistics of both the experimental and the control condition for the quality of the text. The first text served as a pre-test for both conditions to determine the starting point of the text quality. During the second text, the experimental condition got the intervention of instruction on the use of a concept map for writing, to increase the writing quality. The control condition did not receive this intervention. During the third text, the experimental condition had the intervention of the instruction on organizing concepts of a concept map for writing, to increase the writing quality. Again, the control condition did not receive this intervention.

Table 1
Descriptive statistics of text quality of experimental condition

Variable	N	Mean	SD
Quality score first text			
Experimental condition	40	12.78	1.82
Control condition	50	12.60	2.27
Quality score second text			
Experimental condition	40	14.35	1.53
Control condition	50	12.26	2.20
Quality score third text			
Experimental condition	40	15.15	1.92
Control condition	50	12.38	2.40

Comparison of narrative texts of experimental condition and control condition

To determine whether there was a statistical difference between the texts of the control condition and the experimental condition, to see if the improvement of the text quality was due to the interventions, a Kruskal-Wallis Test was conducted. This test showed for the first text no statistical differences, with $\chi^2(1) = .39, p = .53$. There was a statistical difference between the quality of the second text of the control condition and the experimental condition, with $\chi^2(1) = 21.46, p < .001$. There was also a statistical difference in text quality of the control condition and the experimental condition for the third text, with $\chi^2(1) = 26.46, p < .001$.

Narrative texts of the experimental condition

To determine if the concept map and the organization of the concepts of a concept map had an effect on the quality of the texts, a Friedman test was conducted. This revealed that there is a significant difference in text quality, $\chi^2(2) = 42.96, p < .001$. Subsequently, a post hoc analysis with Wilcoxon signed-rank test with a Bonferroni correction applied, resulting in a significance level of $p < .017$, was conducted. This was done to find out what interventions ensured the significant difference in text quality. The used variables for the Wilcoxon signed-rank test was the text quality for the three texts for the experimental condition. This shows a significant difference between the first text ($Mdn = 13.00$) and the second text ($Mdn = 14.00$), $Z = -4.70, p < .001, r = -.74$. There is also a significant difference between the second text ($Mdn = 14.00$) and the third text ($Mdn = 15.00$), $Z = -3.70, p < .001, r = -.58$. Lastly, there is a significant difference between the first text ($Mdn = 13.00$) and the third text ($Mdn = 15.00$), $Z = -5.03, p < .001, r = -.80$.

In order to find out which aspects of text quality increased over the three texts, a Friedman test and a Wilcoxon signed-rank test was used. With the Wilcoxon signed-rank test a Bonferroni correction was applied, resulting in a significance level of $p < .017$. Although it is believed that sentence construction and grammar will not significantly differ throughout the three texts, it was still analysed since it was scored in the rubric.

First the aspect content was examined, with the variable of content for the first, second, and third text. The Friedman test showed a significant difference in content for the three texts, with $\chi^2(2) = 47.50, p < .001$. The Wilcoxon signed-rank test for content showed a significant difference between the first ($Mdn = 3.00$) and the second text ($Mdn = 4.00$), $Z = -4.48, p < .001, r = -.71$. It also showed a significant difference in content between the second ($Mdn = 4.00$) and the third text ($Mdn = 4.00$), $Z = -2.83, p = .005, r = -.45$. There was also a significant difference between the first ($Mdn = 3.00$) and the third text ($Mdn = 4.00$) in content, $Z = -5.27, p < .001, r = -.83$.

The second aspect was organization, with the variable of organization for the first, second, and third text used. The Friedman test showed a significant difference in organization for the three texts, with $\chi^2(2) = 19.30, p < .001$. The Wilcoxon signed-rank test for organization showed a significant difference between the first ($Mdn = 3.00$) and the second text ($Mdn = 3.50$), $Z = -3.00, p = .003, r = -.47$. It did not show a significant difference between the second ($Mdn = 3.50$) and the third

text (*Mdn* = 4.00) for organization, $Z = -1.44$, $p = .149$, $r = -.23$. There was a significant difference in organization between the first (*Mdn* = 3.00) and the third text (*Mdn* = 4.00), $Z = -3.76$, $p < .001$, $r = -.59$.

The third aspect was sentence construction, with the variable sentence construction for the first, second, and third text used. The Friedman test showed a significant difference in sentence construction for the three texts, with $\chi^2(2) = 8.36$, $p < .015$. The Wilcoxon signed-rank test for sentence construction did not show a significant difference between the first (*Mdn* = 3.00) and the second text (*Mdn* = 4.00), $Z = -1.96$, $p = .050$, $r = -.31$. The second (*Mdn* = 4.00) and the third text (*Mdn* = 4.00) did not have a significant difference in sentence construction, $Z = -1.00$, $p = .317$, $r = -.16$. There also was no significant difference in sentence construction between the first (*Mdn* = 3.00) and the third text (*Mdn* = 4.00), $Z = -2.17$, $p = .030$, $r = -.34$.

The final aspect was grammar, with the variable grammar for the first, second, and third text used. The Friedman test showed a significant difference in grammar for the three texts, with $\chi^2(2) = 14.31$, $p = .001$. The Wilcoxon signed-rank test for grammar did not show a significant difference between the first (*Mdn* = 4.00) and the second text (*Mdn* = 4.00), $Z = -1.96$, $p = .050$, $r = -.31$. It also did not show a significant difference for grammar between the second (*Mdn* = 4.00) and the third text (*Mdn* = 4.00), $Z = -2.32$, $p = .020$, $r = -.37$. There was a significant difference between the first (*Mdn* = 4.00) and the third text (*Mdn* = 4.00) for grammar, $Z = -3.28$, $p = .001$, $r = -.52$.

Concept maps of the experimental condition

Table 2 shows the descriptive statistics of the concept maps that the experimental condition used during the second and the third text. The concept map that was used for the third text was an organized concept map.

