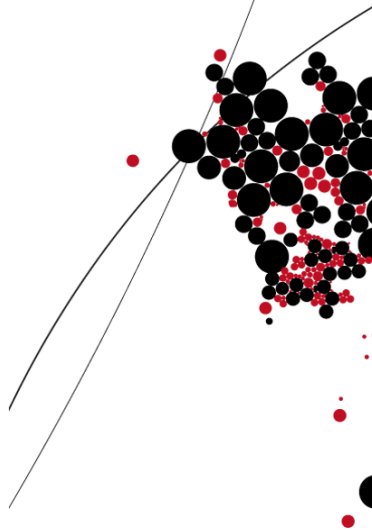




**Master thesis**

**Cooperative learning in Intermediate Vocational Education.  
Foreign language learning**

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## **Abstract**

Society and technology change rapidly. Therefore, the educational system, and the teaching methods used, need to change too. Educators increasingly struggle to capture the attention of students, especially among students in intermediate vocational education which are often considered a difficult target group. To achieve more meaningful learning, active teaching and activating students is needed, also in foreign language learning. This research aims to find out whether cooperative learning activities can positively influence the reading and speaking skills in foreign language learning for these students, and to determine if there is an effect between cooperative learning and the flow students experience during these cooperative learning activities. In total, 37 participants followed four special designed language lessons with cooperative learning activities. During these learning activities, it was important that the involvement and the flow students experienced was as high as possible. All participants did a pre-test and the final test. To analyze the flow participants experienced, the FKS questionnaire and a questionnaire to analyze the evaluation of cooperative learning were used during these lessons. The study showed less impact of cooperative learning than expected. The expectation was that cooperative learning improved more involvement among students, higher results and more speaking minutes of a foreign language. Surprisingly, the final results of the Toa test speaking and the Toa test reading from the group who experienced cooperative learning, did not significantly differ from the control group. Furthermore, it was surprising that there was no significant effect on the number of new learned/read words. However, cooperative learning did have a positive effect on students' average of speaking minutes during class. Also, according to the flow FKS questionnaire, students experienced cooperative learning lessons as positive.

All-in-all, the results of this research indicate that although cooperative learning is experienced as a positive teaching method by students of the intermediate vocational education, it is not specifically an influencing factor on higher results on speaking and reading skills in foreign language learning. The results of this study can be used by further investigate which teaching method or which variety of teaching methods is/are suitable for students of the intermediate vocational education to increase their level and the participation during language education.

## **Keywords**

Intermediate vocational education (MBO), motivating practice, higher level of flow and motivation, cooperative learning, foreign language learning

## **Preface**

This research is a practice-oriented research and discusses the value of cooperative learning for first grade students of intermediate vocational education regarding learning a foreign language. The research question stems from the concerns and daily experience on a large intermediate vocational education situated in central Netherlands.

The experience as a teacher is that students of the intermediate vocational education often feel uncomfortable speaking a foreign language in class and they often have difficulties with reading. Because of the importance of reading and speaking a foreign language, especially English, students need to practice these skills more often and they have to get over the (speaking) hump. Cooperative learning gives students the opportunity to practice their communication skills and therefore prepare them for future face-to-face conversations, telephone conversations, communicating with customers and reading documents, articles and contracts. All types of skills that are needed for students who attend a financial business study and often consider pursuing a future career in business.

The purpose is to investigate if lessons with cooperative learning activities have influence on learning a foreign language and if it has influence on better and more speaking of the foreign language. In these learning activities, it is important to do work activities where the flow and involvement of students is as high as possible. Students work within their own class in mixed ability groups of four. In a cooperative setting, they work on their speaking and reading skills. The focus in this study is on students of intermediate vocational education from the age of 18 until 20 years old. There is one experimental class and one control class. This research covers a time period of six weeks and students work on foreign language learning 60 minutes a week.

March 2019,  
Rosanne Koops

## **Researchers name and affiliation**

This research essay is written in the context of the graduation project of Rosanne Koops. This research is conducted as a final project of the master Educational Science and Technology at the University of Twente. Within this research, students of intermediate vocational education ROC Midden Nederland are involved. ROC Midden Nederland is an educational organization that is already more than 12 years active in the field of intermediate vocational education, located in the region of Utrecht, the Netherlands.

“Believe in yourself and all that you are. Know that there is  
something inside you that is greater  
than any obstacle.”

Christian D. Larson

**Title**

Cooperative learning in Intermediate Vocational Education. Foreign language learning

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# **1. Introduction**

## **1.1 Research**

Speaking anxiety is a topic that is frequently studied within the field of foreign language acquisition (Siyli & Kafes, 2015). Students also have limited opportunities for active use of the foreign language outside the classroom. Because of the importance of reading and speaking in the foreign language, students need to practice these skills more often and they have to get over their speaking anxiety. Cooperative learning gives students the opportunity to practice their communication skills in small groups and not in front of the entire class. For students who are attending a financial business study and often consider pursuing a career in business it is important to be able participate in written as well as oral communication. Cooperative practice can prepare them for future job-related face-to-face conversations, telephone conversations, communicating with customers and reading documents, articles and contracts.

The purpose of this study is to investigate whether lessons with cooperative learning activities have a positive influence on speaking and reading a foreign language.

## **1.2 The potential of cooperative language learning for intermediate vocational students**

Drop-out, absence and demotivation are considered major problems in intermediate vocational education (Vanneste, Feron, van Mook, and de Rijk, 2017) and also in foreign language education. Students often lack in participating during language education, and have to overcome their fear of speaking and practicing a foreign language, while teachers have difficulties capturing students' attention. At least, this is the experience of a large ROC (Regional Education Center that offers intermediate vocational education), situated in central Netherlands. The low level of student engagement is associated with drops in students' academic performance and behavioral problems in the classroom (Klem & Connel, 2004). Research conducted by TOA (Bureau Ice, 2018) shows that students in intermediate vocational education express low levels of engagement in language course. Since language training involves active practices, it is very important to increase motivation. Research shows traditional, expository teaching methods are not always the best way to increase motivation (Ryan et al. 1999) and that more active and student-centered approaches are linked to higher levels of engagement (Macleod et al, 2015; Machemer & Crawford, 2007). Engagement benefits from active participation in academic activities. Cooperative small group learning has the potential to activate the students and also provides opportunities to actively practice language skills. Research findings indicate that cooperative learning can have a positive effect on students' problem-solving performance and achievement learning achievement (Sears & Reagin, 2013; Slavin, 2014) as well as motivation (Noels et al. 2000). According to Johnson and Johnson (2013), students who work in small groups, all get the chance to be actively involved in the activity, while with upfront teaching, often only students who are asked by teachers are at that moment actively involved. By working cooperatively in small groups, you increase the chance on active participation of all students.