Table 2

Descriptive statistics of the concept maps of experimental condition

	N	Mean	SD
Concept map text 2	40	4.72	1.11
Concept map text 3	40	7.38	1.46

A Spearman rank-order correlation was conducted in order to find out if there is a relation between the quality of a concept map and the quality of the text. A two-tailed test of significance did not indicate a relation between the quality of the concept map of the second text and the quality of the second text, $r_s = .23$, $p = .15$. However, a two-tailed test of significance did show a significant relation between the quality of the concept map of the third text and the quality of the third text, $r_s = .36$, $p = .02$. Nevertheless, this was a weak correlation.

Conclusion and Discussion

Discussion of findings

The goal of this study was to examine what effect instruction on concept mapping and instruction on organizing concepts in a concept map has on the narrative writing quality of elementary school students. To test this effect, fifth- and sixth-grade students wrote narrative texts, where the experimental condition made use of instruction on concept mapping and instruction on organizing concepts in a concept map.

The results of the comparison between the scores of the experimental condition and the control condition on their narrative writing quality showed that the experimental condition wrote higher quality texts than the control condition after receiving the interventions. The results of the first text showed that both conditions had the same starting point for text quality. The results of the second and third text did show that the experimental condition performed better when using a

concept map and an organized concept map than the control condition who did not use these interventions, and therefore did not plan their writing. These results are in line with the expectations and previous studies, who found that when students used concept mapping, their writing improved due to the fact that more time was being spend on the organization and composition (Machida & Dalsky, 2014; Flanagan & Bouck, 2015). This study however shows that the use of concept maps can also improve narrative writing for elementary school students, since previous studies have not yet been done with this audience. According to Ellis and Yuan (2004), this effect is due to the students from the experimental condition using pre-task planning before beginning their writing, and therefore taking more time to compose their content and organize their text.

The results of the effect of the intervention on the text-quality of the experimental condition showed that the instruction on concept mapping did increase the narrative text quality of the students. The text quality did increase between the first and the second text of the experimental condition. When looking at the different aspects of text quality, this increasement was due to the content and the organization being better in the second text. This is in line with previous studies. The instruction on concept mapping did have an effect on the content and the organization of the text. This means that the texts had more details, due to a better composition, and the described events logically followed each other up, due to a better organization (Machida & Dalsky, 2014; Flanagan & Bouck, 2015). To give an answer to the sub-question: "What is the effect of a concept map on the quality of narrative writing?", the effect of the use of instruction on concept mapping is that the text quality did benefit from it, making the texts more detailed and organized.

The results of the effect of the instruction on organizing the concepts in a concept map showed that the narrative text quality of the students increased. Looking at the separate aspects, only the aspect content increased between the second and the third text. Since content was scored on how detailed the text was, it means that the instruction on organizing a concept map ensured more detailed texts, which can be due to the students planning more ideas for the text and working these out before starting to write (Flanagan & Bouck, 2015). However, the other aspects did not show a significant difference between the second and the third text, which was not expected. The organization of the text did not benefit more from the instruction on organizing the concept map. Looking more closely at these results, the organization did not decrease from the second to the third text, meaning that the organization was still better than when instruction only focussed on the making of concept maps. An explanation for this can be that the students did not have an instruction on how to translate a concept map into a narrative text. The instruction that the students got focussed on the making of a concept map, and an organized concept map, according to a known story. The writing task that the students got was the other way around, writing a narrative text with a self-made concept map. According to the results on the use of a concept map to write a narrative text with, students did understand how to use a concept map to write a narrative text with. However, looking at this result, students did not know how to use the organization of the concept map in order to organize the narrative text that they were writing. Students were only taught how to organize a concept map and not how to use this organization in their text. Students could benefit from an instruction on how an organized concept map could be used to write an organized narrative text. Future research is needed to clarify if this instruction can indeed increase the organization of a narrative text, and consequently increase the narrative text quality of elementary school students. To answer the sub-question: "What is the added value of the organization of the concept map?", the instruction on organizing a concept map did produce texts with a higher-quality than when the organization was not used in the instruction. This was due to a better content of the texts, meaning that more detailed texts were written.

The results of the correlation between the quality of a concept map and the quality of the corresponding narrative texts, showed that there is a weak correlation between the third text and the corresponding concept maps. The quality of the concept map of the second text and the quality of the second text did not show a relation. This means that the quality of a concept map in which the concepts are organized does relate to the quality of the corresponding narrative text. Students who made a high-quality concept map were more likely to also write a high-quality narrative text.

However, since this correlation was weak, the possibility is not high. This is partially in line with the literature. That the quality of the concept map of the second text did not correlate with the quality of the second text itself, and that the correlation between the organized concept map and the third text is weak, can have several reasons. Chang et al. (2002) stated that elementary school students struggled with the producing a concept map from scratch. Students only had little guidance during the first concept map (of the second text), where they only got an instruction on the basics of a concept map. During the second concept map (of the third text), students got a bit more guidance, by giving students instruction on organizing a concept map. However, students still made concept maps from scratch, with little guidance. Therefore, the quality of a concept map does not have to agree with the quality of the text. Future research could show if the writing quality of elementary school students could be improved when a more guided form of concept mapping is used. However, since it cannot be said with certainty, future research could analyse the concept maps and narrative texts on how the concept map translates itself into the narrative text. This could be done by looking at the concepts that were used in the concept map and which were still present in the narrative text. When looking at this, it could be predicted if the problem manifests itself when the concept maps needs to be translated into the narrative text. To answer the sub-question: "To what extent is there a correlation between the quality of a concept map and the text?", there is only a correlation between the quality of an organized concept map and the corresponding text. This proves that a high-quality concept map can predict a high-quality narrative text, however, it is a weak correlation, meaning that the possibility is small.

Strengths and limitations

The current study does provide that the narrative text quality of elementary school students benefits from instruction on concept mapping and instruction on organizing concepts in a concept map. An important strength of this study is the use of the organization of concepts in the concept map. Since literature suggests that elementary school students struggle with producing a concept map from scratch, guidance on organizing concepts in a concept map did help the students with writing a narrative text. Besides this, this study scored the concept maps that were made by the students from the experimental condition to find out if a high-quality concept map can ensure a high-quality text. This leads to the insight that elementary school students should get additional instruction on how to translate a concept map to a narrative text. This instruction could be done through modelling of the teacher. The teacher could model how to make a concept map and then write a narrative text with it. Furthermore, this study was executed on an elementary school and performed by the own teachers of the students. This made this study unobtrusive for the students themselves, since they did not know that they participated in a study. Therefore, the students did not act differently, while writing the texts.

However, this study also consists of some limitations. First, the teachers themselves gave the lessons to the students. While the teachers did receive a lesson plan and instruction of the researcher, there was no control on what the teachers did during the lesson. Therefore, there was no verification if the teachers did follow the lesson plan or if they changed something during the lesson themselves. Nevertheless, this way the lessons stayed the truest to the regular curriculum, meaning that the students did not notice the study. This also brings the benefit of the ecological validity, meaning that the results of this study are more generalizable. Second, the study was performed during the last months of the schoolyear. For the sixth-grade students that participated in this study, it meant that they were in their final months of elementary school. Commonly, these students decrease in motivation over these months, since their future school career is already planned out for them. Beneficial for this study would have been to perform this study during the first months of the schoolyear, so all the students would have been motivated. Last, this study did not take the prior knowledge in account. Meaning, that the prior knowledge of the students about concept maps and about their grammar and sentence construction was not considered and was not controlled for.

Conclusion

The goal of this study was to find out if instruction on concept mapping and instruction on organizing concepts in a concept map, during the pre-task planning phase, can contribute to the quality of narrative writing of elementary school students. Therefore, the following research question was created: "To what extent does the instruction about concept mapping and instruction about organizing the concepts in a concept map, during the pre-task planning phase, contribute to the quality of narrative writing of elementary school students?"

It can be concluded that both the instruction on concept mapping and on organizing a concept map did increase on the quality of narrative writing. The intervention on concept mapping ensured that the narrative texts did have more details and were overall more organized. The intervention on organizing a concept map ensured that the narrative texts had an even higher content score, meaning that the text provided more details about written ideas and events. In conclusion, this means that students can benefit immensely from planning their writing, since it increases their content and organization of the texts. It also shows that not only high school and college students benefit from this, but also elementary school students. Furthermore, concept mapping is a way of pre-task planning that can also be used for elementary school students.

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Appendices

Appendix A. Quality of the text rubric

	Unsatisfactory Response 1	Insufficient Response 2	Uneven Response 3	Sufficient Response 4	Skilful Response 5	Excellent Response 6
Content	Attempts a response, but may only paraphrase the prompt or be extremely brief.	Attempts a response, but is no more than a fragment or the beginning of a story OR is very repetitive.	Attempts to tell a story, but tells only part of a story, gives a plan for a story, or is list-like.	Tells a clear story with little development; has few details.	Tells a clear story with some development, including some relevant descriptive details.	Tells a well-developed story with relevant descriptive details across the response.
Organization	Exhibits no control over organization.	Is very disorganized OR too brief to detect organization.	Lacks a clear progression of events; elements may not fit together or be in sequence.	Events are generally related; may contain brief digressions or inconsistencies.	Events are connected in much of the response; may lack some transitions.	Events are well connected and tie the story together with transitions across the response.
Sentence construction	Exhibits no control over sentence formation; word choice is inaccurate across the response.	Exhibits little control over sentence boundaries and sentence formation; word choice is inaccurate in much of the response	Exhibits uneven control over sentence boundaries and may have some inaccurate word choices.	Generally, has simple sentences and simple word choice; may exhibit uneven control over sentence boundaries.	Exhibits some variety in sentence structure and exhibits some specific word choices.	Sustains varied sentence structure and exhibits specific word choices.
Grammar	Characterized by misspellings, missing words, incorrect word order; errors in	Characterized by misspellings, missing words, incorrect word order; errors in	Errors in grammar, spelling, and mechanics sometimes	Has sentences that consist mostly of complete, clear, distinct thoughts;	Generally, exhibits control over sentence boundaries; errors	Exhibits control over sentence boundaries; errors in grammar,

	grammar, spelling, and mechanics severely impede understanding across the response	grammar, spelling, and mechanics are severe enough to make understanding very difficult in much of the response	interfere with understanding.	errors in grammar, spelling, and mechanics generally do not interfere with understanding.	in grammar, spelling, and mechanics do not interfere with understanding.	spelling, and mechanics do not interfere with understanding.
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Note. Adapted from “The nation’s report card: Writing 2002,” by Persky, Dane, and Jin, 2003. Retrieved from:

<https://nces.ed.gov/nationsreportcard/pdf/main2002/2003529.pdf>

Appendix B. Coding scheme of the quality of the concept map

Content	
Criterion 1:	General concept
0 points	There is no general concept present in the concept map
1 point	A general concept is present in the concept map
Criterion 2:	Links between concepts
0 points	No links are present in the concept map
1 point	A few links are present between the concepts of the concept map, but not all concepts are linked
2 points	All concepts are linked with another concept in the concept map
Criterion 3:	Levels of the concept map
0 points	The concept map only exists of a general concept and there are no other levels of concepts present in the concept map
1 point	The concept map does only have one level of concepts, meaning that linked to the general concept are concepts, but no other concepts have another level of concepts attached.
2 points	The concept map exists of two levels of concepts, meaning that there are new concepts linked to the concepts that are linked to the general concept
3 points	The concept map exists of more than two levels of concepts
Structure	
Criterion 4:	Organization of the concepts
0 points	There is no organization in the concepts that are linked to the general concept. The concepts are randomly placed around the general concept
1 point	The concepts are somewhat organized (e.g. characteristics of the story or events of the story), but most of the concepts are still randomly placed in the concept map.
2 points	The concepts are organized in the concept map (e.g. characteristics of the story or events of the story), but there are still some concepts that are randomly placed in the concept map and that are not organized.
3 points	All the concepts are organized in the concept map (e.g. characteristics of the story or events of the story).