Cooperative learning has potentially a positive effect on students' motivation and learning outcomes, but is not frequently used by teacher since they do not always have enough knowledge or skills to implement or use it (Baker & Clark, 2010; Macpherson, 2015). Teachers might have recognized the fact that students need to be actively engaged with the material they are trying to teach them (McGlynn, 2005), but also see that productive cooperative learning is rare among students (Li & Lam, 2013). According to Li and Lam (2013) students rarely celebrate each other's successes, find it difficult to encourage each

other and only seldom engage in productive helping behavior which causes unproductive cooperative learning.

### **1.3 Foreign language education**

Foreign language is a cover term for any language which is not the native language of the majority of people in a certain country or region, and is not used as a regular language in communication (Richards & Smidt, 2002). From this definition, it becomes clear that foreign language education focusses on languages which are not the mother tongue and are typically taught as academic subjects in order to teach students to communicate with foreigners (Richards & Smidt, 2002). For students in intermediate vocational education this might involve a language that is often used in their future work environment. Within the context of foreign language education, cooperation is not only interesting because of the potential effect on motivation (Li & Lam, 2013; Faryadi, 2007), but it also offers opportunities to increase interaction in the foreign language. Task based language learning, which focuses on the use of authentic language and on meaningful tasks using the target language, can also be used to increase the interaction and also to improve cooperative learning and foreign language learning. Forms of cooperative learning fit in the context of Task Based Language Teaching (Long, 1985), where the focus is on practicing and using authentic language in a meaningful context and not on teaching language as a system of rules that are taught to the students in a piecewise and decontextualized manner, and practice in isolated sentences (Long, 1985). Most language learners in intermediate vocational education learn the language for functional purposes. Their motivation to engage in the language classes therefore might also be linked to this specific purpose. Allowing students to actively work in a (semi-)authentic setting that includes interaction with others might increase their motivation for language courses. This is in line with the work of Noels et al. (2000) who argue that to foster sustained learning, it may not be sufficient to convince students that language learning is interesting and enjoyable; they may need to be persuaded that it is also personally important for them. Students need to be aware of the fact that learning a foreign language is relevant for the job market in which people are expected to be able to have an English conversation and to read e-mails and (short) contracts. According to Smith and Candlin (2014), when students work together on a language activity in a meaningful context, for example relevant for the job market, students will actively use the foreign language. This is also in line with Task Based Language Teaching which focuses on authentic exercises (Long, 1985). When these exercises are performed in cooperative groups, active interaction with the teaching materials can be maximized. When students work together, in a cooperative learning setting, the language and think development is stimulated on different levels. Content wise, the activity has a language goal; students are working with language activities. In addition, students work on language activities and communicate with each other and while doing that, enhance their speaking and listening skills, and practice thinking strategies (Noels et al. 2000).

### **1.4 Students' flow and motivation**

In line with Task Based Language Teaching, students should be aware of the relevance of the assignments in the context of their professional career. Relevant cooperative learning tasks might not only effect students' learning outcomes but also students' motivation in the context of foreign language learning. When students work on a task that they experience as relevant and feel pleasantly challenged they might experience a flow. Flow is defined as a mental state of mind in which a person is fully absorbed in the activity, with a motivated and energetic focus (Esteban-Millat et al. 2014). When people experience a flow, all thoughts, desires and feelings are in harmony, which can be a success element in the progress of the process in learning a foreign language (Esteban-Millat et al. 2014). Experiencing a flow during cooperative learning activities can be of extra value in foreign language learning, because

when students experience flow in their work activity, this is often combined with more motivation for the specific task (Fan & Wolters, 2014) and more involvement. When students are more motivated and involved, students have more chance of making progress in learning a foreign language. Motivation is a very important factor for students to do well in school and to participate during class activities and, as explained before, there is not enough motivation in vocational education, therefore it is important for students to experience flow during their activities. Fan and Wolters (2014) explain that a good deal of evidence indicates that students' motivational beliefs and attitudes play a critical role in their academic success. Currently, the lack of motivation and speaking anxiety play a large role in second language learning in intermediate vocational education. Therefore, task-based learning in foreign language learning can make a difference in motivation. By using cooperative learning activities, and also task-based learning within these activities, students get the opportunity to be more involved in the learning process which can lead to more motivation (Fan & Wolters, 2014).

When students experience more flow during foreign language learning, it can improve their motivation and therefore can help students to speak, to make mistakes, to try, and eventually to overcome their own boundaries and when necessary to overcome their speaking anxiety in foreign language learning.

### **1.5 Designing for optimal cooperative language learning**

Currently, our educational system has a conventional lecture-oriented curriculum with its emphasis on passive learning (Michael, 2006). It is urgently needed that students become interested in actively knowing, rather than passively believing (Michael, 2006). To learn, students must do more than listen. They must read, write, discuss, be active, which refers to knowledge, skills and attitudes. They must master the foreign language actively, not passively. To provide working on these skills, cooperative learning lessons are inserted, which can especially be beneficial for speaking a foreign language (Noels et al. 2000).

Overall forms of cooperative and small group learning are associated with positive learning outcomes. This is illustrated by the results of a review study by Robert Slavin including 67 studies on cooperative learning. He found that overall 61% of the cooperative learning classes achieved significantly higher test scores than the traditional classes (Slavin, 1991).