Appendix C. Lesson plans experimental condition and control condition

LESVOORBEREIDINGSFORMULIER

Groep: 7 + 8 experimentele
conditie + controle
conditie

Datum: _____ Lesnr.: 1

HULPVRAGEN

DOELSTELLING(EN)

<p><i>Wat wil je met deze les bereiken bij de leerlingen?</i></p> <p>Wat is je concrete doel en bij welk algemeen doel hoort dit volgens jou?</p>	<p>Aan het einde van de les hebben de leerlingen een verhaal geschreven, waarbij de beginsituatie wordt vastgesteld van de kwaliteit van hun schrijven.</p>
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HULPVRAGEN

BEGINSITUATIE

<p><i>Wat is het vertrekpunt van de leerlingen ten aanzien van je doelstelling(en)?</i></p> <p>Welke inschatting maak je ten aanzien van wat de kinderen kennen, kunnen, voelen en weten ten aanzien van je doelstelling(en)?</p>	<p>De leerlingen zijn al bekend met het schrijven van een verhaal en hebben dit al eerder gedaan. De leerlingen weten hoe een verhaal eruit, weten dat er personages en gebeurtenissen in voorkomen.</p>
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Inleiding

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Aansluiting, oriëntatie, aandacht richten. - Hoe sluit je aan bij de belevingswerelden van de leerlingen? - Hoe sluit je aan bij een vorige les/ activiteit? - Weten de leerlingen hoe de les gaat verlopen en wat er van ze verwacht wordt? <p>Welke 'aandachtvanger' gebruik je?</p>	<p>Hierin wordt de kennis van de leerlingen teruggehaald over het schrijven van een verhaal. De leerlingen krijgen uitleg over wat er allemaal in een verhaal hoort te zitten:</p> <ul style="list-style-type: none"> - gebeurtenissen - personages <p>Daarnaast moeten de leerlingen denken aan de schrijfgeregels, zoals het gebruik maken van komma's en punten en het gebruik van hoofdletters.</p>	<p>Tijdsduur: 5 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

Kern

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Welke gevarieerde didactische werkvormen gebruik je? - Hoe zorg je voor voldoende afwisseling in de activiteiten voor de leerling? 	<p>De leerlingen gaan een verhaal schrijven over een probleem op vakantie. Daarbij kan het bijvoorbeeld gaan over dat de</p>	<p>Tijdsduur: 20 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p>

<ul style="list-style-type: none"> - Hoe heb je de leerstof overzichtelijk en toegankelijk gemaakt voor de leerlingen? - Wat zal leerlingen aanspreken in de leerstof en op welke wijze kun je hier rekening mee houden? - Waar komen leerlingen (aspecten van) de leerstof tegen in hun leefwereld en op welke wijze kun je dit gebruiken in je les? - Hoe heb je ervoor gezorgd dat de leerlingen actief met de leerstof bezig zijn? - Welke aanschouwelijke middelen gebruik je bij de les? - Hoe kun je de sfeer in de les optimaliseren? - Hoe is er sprake van een logische opbouw in inleiding, kern en afsluiting? - Heb je nog goed voor ogen wat je met deze les wilt bereiken? 	<p>auto onderweg naar vakantie kapotgaat.</p> <p>De leerlingen zijn vrij in wat ze willen neerzetten in het verhaal. Voorwaarde voor het verhaal is wel dat er minimaal twee gebeurtenissen in moeten zitten en dat er drie personages in voor moeten komen.</p> <p>De leerlingen mogen zelf beslissen waar ze het verhaal over gaan schrijven binnen het gegeven criterium.</p> <p>Als de leerlingen er niet uitkomen, dan kan de leerkracht een titel voor een verhaal geven, wat de leerlingen meer inspiratie en richtlijnen kan geven. Opties daarvoor zijn:</p> <ul style="list-style-type: none"> - Het vliegtuig gemist - Er is een haai in de zee - Er zijn spullen gestolen op de camping - Een familielid is verdwenen op vakantie 	<p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>
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Afsluiting

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Hoe controleer je of de leerlingen de doelen van de les hebben bereikt? - Kun je samen met de leerlingen bespreken hoe er in de les gewerkt is? <p>Kun je een gezamenlijke activiteit bedenken waarmee je de les afrondt?</p>	<p>De leerlingen leveren de verhalen apart bij de leerkracht in zodat deze kunnen worden verzameld voor het onderzoek. Eventueel kan er aan het einde van de les nog een korte evaluatie komen over wat de leerlingen moeilijk/makkelijk vonden en wat ze leuk vonden aan het schrijven van een verhaal.</p>	<p>Tijdsduur: 5 min.</p>

LESVOORBEREIDINGSFORMULIER

Groep: 7 + 8 controle conditie
 Datum: Lesnr.: 2

HULPVRAGEN

DOELSTELLING(EN)

<p><i>Wat wil je met deze les bereiken bij de leerlingen?</i></p> <p>Wat is je concrete doel en bij welk algemeen doel hoort dit volgens jou?</p>	<p>Aan het einde van de les hebben de leerlingen een verhaal geschreven, waarbij de beginsituatie wordt vastgesteld van de kwaliteit van hun schrijven.</p>
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HULPVRAGEN

BEGINSITUATIE

<p><i>Wat is het vertrekpunt van de leerlingen ten aanzien van je doelstelling(en)?</i></p> <p>Welke inschatting maak je ten aanzien van wat de kinderen kennen, kunnen, voelen en weten ten aanzien van je doelstelling(en)?</p>	<p>De leerlingen zijn al bekend met het schrijven van een verhaal en hebben dit al eerder gedaan. De leerlingen weten hoe een verhaal eruit, weten dat er personages en gebeurtenissen in voorkomen.</p>
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Inleiding

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Aansluiting, oriëntatie, aandacht richten. - Hoe sluit je aan bij de belevingswerelden van de leerlingen? - Hoe sluit je aan bij een vorige les/ activiteit? - Weten de leerlingen hoe de les gaat verlopen en wat er van ze verwacht wordt? <p>Welke 'aandachtvanger' gebruik je?</p>	<p>Hierin wordt de kennis van de leerlingen teruggehaald over het schrijven van een verhaal. De leerlingen krijgen uitleg over wat er allemaal in een verhaal hoort te zitten:</p> <ul style="list-style-type: none"> - gebeurtenissen - personages <p>Daarnaast moeten de leerlingen denken aan de schrijfgeregels, zoals het gebruik maken van komma's en punten en het gebruik van hoofdletters.</p>	<p>Tijdsduur: 5 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