In order to create a positive learning outcome, designers of the learning material as well as teachers play an important role. Designers and teachers can create learning activities and facilitate students in such a way that they are encouraged to actively engage in the cooperative learning process (Barry, 2006; Magennis & Farrell, 2005).

When designing for an optimal cooperative learning process regarding a foreign language, it is important to embed task based learning so students are actively involved with the language and with the task (Li & Lam, 2013). These tasks should be as authentic and relevant as possible in order for students to pursue an optimal feeling of flow and therefore to be more motivated and involved in the learning process (Li & Lam, 2013; Long, 1985). This can be difficult, therefore Duplass (2006) formulated eight basic features that can be used to design cooperative learning assignments. These basic features are presented in Figure 1 and can help teachers in forming a cooperative learning lesson. The characteristics include teacher monitoring but also aspects that refer to the design of the learning task like group composition and tasks that promote positive interdependence. It is stressed that social skills and group processes are important and should be reflected upon. When all eight parts are well considered, the chance of giving an effective cooperative learning lesson is larger and by keeping this in mind, common problems such as no variety of levels in the group, lack of structure and students who do not know what to do are prevented. In this study, part of the language education was redesigned according to the guidelines of Duplass (2006) and the effect of cooperative learning on foreign language learning and the flow students experience



will be evaluated through the comparison of two groups of students, a control group and an experimental group.

With cooperative learning activities used in this research, such as working in mixed ability groups on solving a case, discussing articles, statements, and discovery learning by solving a puzzle, students work in a powerful learning environment (Michael, 2006). The expectation of working in a powerful learning environment is an increase of active participation and more engagement during foreign language learning (Kagan & Kagan, 2009). The expectation is also an increase in the speaking minutes of students. To increase the speaking minutes of students and to see results in students who experience less difficulties talking to each other in a foreign language would be seen as a benefit in this research, not necessarily as a result. This research is also about measuring the experience, not only the results of tests.

1. Teacher supervision: the instructor should always monitor group activity in order to make sure that learners are not veering too far off the assigned task. Also, the instructor should also be available for answering questions raised by the learners and guiding them through the discussion.
2. Heterogeneous groups: groups of diverse levels of ability should be created.
3. Positive interdependence: to achieve positive interdependence, the group should work towards a reward or final learning objective.
4. Face-to-face interaction: the teacher should encourage the learners to use verbal and nonverbal communication to explain learning materials to each other or deal with problems encountered.
5. Individual accountability: learners are assigned specific roles in the group (when possible) to ensure they are all accountable for completing their tasks. In addition, each member of the group should assist the whole group in meeting the learning outcome.
6. Social skills: cooperative learning promotes social skills such as speaking in an appropriate manner, being respectful, and wisely utilizing the time allocated to a task.
7. Group processing: learners should reflect on the way the group functioned during learning activities.
8. Evaluation: assessment can take the form of both individual and group assessment.

**Fig. 1** Eight basic features cooperative learning should include retrieved from Duplass (2006).

## 2. Research question

In this study we compared the relation between cooperative learning and students' performance in reading and speaking in learning a foreign language. In order to guide the research, the three following research questions are posed:

1. Can cooperative learning positively influence students' performance (results) in reading and speaking in foreign language learning?"

*Definition of 'positively influence': consisting in the presence of distinguishing features, the capacity to have a visible and beneficial effect on the learning outcome of the students (Oxford Dictionary, 2019). 'Positively' means students will have higher results during their final tests in comparison to their pre-tests.*

2. Does cooperative learning result in more speaking minutes and in learning more new words?

*Definition of 'more speaking minutes and learning more new words': an increase of learning new words and an increase of speaking minutes during their final lesson of cooperative learning. This compared to the number of new learned words in reading and the total of speaking minutes students of the intermediate vocational education have acquired during their first lesson of cooperative learning.*

3. Do students experience cooperative learning as a positive and beneficial (motivational) teaching method?

*Definition of 'positive and beneficial': the teaching method cooperative learning being appreciated as helpful and profitable e.g. will result in more motivation for accomplishing a certain assignment and/or involvement during the process of learning a foreign language (in class).*

In addition, the following hypotheses are formulated:

Hypothesis 1: Cooperative learning lessons have a positive effect on students' test results in speaking and reading in foreign language learning.

Hypothesis 2: Cooperative learning positively influences the total of students' speaking minutes in a foreign language.

Hypothesis 3: Students experience cooperative learning as a positive and beneficial teaching method.

### 3. Method

#### 3.1 Context

This study was carried out among first year students of intermediate vocational education financial employee of a large ROC. Students started on this research with the instructional intervention, which consisted of an intake test, four lessons and a final test, targeted two different features; reading and speaking skills of a foreign language (English). These students were chosen because they are not used to cooperative learning and English is an important class for these students considering English is a dominant business language and many of these students would like to continue their studies with a higher business studies or would like to work in an international environment.

#### 3.2 Research methodology

A quasi-experimental research was conducted by using two different questionnaires and by giving special designed cooperative lessons (see intervention). Both questionnaires are existing questionnaires and have proven to be useful in other researches. Responses of both questionnaires are quantified using the statistical program SPSS and the results are presented in the chapter 'Results'. The quantitative data makes the outcome more explicit and objective, which leads to representative results (Babbie, 2010). The data collection is obtrusive, meaning that the participants are aware of the fact they are taking part in a research. Although this may influence their answers on the questionnaires (Boudah, 2010), participants are aware that results of this research have no influence on them in any way and although students signed questionnaires with a number, results are as anonymous as possible and no names are used.

#### 3.3 Participants

This study aimed at gathering data from 50 students of intermediate vocational education of the financial study level 4. Both the experimental group and the control group were a class of students. Students of the experimental group, were divided in mixed-ability groups of four, based on their previous scores for the foreign language (English). At the end of the research, the data collection resulted in 37 respondents (74%), due to missing data for the first or the final test result, not all students could finish participating in this study and therefore their data could not be used. This was for example caused by students who switched studies while the research was taking place, and were therefore unable to finish participating in this research. The experimental group, consisted of 22 students (N=22), and the control group, consisted of 15 students (N=15), of these students, 51.4% is female and 48.6% is male. The experimental group is one complete class and also the control group is one class. All students are between 18 and 21 years old with an average age of 19.

#### 3.4 Materials

##### *TOA-test*

Before students participated in this research, they first completed a pre-test reading and a pre-test speaking by using a TOA-test. TOA is the name of a web-based testing system (Bureau Ice, 2019), based on the Common European Framework of Reference (CEF), and approved by the inspectorate of education and often used in intermediate vocational education. TOA measures the developed knowledge or skills of a specific competence; in this research the speaking skills and the reading skills. Both TOA-tests focus on the same skills and have a similar level of difficulty. In the TOA-test reading, students have to read at least 10 articles that all differ in length. Careers, health, business and school are examples of subjects in these articles. Overall, students have to answer 30 multiple-choice questions with three options. Toa checks the answers and grades the outcome of the test with a censure of 70% for a sufficient grade (5.5 or higher). In the speaking TOA-test, students get four different situations, varied

from leaving a voicemail message to a colleague, to giving a short presentation about a job, or to give an opinion about a certain topic by using arguments. Students have to speak-out what they would say in a certain situation. After handling all four situations, the speaking level of the students is decided by filling in an online form, grading the five following points: coherency, word use and vocabulary, correct grammar, fluency, pronunciation. In the online form, TOA gives the teachers instructions on what would be suitable. All information about validity, reliability and how to use their exam instruments can be found on their website (Bureau Ice, 2019).

#### *Flow-FKS questionnaire*

The flow of all participants, the experimental group as well as the control group, is measured by using the Flow FKS questionnaire (Rheinberg and Vollmeijer, 2003). In this questionnaire, students have to fill in how they feel during the activity they are working on. The outcome of the questionnaires gives an understanding of how students experience the activity, how they feel during the activity and what the activity does with their minds.

During each research lesson (with a total amount of four lessons), the FKS questionnaire was used, for both the experimental group as the control group. The FKS questionnaire has a stipulated time of two minutes for filling in the whole questionnaire and consists of 10 items with a seven-point Likert scale in which 1 means 'not at all' and 7 means 'very much'. The FKS (Flow-Kurzskala) questionnaire is designed by Rheinberg and Vollmeijer (2003) and measures ten dimensions of experiencing a flow with reference to motivation during experimental learning situations. The complete FKS questionnaire is shown in Appendix B. This questionnaire is used four times, each time at the end of the lesson.

The scale reliability of the FKS Flow questionnaire was checked by using Cronbach's Alpha to determine whether the questionnaires were acceptable. The internal consistency and therefore the reliability of all lessons with the FKS Flow questionnaire is acceptable and/or good, the Cronbach's Alpha ranged between  $>0,744$  and  $>0,853$ .

#### *Cooperative learning questionnaire*

To gain more insight in how students experienced the cooperation after each lesson (with a total amount of four lessons) the experimental group filled in the questionnaire 'evaluation cooperative learning'. This questionnaire consists of 17 items with a three-point Likert scale in which 1 means 'disagree', two means 'more or less agree' and three means 'totally agree'. The two final questions are open questions in which students have to fill in the speaking minutes and the new read words, both related to the assignment they worked on. At the end of each of the four lessons, students filled in this questionnaire.

The complete questionnaire evaluation cooperative learning can be found in Appendix C.

The scale reliability of the Questionnaire Evaluation Cooperative learning is in the first lesson questionable,  $\alpha=,662$ . In lesson 2, 3 and 4 it ranged between  $\alpha=,720$  and  $\alpha=,875$ . According to Cortina (1993), the Cronbach's Alpha of the questionnaire Evaluation Cooperative learning in lesson 2 and 3 is good and therefore reliable.

### **3.5 The intervention**

In order to investigate whether cooperative learning has an effect on foreign language learning, special lessons needed to be designed, and therefore an intervention took place. The intervention consisted of four lessons in which several different methods were applied. In figure 2 there are different examples of active learning approaches (Michael, 2006), these examples were used to design the lessons for cooperative learning in a foreign language. All tasks were focused on the use of authentic language and on asking students to do meaningful tasks using the target language English, therefore all assignments included task-based

language learning (Long, 1985). The experimental group worked in groups of four (cooperative learning) and the control group did the assignments individually or together with the teacher in a classical setting (see Appendix D). Also, during each lesson the teacher used the eight basic features regarding cooperative learning from Duplass (2006). While following the lessons, the experimental group members learn together, interact together and transfer knowledge together (Faryadi, 2007).

Problem based of case-based learning

Cooperative/collaborative learning/groupwork of all kinds

Peer instruction

Discovery learning

**Fig. 2** Examples of student-centered, active learning approaches retrieved from Michael (2006).

#### Lesson 1, experimental group:

Students got five or six different articles all related to their study/future job domain. First, students decided which four articles they read. Then they divided the articles, they started reading the article and after reading the article, together they made a large poster with all the highlights of all four articles. While making the poster they discussed in short what their article was about and what the highlights of the article contained. They also included a wordlist on the poster with the Dutch translation. When one group member did not understand an article, another group member helped and explained. The only language that was allowed to use during this assignment was English. When they were ready with their poster, they gave a short presentation for the other groups, all group members took part in that short presentation.

#### Lesson 1, control group:

The control group also read the articles but they read all articles individually. They had to look up unknown words and at the end of the class, the articles and the content was discussed with the whole class. All students had to explain in English what they read and had to give their opinion about the articles/topic.

#### Lesson 2, experimental group:

Students looked up an article they found interesting. Eventually, each group had four different articles with four different topics. They read all four articles and while reading each article they made notes on a special designed poster in order for students to be able to write on one paper. In the middle of the poster, students can read the procedure for this assignment. Students started with writing down the name of the article in one block. Then each round, students made notes about the articles in the corresponding block. After reading and making notes in the special block for the specific article, they answered each other's questions about the article, discussed each other's opinions, discussed meaning of the words, which article they found the most interesting and why, which one the least interesting etc. Students were only allowed to speak English and every group member explained his/her opinion etc.