Kern

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Welke gevarieerde didactische werkvormen gebruik je? - Hoe zorg je voor voldoende afwisseling in de activiteiten voor de leerling? - Hoe heb je de leerstof overzichtelijk en 	<p>De leerlingen gaan een verhaal schrijven over een probleem op school. Dit kan bijvoorbeeld gaan over hele strenge leerkracht, waar de klas iets aan wil doen.</p> <p>De leerlingen zijn vrij in wat ze willen neerzetten in het verhaal.</p>	<p>Tijdsduur: 20 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p>

<p>toegankelijk gemaakt voor de leerlingen?</p> <ul style="list-style-type: none"> - Wat zal leerlingen aanspreken in de leerstof en op welke wijze kun je hier rekening mee houden? - Waar komen leerlingen (aspecten van) de leerstof tegen in hun leefwereld en op welke wijze kun je dit gebruiken in je les? - Hoe heb je ervoor gezorgd dat de leerlingen actief met de leerstof bezig zijn? - Welke aanschouwelijke middelen gebruik je bij de les? - Hoe kun je de sfeer in de les optimaliseren? - Hoe is er sprake van een logische opbouw in inleiding, kern en afsluiting? - Heb je nog goed voor ogen wat je met deze les wilt bereiken? 	<p>Voorwaarde voor het verhaal is wel dat er minimaal twee gebeurtenissen in moeten zitten en dat er drie personages in voor moeten komen. De leerlingen mogen zelf beslissen waar ze het verhaal over gaan schrijven binnen het gegeven criterium.</p> <p>Als de leerlingen er niet uitkomen, dan kan de leerkracht een titel voor een verhaal geven, wat de leerlingen meer inspiratie en richtlijnen kan geven. Opties daarvoor zijn:</p> <ul style="list-style-type: none"> - Een schoolvoetbalwedstrijd tussen twee scholen die elkaar niet mogen - De gestolen knikkers van een leerling - Het schoolfeest dat niet door kan gaan - Het schoolreisje dat verkeerd gaat 	<ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>
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Afsluiting

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Hoe controleer je of de leerlingen de doelen van de les hebben bereikt? - Kun je samen met de leerlingen bespreken hoe er in de les gewerkt is? <p>Kun je een gezamenlijke activiteit bedenken waarmee je de les afrondt?</p>	<p>De leerlingen leveren de verhalen apart bij de leerkracht in zodat deze kunnen worden verzameld voor het onderzoek. Eventueel kan er aan het einde van de les nog een korte evaluatie komen over wat de leerlingen moeilijk/makkelijk vonden en wat ze leuk vonden aan het schrijven van een verhaal.</p>	<p>Tijdsduur: 5 min.</p>

LESVOORBEREIDINGSFORMULIER

Groep: 7 + 8 experimentele
 conditie

Datum: _____ Lesnr.: 2

HULPVRAGEN

DOELSTELLING(EN)

<p><i>Wat wil je met deze les bereiken bij de leerlingen?</i></p> <p>Wat is je concrete doel en bij welk algemeen doel hoort dit volgens jou?</p>	<p>Aan het einde van de les hebben de leerlingen een verhaal geschreven, waarbij ze gebruik hebben gemaakt van een concept map.</p>
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HULPVRAGEN

BEGINSITUATIE

<p><i>Wat is het vertrekpunt van de leerlingen ten aanzien van je doelstelling(en)?</i></p> <p>Welke inschatting maak je ten aanzien van wat de kinderen kennen, kunnen, voelen en weten ten aanzien van je doelstelling(en)?</p>	<p>De leerlingen zijn al bekend met het schrijven van een verhaal en hebben dit al eerder gedaan. De leerlingen weten hoe een verhaal eruit, weten dat er personages en gebeurtenissen in voorkomen.</p>
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Inleiding

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Aansluiting, oriëntatie, aandacht richten. - Hoe sluit je aan bij de belevingswerelden van de leerlingen? - Hoe sluit je aan bij een vorige les/ activiteit? - Weten de leerlingen hoe de les gaat verlopen en wat er van ze verwacht wordt? <p>Welke 'aandachtvanger' gebruik je?</p>	<p>Hierin wordt de kennis van het maken van een concept map teruggehaald. Samen met de leerlingen wordt er een concept map gemaakt op het digibord. Dit gaat over een bekend verhaal wat de leerlingen kennen (bijvoorbeeld een boek wat iedereen leest of een boek wat met de klas gelezen wordt). Samen wordt er een concept map van het verhaal gemaakt. Vragen die hierbij gesteld worden zijn:</p> <ul style="list-style-type: none"> - Wat is het belangrijkste concept van de concept map? - Wat is handig om er allemaal in te verwerken? <p>Hierbij moeten de antwoorden voornamelijk uit de leerlingen komen.</p>	<p>Tijdsduur: 10 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Papier voor de concept map - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