#### Lesson 2, control group:

The students in the control group also looked up articles they found interesting, in total they choose three different articles. When they were ready reading, they recorded their opinions about the articles with their phone, they explained which article they found most interesting, which the least interesting etcetera. Afterwards, they listened to their own recording and gave themselves feedback. Eventually, they handed in their recording via BlackBoard, the online environment for students.

#### Lesson 3, experimental group:

Each student got an envelope with different cards with a few sentences on it. Students read the cards to each other, the other students listened carefully and could not see the cards. When everyone was ready reading the cards, they put the cards in the right order so that a story appeared. They really had to work together on this one and could only discuss in English. Then they wrote it down in their own words and told each other the story in their own words. Finally, all students should be able to tell this story in their own words.

#### Lesson 3, control group:

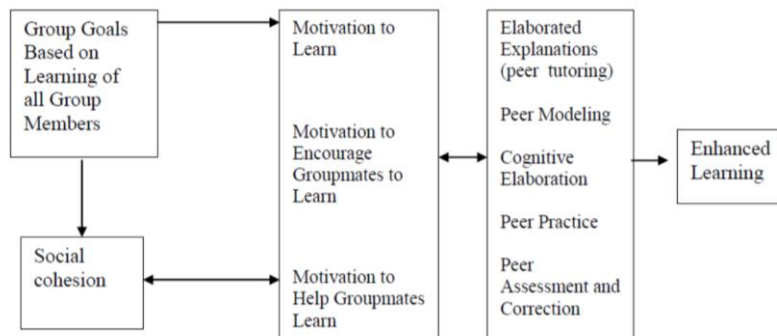
Students of the control group also used the cards to make a story out of it but they did this individually. When they were ready, they wrote down a summary of the story in their own words and discussed this together with the class. When they were ready, they worked in the workbook on the reading assignments.

#### Lesson 4, experimental group:

Students got a handout with four different problem cases (see Appendix D, short explanation cases). First, they read all cases and together they decided for which case they would like to come up with a solution (social cohesion). Then they discussed the case and the goals and gave clarifications. Furthermore, they discussed possible solutions and while discussing they motivated each other to learn, to help each other understand the case and to understand the possible solutions. After discussing the possible solutions and when necessary elaborate explanations, together they decided the best solution (assessment and correction) and prepared a PowerPoint presentation. All these steps help to reach the positive effects of cooperative learning as shown in Figure 3 (Slavin, 2011). Eventually, they presented their solution to the problem in their case to the other groups. Other students asked questions. During the whole assignment, they were only allowed to talk English.

#### Lesson 4, control group:

Students of the control group worked individually on their case, came up with a solution on their own and gave short presentations about their problem and their solution to the rest of the class.



**Fig. 3** Integration of Theoretical Perspectives on Cooperative Learning Effects on Learning, adapted from Slavin (2011).

### 3.6 Design and procedure

Before the cooperative learning lessons, students started the research by completing a pre-test reading (TOA) and a pre-test speaking (TOA) to measure their current level. The reading test focuses on understanding texts and lasted 30 minutes and the speaking test focuses on coherency, grammar, word use, fluency, and pronunciation and took students 15 minutes to finish. After completing the pre-tests, students were divided into mixed ability groups of four. Each week, the experimental group followed an English cooperative learning class of 60 minutes and the control group followed one traditional English class focused on reading and

speaking, four weeks in a row. The experimental group worked with the same group members every week.

At the end of all four lessons, both the experimental group and the control group filled in the flow FKS questionnaire (Rheinberg & Vollmeijer, 2003). This questionnaire is used to gather data about the level of (motivational) flow students experience during the learning process. To measure this accurately, the questionnaire is filled in once for each lesson, individually and anonymously with no names but with a personal number. At the end of all four lessons, students of the experimental group filled in the cooperative learning questionnaire to determine their experience in cooperative learning.

Finally, after five weeks, new TOA-tests were used to measure their level and to determine the progress they have made. To measure the impact of cooperative learning and the flow students experienced, the reading and speaking level of the final tests are compared with the scores of students of the control group. In total, this research lasted six weeks.



## 4. Results

### 4.1 Effect cooperative learning on speaking and reading skills

To test the hypothesis if cooperative learning lessons have a positive effect on students' test results in speaking and reading in foreign language learning, the repeated measures ANOVA was performed. The results showed that there was no significant effect on speaking skills before and after the research lessons, in both the experimental group and in the control group. There was also no difference in homogeneity. Main effect of time:  $F(1,35)=7.748$ ,  $p=0.009$ ; main effect of group:  $F(1,35)=6.986$ ,  $p=0.012$ ; no interaction effect of group by time:  $F(1,35)=3.047$ ,  $p=0.09$ .

However, by using repeated measures ANOVA, a significant difference was found in reading skills between both groups in the first measure and the last measure. Main effect of time:  $F(1,35)=4.177$ ,  $p=0.049$ ; main effect of group:  $F(1,35)=4.530$ ,  $p=0.04$ ; interaction effect of group by time:  $F(1,35)=0.150$ ,  $p=0.7$

### 4.2 Cooperative learning and increase of reading- and speaking minutes

To test the hypothesis whether cooperative learning positively influences the total of students' speaking minutes in a foreign language and to compare the difference of new read/learned words in lesson 1 with the final lesson (lesson 4) of the experimental group, a paired sample T-test was performed.

There was not a significant difference in the scores of the first lesson ( $M=6.05$ ,  $SD=4.09$ ) and the scores of the fourth lesson ( $M=5.09$ ,  $SD=3.05$ ),  $T(21)=1.002$ ,  $P=0.328$ .

Also a paired sample T-test was conducted to compare the difference in speaking minutes of the first lesson (lesson 1) with the last lesson (lesson 4). In this case, there was a significant increase in the scores of the first lesson ( $M=6.68$ ,  $SD=5.34$ ) and the scores of the fourth lesson ( $M=12.32$ ,  $SD=10.61$ ),  $T(21)=-3.237$ ,  $P=0.004$ .