Kern

ONTWERPVragen	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Welke gevarieerde didactische werkvormen gebruik je? - Hoe zorg je voor voldoende afwisseling in de activiteiten voor de leerling? - Hoe heb je de leerstof overzichtelijk en toegankelijk gemaakt voor de leerlingen? - Wat zal leerlingen aanspreken in de leerstof en op welke wijze kun je hier rekening mee houden? - Waar komen leerlingen (aspecten van) de leerstof tegen in hun leefwereld en op welke wijze kun je dit gebruiken in je les? - Hoe heb je ervoor gezorgd dat de leerlingen actief met de leerstof bezig zijn? - Welke aanschouwelijke middelen gebruik je bij de les? - Hoe kun je de sfeer in de les optimaliseren? - Hoe is er sprake van een logische opbouw in inleiding, kern en afsluiting? - Heb je nog goed voor ogen wat je met deze les wilt bereiken? 	<p>De leerlingen gaan een verhaal schrijven over een probleem op school. Dit kan bijvoorbeeld gaan over hele strenge leerkracht, waar de klas iets aan wil doen.</p> <p>Eerst gaan de leerlingen een concept map maken voor hun verhaal. Aan de hand van deze concept map gaan ze vervolgens een verhaal maken. De leerlingen zijn vrij in wat ze willen neerzetten in het verhaal. Voorwaarde voor het verhaal is wel dat er minimaal twee gebeurtenissen in moeten zitten en dat er drie personages in voor moeten komen. De leerlingen mogen zelf beslissen waar ze het verhaal over gaan schrijven binnen het gegeven criterium.</p> <p>Als de leerlingen er niet uitkomen, dan kan de leerkracht een titel voor een verhaal geven, wat de leerlingen meer inspiratie en richtlijnen kan geven. Opties daarvoor zijn:</p> <ul style="list-style-type: none"> - Een schoolvoetbalwedstrijd tussen twee scholen die elkaar niet mogen - De gestolen knikkers van een leerling - Het schoolfeest dat niet door kan gaan - Het schoolreisje dat verkeerd gaat 	<p>Tijdsduur: 20 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Papier voor de concept map - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

Afsluiting

ONTWERPVragen	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Hoe controleer je of de leerlingen de doelen van de les hebben bereikt? - Kun je samen met de leerlingen bespreken hoe er in de les gewerkt is? <p>Kun je een gezamenlijke activiteit bedenken waarmee je de les afrondt?</p>	<p>De leerlingen leveren de verhalen apart bij de leerkracht in zodat deze kunnen worden verzameld voor het onderzoek. De concept maps moeten daarbij ook ingeleverd worden, belangrijk is dat beide van naam voorzien zijn. Eventueel</p>	<p>Tijdsduur: 5 min.</p>

	kan er aan het einde van de les nog een korte evaluatie komen over wat de leerlingen moeilijk/makkelijk vonden en wat ze leuk vonden aan het schrijven van een verhaal.	
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LESVOORBEREIDINGSFORMULIER

Groep: 7 + 8 controle conditie
 Datum: _____ Lesnr.: 3

HULPVRAGEN

DOELSTELLING(EN)

<p style="text-align: center;"><i>Wat wil je met deze les bereiken bij de leerlingen?</i></p> <p>Wat is je concrete doel en bij welk algemeen doel hoort dit volgens jou?</p>	<p>Aan het einde van de les hebben de leerlingen een verhaal geschreven, waarbij de beginsituatie wordt vastgesteld van de kwaliteit van hun schrijven.</p>
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HULPVRAGEN

BEGINSITUATIE

<p style="text-align: center;"><i>Wat is het vertrekpunt van de leerlingen ten aanzien van je doelstelling(en)?</i></p> <p>Welke inschatting maak je ten aanzien van wat de kinderen kennen, kunnen, voelen en weten ten aanzien van je doelstelling(en)?</p>	<p>De leerlingen zijn al bekend met het schrijven van een verhaal en hebben dit al eerder gedaan. De leerlingen weten hoe een verhaal eruit, weten dat er personages en gebeurtenissen in voorkomen.</p>
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Inleiding

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Aansluiting, oriëntatie, aandacht richten. - Hoe sluit je aan bij de belevingswerelden van de leerlingen? - Hoe sluit je aan bij een vorige les/ activiteit? - Weten de leerlingen hoe de les gaat verlopen en wat er van ze verwacht wordt? <p>Welke 'aandachtvanger' gebruik je?</p>	<p>Hierin wordt de kennis van de leerlingen teruggehaald over het schrijven van een verhaal. De leerlingen krijgen uitleg over wat er allemaal in een verhaal hoort te zitten:</p> <ul style="list-style-type: none"> - gebeurtenissen - personages <p>Daarnaast moeten de leerlingen denken aan de schrijfgeregels, zoals het gebruik maken van komma's en punten en het gebruik van hoofdletters.</p>	<p>Tijdsduur: 5 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

Kern

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Welke gevarieerde didactische werkvormen gebruik je? - Hoe zorg je voor voldoende afwisseling in de activiteiten voor de leerling? - Hoe heb je de leerstof overzichtelijk en toegankelijk gemaakt voor de leerlingen? - Wat zal leerlingen aanspreken in de leerstof en op welke 	<p>De leerlingen gaan een verhaal schrijven over een detective. Hierin moet een mysterie worden opgelost door een detective.</p> <p>De leerlingen zijn vrij in wat ze willen neerzetten in het</p>	<p>Tijdsduur: 20 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen

<p>wijze kun je hier rekening mee houden?</p> <ul style="list-style-type: none"> - Waar komen leerlingen (aspecten van) de leerstof tegen in hun leefwereld en op welke wijze kun je dit gebruiken in je les? - Hoe heb je ervoor gezorgd dat de leerlingen actief met de leerstof bezig zijn? - Welke aanschouwelijke middelen gebruik je bij de les? - Hoe kun je de sfeer in de les optimaliseren? - Hoe is er sprake van een logische opbouw in inleiding, kern en afsluiting? - Heb je nog goed voor ogen wat je met deze les wilt bereiken? 	<p>verhaal. Voorwaarde voor het verhaal is wel dat er minimaal twee gebeurtenissen in moeten zitten en dat er drie personages in voor moeten komen.</p> <p>De leerlingen mogen zelf beslissen waar ze het verhaal over gaan schrijven binnen het gegeven criterium.</p> <p>Als de leerlingen er niet uitkomen, dan kan de leerkracht een titel voor een verhaal geven, wat de leerlingen meer inspiratie en richtlijnen kan geven. Opties daarvoor zijn:</p> <ul style="list-style-type: none"> - Het gestolen schilderij - Het huisdier die is weggelopen - Ingebroken op school - De fiets die is gestolen 	<p>- Digibord voor de uitleg</p> <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>
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Afsluiting

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Hoe controleer je of de leerlingen de doelen van de les hebben bereikt? - Kun je samen met de leerlingen bespreken hoe er in de les gewerkt is? <p>Kun je een gezamenlijke activiteit bedenken waarmee je de les afrondt?</p>	<p>De leerlingen leveren de verhalen apart bij de leerkracht in zodat deze kunnen worden verzameld voor het onderzoek. Eventueel kan er aan het einde van de les nog een korte evaluatie komen over wat de leerlingen moeilijk/makkelijk vonden en wat ze leuk vonden aan het schrijven van een verhaal.</p>	<p>Tijdsduur: 5 min.</p>