### 4.3 Flow in cooperative learning as a motivational teaching method

To test the hypothesis if students experience cooperative learning as a positive and motivational teaching method and to test whether it leads to higher results, an independent samples T-test was used to test differences per lesson per group (experimental- and control group).

No significant differences between the experimental group and the control group were found for lesson 1 ( $T(35)=0.946$ ,  $P=0.35$ ), lesson 2 ( $T(35)=0.183$ ,  $P=0.86$ ), lesson 3 ( $T(35)=0.384$ ,  $P=0.70$ ) and lesson 4 ( $T(35)=0.297$ ,  $P=0.77$ ).

**Table 1.** Mean flow scores measured for both groups at every lessons

	Experimental group			Control group		
	N	Mean	Std. Deviation	N	Mean	Std. Deviation
Score 1	22	4.38	0.987	15	4.67	0.810
Score 2	22	4.79	0.952	15	4.85	0.935
Score 3	22	4.82	0.575	15	4.94	1.353
Score 4	22	4.98	0.693	15	4.90	0.839

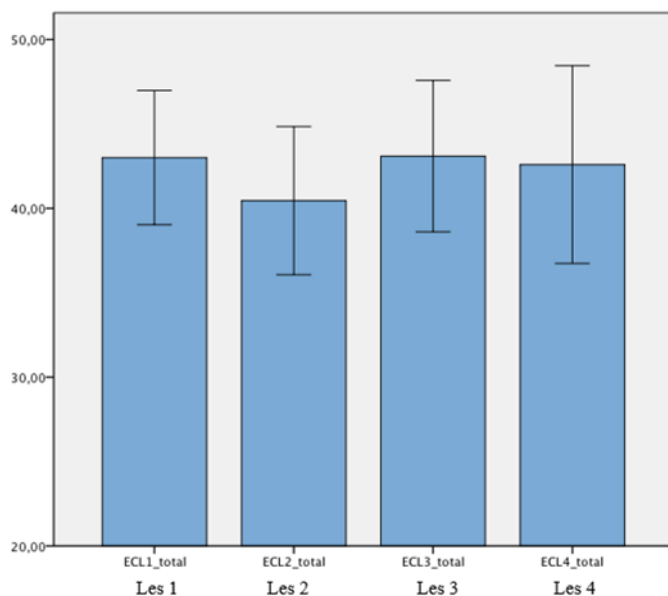


#### 4.4 Students' experience Cooperative learning

In order to determine whether the special designed lessons influenced the opinion of the students in the experimental group about cooperative learning, the questionnaire scores about cooperative learning were analyzed.

Students experienced the cooperative learning lessons as positive. As shown in Table 2, students are more than average motivated during the lessons, when you consider a minimum score of 34 as average. In total, the Cooperative learning questionnaire consisted of 17 questions with a Likert scale of 3 points. A minimum score of 34 would mean that students give at least 2 points for each question which means they more or less agree (is positive). As shown in Table 2, the scores for each lesson are higher than 40, which means the students experienced cooperative learning as motivational.

**Table 2.** *Overview students' opinion Cooperative learning*<sup>1</sup>



#### 4.5 Correlation appreciation cooperative learning and final test results

To test whether students experience cooperative learning as a positive and beneficial teaching method, the correlations were calculated by examining the average outcome of the questionnaire Evaluation Cooperative Learning related to the outcome of the final TOA test reading, the final TOA test speaking and the number of new read/learned words and total speaking minutes.

No significant correlation was found between speaking ability as assessed by TOA ( $r=.312$ ,  $p=.158$ ) and the appreciation of cooperative learning. Also the correlation between reading ability as assessed by TOA ( $r=.328$ ,  $p=.136$ ) and the appreciation of cooperative learning was not significant. The total speaking minutes measured with the cooperative learning questionnaire ( $r=.184$ ,  $p=.412$ ) and the number of new read/learned words measured with the cooperative learning questionnaire ( $r=.274$ ,  $p=.217$ ) also did not correlate significantly.

<sup>1</sup> Please note that the scale is adjusted to students' outcome (N=37) and starts at 20 instead of 0.

## 5. Discussion

The main goal of this study was to answer the research question: *Can cooperative learning positively influence students' performance in reading and speaking in foreign language learning?* To answer this question, research focused on the following sub questions: *Does cooperative learning result in more or better reading and speaking in foreign language learning?* and *Do students experience cooperative learning as a positive and beneficial teaching method?* This research was done with students between the age of 18 and 20, all enrolled in a financial study at intermediate vocational level.

*Do cooperative learning lessons have a positive effect on students?*

Test results in speaking and reading a foreign language has not confirmed a positive effect of cooperative learning lessons on test results of students. Using cooperative learning as a way of teaching, does not necessarily mean it positively affects students' performance in speaking a foreign language. For both groups, there was a positive difference over time, but not the difference this research anticipated for the experimental group.

Regarding the test results of reading skills, results showed there was a significant difference between both groups during the first measure (pre TOA test) and the last measure (final TOA test). It shows both groups improved their reading skills over time, yet the control group has a higher score and therefore shows more improvement in reading skills than the experimental group. This means both groups improved but cooperative learning did not show better effects on the improvement than regular lessons. Although the expectation was that cooperative learning would have a positive influence on improvement, results show that it had not in this research. A possible explanation for this might be found in the research related to foreign language learning. Learning a new language is part of a natural process (Vaughn & Hernandez, 2018) and therefore takes time. Even though this method can guide students in a certain direction, it is possible that the time in this study (four lessons of cooperative learning) is not enough to observe a significant positive effect on these elements. Gillies (2004) explains that frequency of task related interactions in groups is important for productivity, and therefore it is possible that there is not enough frequency in this study. Another explanation can be found in the cooperatively environment. It is possible that students who need to work in a cooperative setting do not have (all) the needed skills to do so, such as being able to work as a whole group, being an active member in that group, listen to each other and being able to give feedback. Also, as Duplass (2006) explained, there are eight features cooperative learning should include. Teachers can make heterogeneous groups and can supervise and monitor, but the success of cooperative learning is also dependent on the students themselves and the groups they work in. Elements such as individual accountability and their social skills can also affect the success of learning a language in a cooperative setting.