LESVOORBEREIDINGSFORMULIER

Groep: 7 + 8 experimentele
 conditie

Datum: _____ Lesnr.: 3

HULPVRAGEN

DOELSTELLING(EN)

<p><i>Wat wil je met deze les bereiken bij de leerlingen?</i></p> <p>Wat is je concrete doel en bij welk algemeen doel hoort dit volgens jou?</p>	<p>Aan het einde van de les hebben de leerlingen een verhaal geschreven, waarbij ze gebruik hebben gemaakt van een concept map en de concept map georganiseerd gaat worden.</p>
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HULPVRAGEN

BEGINSITUATIE

<p><i>Wat is het vertrekpunt van de leerlingen ten aanzien van je doelstelling(en)?</i></p> <p>Welke inschatting maak je ten aanzien van wat de kinderen kennen, kunnen, voelen en weten ten aanzien van je doelstelling(en)?</p>	<p>De leerlingen zijn al bekend met het schrijven van een verhaal en hebben dit al eerder gedaan. De leerlingen weten hoe een verhaal eruit, weten dat er personages en gebeurtenissen in voorkomen.</p>
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Inleiding

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Aansluiting, oriëntatie, aandacht richten. - Hoe sluit je aan bij de belevingswerelden van de leerlingen? - Hoe sluit je aan bij een vorige les/ activiteit? - Weten de leerlingen hoe de les gaat verlopen en wat er van ze verwacht wordt? <p>Welke 'aandachtvanger' gebruik je?</p>	<p>Hierin wordt de kennis van het maken van een concept map teruggehaald. Samen met de leerlingen wordt er een concept map gemaakt op het digibord. Dit gaat over een bekend verhaal wat de leerlingen kennen (bijvoorbeeld een boek wat iedereen leest of een boek wat met de klas gelezen wordt). Dit keer gaat het om de organisatie van de concept map. De organisatie hiervan wordt per gebeurtenis van het verhaal. Dus per "tak" die aanwezig is in de concept map is er een bepaalde gebeurtenis, hierbij komen dan de personages, plekken en wat er gebeurt. Dit wordt weer samen met de leerlingen gedaan. Eerst kan de leerlingen gevraagd worden wat hun idee is bij het organiseren van een concept</p>	<p>Tijdsduur: 10 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Papier voor de concept map - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

	map. Vervolgens wordt de manier uitgelegd hoe het deze les wordt gedaan.	
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Kern

ONTWERPVVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Welke gevarieerde didactische werkvormen gebruik je? - Hoe zorg je voor voldoende afwisseling in de activiteiten voor de leerling? - Hoe heb je de leerstof overzichtelijk en toegankelijk gemaakt voor de leerlingen? - Wat zal leerlingen aanspreken in de leerstof en op welke wijze kun je hier rekening mee houden? - Waar komen leerlingen (aspecten van) de leerstof tegen in hun leefwereld en op welke wijze kun je dit gebruiken in je les? - Hoe heb je ervoor gezorgd dat de leerlingen actief met de leerstof bezig zijn? - Welke aanschouwelijke middelen gebruik je bij de les? - Hoe kun je de sfeer in de les optimaliseren? - Hoe is er sprake van een logische opbouw in inleiding, kern en afsluiting? - Heb je nog goed voor ogen wat je met deze les wilt bereiken? 	<p>De leerlingen gaan een verhaal schrijven over een detective. Hierin moet een mysterie worden opgelost door een detective.</p> <p>Eerst gaan de leerlingen een concept map maken voor hun verhaal. Deze wordt aan de hand van de beschreven organisatie gedaan. Aan de hand van deze concept map gaan ze vervolgens een verhaal maken.</p> <p>De leerlingen zijn vrij in wat ze willen neerzetten in het verhaal. Voorwaarde voor het verhaal is wel dat er minimaal twee gebeurtenissen in moeten zitten en dat er drie personages in voor moeten komen.</p> <p>De leerlingen mogen zelf beslissen waar ze het verhaal over gaan schrijven binnen het gegeven criterium.</p> <p>Als de leerlingen er niet uitkomen, dan kan de leerkracht een titel voor een verhaal geven, wat de leerlingen meer inspiratie en richtlijnen kan geven. Opties daarvoor zijn:</p> <ul style="list-style-type: none"> - Het gestolen schilderij - Het huisdier die is weggelopen - Ingebroken op school - De fiets die is gestolen 	<p>Tijdsduur: 20 min.</p> <p>De leerlingen werken individueel aan deze opdracht.</p> <p>Materiaal:</p> <ul style="list-style-type: none"> - Schrijfpapier voor de leerlingen - Papier voor de concept map - Digibord voor de uitleg <p>De leerlingen schrijven het verhaal op een apart papier, zodat deze kan worden ingenomen voor het onderzoek.</p>

Afsluiting

ONTWERPVRAGEN	LESBESCHRIJVING	ORGANISATIE
<ul style="list-style-type: none"> - Hoe controleer je of de leerlingen de doelen van de les hebben bereikt? - Kun je samen met de leerlingen bespreken hoe er in de les gewerkt is? <p>Kun je een gezamenlijke activiteit bedenken waarmee je de les afrondt?</p>	<p>De leerlingen leveren de verhalen apart bij de leerkracht in zodat deze kunnen worden verzameld voor het onderzoek. De concept maps moeten daarbij ook ingeleverd worden, belangrijk is dat beide van naam voorzien zijn. Eventueel kan er aan het einde van de les nog een korte evaluatie komen over wat de leerlingen moeilijk/makkelijk vonden en wat ze leuk vonden aan het schrijven van een verhaal.</p>	<p>Tijdsduur: 5 min.</p>