Learning a foreign language does not only affect cooperative learning, but there are different influencing factors involved according to Vaugh & Harnandez (2018), McGlynn (2005) and Koda (2007), such as age, different learning strategies for different ages which means not all students benefit from one teaching method, genetic background, and previous gained knowledge and experiences. Even though results of this study suggest that cooperative learning might not be an important influencing factor, it is important to consider that cooperative learning activities work different than other work forms such as working individually with a method and a workbook. For example, in cooperative learning, students can be more flexible in how they learn during the activities and somewhat dependent on the partner they work with and his social skills, previously gained knowledge (level), and even the partner's motivation can be an influencing factor. Johnson and Johnson (1999) explain that cooperative learning should meet the following five basic requirements; positive mutual

dependence; individual responsibility; direct interaction; social skills; and being able to evaluate the group process. According to Johnson and Johnson (1999), the effect of cooperative learning is best feasible when all participants involved in the process are not only held responsible for the group process but also for their individual contribution to the learning process. Maybe the outcome of the study says students do not necessarily learn a foreign language better/more with cooperative learning activities, but not all factors are measured. It is possible that students become more flexible in their language use and maybe come up with target-based solutions, but according to the Toa online check form for speaking tests may not use the desired words and sentences and although certain students make improvements, do not reach the level they need to reach (A2, see Appendix A) for their speaking assignment. Other aspects such as the courage to speak and the fact that students start with talking and reading easy words, and with time they learn more (difficult) words and therefore the language becomes easier, are not taken into account. It is also possible that students improve other skills than inquiring a foreign language by using cooperative learning, however this research did not focus on that.

#### *Does cooperative learning influence the speaking minutes?*

The results of this study suggest that the lessons of cooperative learning had an effect on the number of speaking minutes of students. The students spoke more English as the research progressed. This is in line with the expectations and this is a positive effect. It indicates that the more students got used to speaking English during class, the easier it became and the more they spoke English. A possible explanation for this outcome is that language is learned as a whole through communication (Koda, 2007). When students are working in small groups, learning will occur (Gillies, 2004) and cooperative learning can then promote socialization and learning, students can work with each other, help each other and when teachers gave the correct essential structure and guidance, it promotes cooperation and learning (Gillies, 2004). Merely placing the students in groups and expecting them to work together will not be beneficial. In order for cooperative learning to influence the speaking of students, it is important that the task is established, so that all group members realize that they are required to commit to completing the task and to help others do so as well (Gillies, 2004; McGlynn, 2005). The teacher's role is essential; teachers should provide explanations, directions, point out errors and they should distribute all materials needed for the task so that students are able to talk about the assignment and to complete the assignment in the group (Gillies, 2004). According to Gillies (2004), when children were given feedback on how to give and receive help during cooperative learning, it enhanced their helping behaviors and they spoke more to each other during class. This is also in line with this research.

#### *Does cooperative learning influence the new learned/read words?*

It is not confirmed that cooperative learning would result in more new learned/read words. Results suggest that the lessons of cooperative learning did not show a positive effect on the new learned/read words of the participants. According to Ammar & Hassan (2018), previous research shows that learners benefit from cooperative learning in dialogue, however reading is more difficult. Koda (2007) explains in his research that reading is the product of a complex information processing system, involving a constellation of closely related mental operations. Reading is learned as a whole, which emphasizes that learners should focus on meaning and on strategy instruction. This research does not focus on strategies or on explaining new words, while it is important in reading that the majority of words, roughly 98%, must be known (Koda, 2007). Also, already present reading difficulties of students are not known, while they could affect the outcome of this research. According to Koda (2007), a clear grasp of the multi-layered relationships among reading subskills is necessary in identifying the cause of

reading difficulties, which some students may have. Also, the vocabulary of the student enables reading comprehension. In conclusion, this research does not provide a clear grasp of the existing difficulties or an indication of student vocabulary, which is a limitation and might explain why cooperative learning did not show a positive effect on the new learned/read words. A suggestion for future research can be to focus more on growth in vocabulary of a foreign language by watching a series with subtitles. The learners' skill is dependent on the number of words they know (Kost et al. 1999) and by watching a series students of the intermediate vocational education like and are interested in, can have a positive influence on their word knowledge. Therefore, it can be interesting to see whether students who regularly watch a series have advantages related to an extended vocabulary in a foreign language.

*Do students experience cooperative learning as a positive and beneficial teaching method?*

There is no significant correlation found between the appreciation of cooperative learning related to the outcome of the tests and the outcome of the final lessons. This means that in the students' experience, cooperative learning does not influence their results in speaking and reading tests, even though it was anticipated that if students had more appreciation for cooperative learning, this would positively affect the results. A possible cause of this outcome could be that although students find cooperative learning a positive teaching method, which is showed in the results of the questionnaire, it is also important that students not only find the activities nice to do, but also experience the activities as useful or are useful (Li & Lam, 2013). Also, the development of a positive attitude towards learning, prosocial behavior among group members, and successful learning outcomes for students need to be encouraged. Students should additionally be actively engaged in the material they are being taught, in order for a positive learning outcome (Gillies, 2004; McGlynn, 2005) which might affect the results. According to McGlynn (2005), active engagement promotes deeper levels of processing and learning because it creates stronger connections. When the engagement within the group is not active enough and when students fail to cooperate within their group, this may affect the individual learner. If the cooperative learning conditions are not met by the group, such as encouragement, discussions, explanations, sharing information, actively work together and all contribute to the task, this can affect the final results. Even when students did like this teaching method. In order for cooperative learning to be beneficial and successful, it needs to meet the associated conditions.