Appendix D. Concept maps

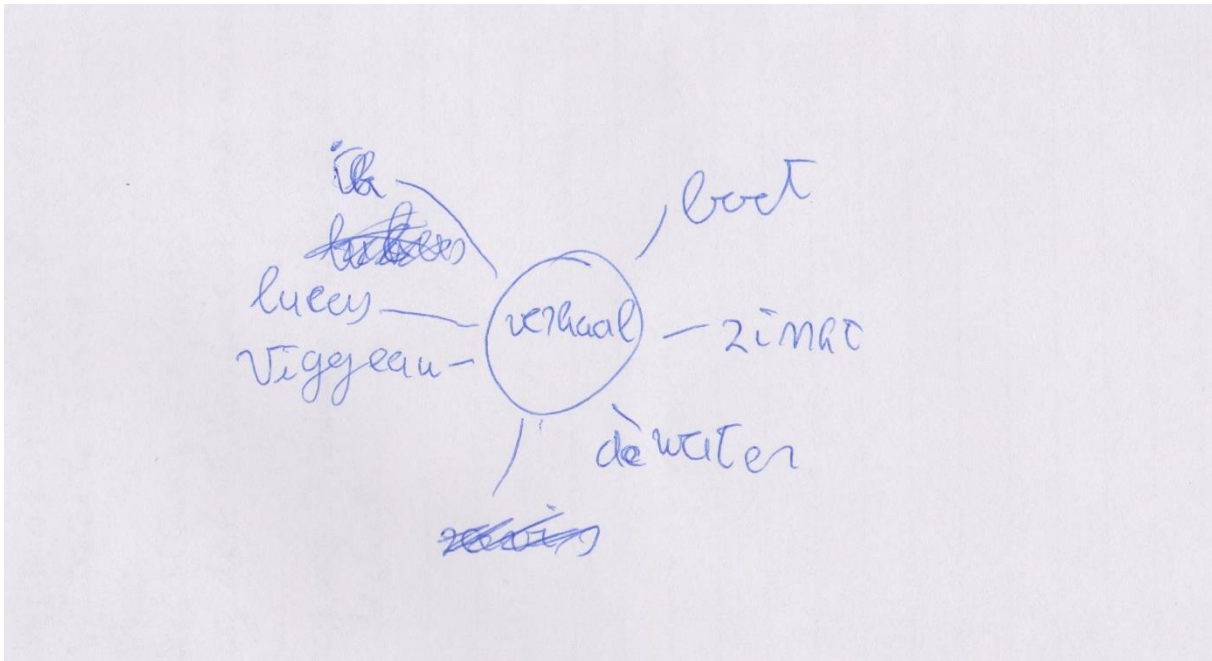


Figure 1. Concept map after the “concept map instruction”.

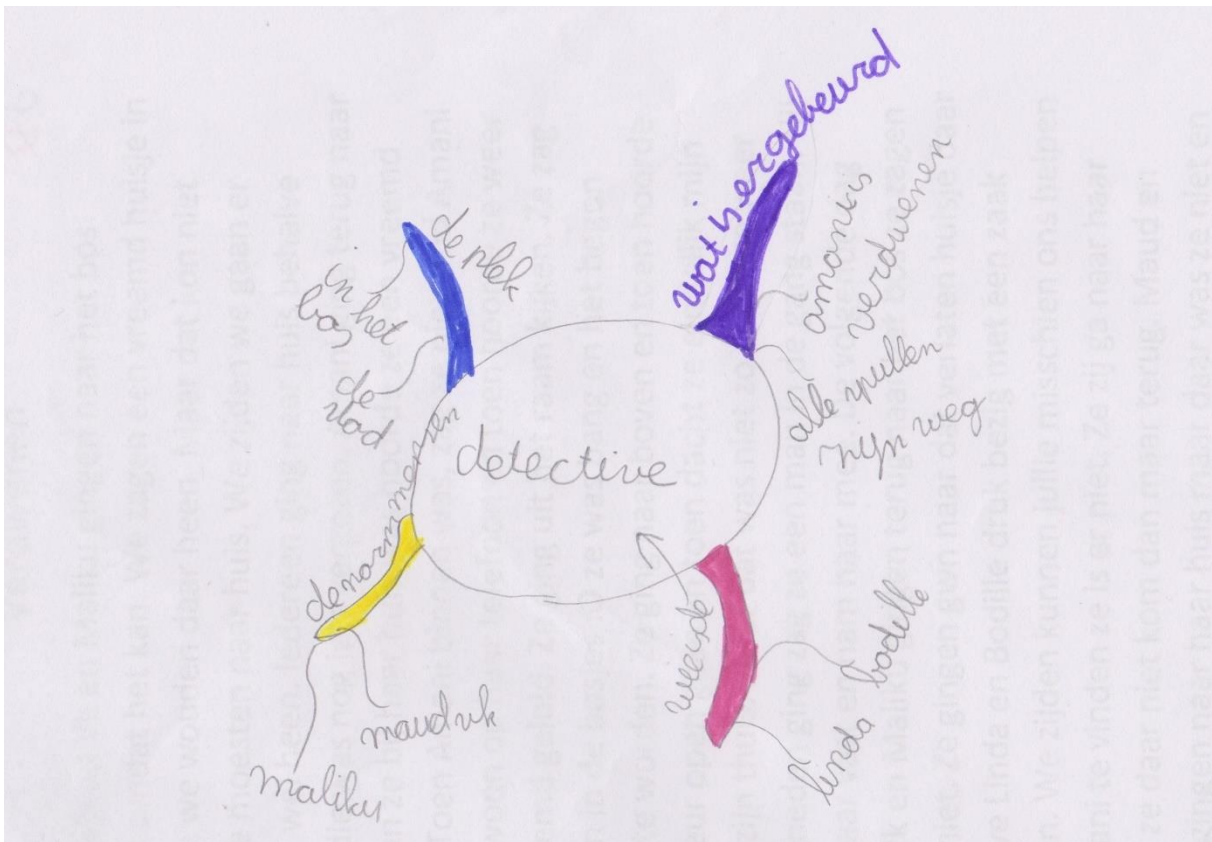


Figure 2. Concept map after the “Organizing concepts in a concept map instruction”.