Additionally, the level of flow for both the control group and the experimental group was analyzed to test whether or not students experience cooperative learning as a positive and beneficial (motivational) teaching method. The experimental group was expected to have a higher level of flow than the control group. However, this is not confirmed. There is no significant difference between both groups in the level of flow they experience during the lessons. This means that cooperative learning had no influence on the experimental group in the level of flow they felt during class or in the way they assimilated in their assignments. A possible explanation for these results is that although students appreciate teamwork, experimental activities, structure, and use of technology (McGlynn, 2005; Vollmeyer & Rheinberg, 2006), it is essential that their groups are complete and that everyone contributes to the task. Difficulties arise when groups are incomplete due to skipping class or switching studies, or when students are not motivated. Unfortunately, these are common issues for students of intermediate vocational education. Another explanation could be that there is no intrinsic motivation; students are not (always) aware of the importance of learning a foreign language and therefore lack intrinsic motivation, which is an important influencing factor and can affect the level of flow students experience for a certain topic (Ammar & Hassan, 2018). Finally, students expect individual attention, additional help, and other institutional resources

to be provided in order to overcome the difficulties they encounter (McGlynn, 2005). Although students receive an explanation of the assignment as well as teachers' guidance, students do not receive all the individual attention, additional help and other assistance they might expect or prefer, which might affect the outcome of the study related to the flow students experience.

#### *Limitations and future research*

There have not been many studies into intermediate vocational education combined with cooperative learning. That renders this research innovative and interesting, even though it is well known that students of the intermediate vocational education are not an easy target group.

Still, this current study has a few limitations. First of all, the study started off with 50 student participants. Yet, some students did not attend all lessons, and as a consequence, the results of these students were incomplete and could therefore not be used. A second limitation is that for some students, English is a second language and for others it is a third language due to the fact they speak Turkish or Moroccan at home. This research does not distinguish between whether it is a second or a third language for participants. Additionally, although participants were aware of the importance of the lessons, they regularly were obstructed by their own embarrassment of speaking. It is also possible that the needed collaboration skills were not fully developed among the participants. All of this may have limited the outcome of this research.

With these limitations in mind, there are still some more interesting factors which can be researched. If possible, future research should use more students for a study in order to have a larger number of respondents (N) to render the outcome more valuable. It could also be interesting to do some extensive research over a longer period, and to do more research on what intermediate vocational education students find positive (and motivational) teaching methods besides cooperative learning. Keeping in mind the fact that a variety of teaching methods enables us to meet the needs of as many students as possible (Vaughn & Hernandez, 2018). During this current research and during talks with students it became clear that this would be an interesting element for further research in intermediate vocational education. Additionally, more research on learning a new language for students who already speak two languages and whether it is important to distinguish whether it is a second or third language and the (dis)advantages of this could also be interesting.

Cooperative learning and other work forms might not be the only influencing factors in foreign language learning. Skills or knowledge for learning a new language may also be affected by genetic background, talent – or lack of this – for language acquisition. Also, the age from which people study the language can affect a person's success in learning a foreign language (Vaughn & Hernandez, 2017). In future research, these aspects should also receive attention.

#### *Conclusion*

All in all, although students experience cooperative learning as positive and it has many beneficial effects on the learning process and on social aspects, it is not proven to be an influencing factor in foreign language learning for students of intermediate vocational education. The study showed that providing students with the opportunity to work together in structured cooperative groups while learning a foreign language, has no influence on the test results, apart from the fact that time is a positively influencing factor in learning a foreign language and that working in groups has a positive effect on the number of speaking minutes of students.

Based on other research it seems that in order to learn a foreign language, students of intermediate vocational education need a variety of teaching methods. Structured lessons, where students can take their time to learn and experience the language seem important as well. This can be a complex process and the expansion of vocabulary during school years and after can be very valuable in the learning process.

A strong impediment of this study is the limited number of respondents, which makes it hard to prove what the real effect can be on students of intermediate vocational education.

Nevertheless, the outcome of this research combined with findings of other research suggest that students of the intermediate vocational education find cooperative learning a positive teaching method but this is only one way of teaching. Further research is required to come up with a perfect combination of a variety of (motivational) teaching methods for students of the intermediate vocational education.

## Reference list

- Ammar, A., & Hassan, R. M. (2018). Talking It Through: Collaborative Dialogue and Second Language Learning. *Language learning*, 68(1), 46-82.
- Babbie, E. (2010). *The practice of social research*. Belmont, CA: Wadsworth.
- Boudah, D. J. (2010). *Conducting educational research: Guide to completing a major project*. Sage Publications.
- Baker, t. & Clark, J. (2010). Cooperative learning – a double-edged sword: a cooperative learning model for use with diverse student groups. *Intercultural Education*, 21(3), 257-268. doi: 10.1080/14675981003760440
- Barry, A. M. (2006). Active Learning using a Drama in Education (DIE) approach in large Group Teaching in Economic Geography. *Creating and Sustaining an Effective Learning Environment*, 1-15.
- Beroepsonderwijs bedrijfsleven. Kwalificeren en examineren. Retrieved 1 February 2019 from <https://kwalificaties.s-bb.nl/>
- Bureau Ice. Het kan beter met de motivatie van Nederlandse leerlingen (blogpost). Retrieved 4 November 2018 from <https://www.toets.nl/news/58/62/Het-kan-beter-met-de-motivatie-van-Nederlandse-leerlingen/>
- Cortina, J.M. (1993). What is coefficient alpha? An examination of theory and applications. *Journal of Applied Psychology*, 78, 98–104. doi:10.1037/0021-9010.78.1.98
- Council of Europe. The CEFR levels. Retrieved 1 February 2019 from <https://www.coe.int/en/web/common-european-framework-reference-languages/level-descriptions>
- Duplass, J. (2006). *Middle and High School Teaching: Methods, Standards, and Best Practices*. Boston: Houghton Mifflin Company.
- Esteban-Millat, I., Martinez-Lopez, F. J., Hueartas-Garcia, R., Meseguer, A., & Rodriguez-Ardura, I. (2014). Modelling students' flow experiences in an online learning environment. *Computers & Education*, 71, 111-123.
- Fan, W. & Wolters, C. A. (2014). School motivation and high school dropout: The mediating role of Educational expectation. *British Journal of Educational Psychology*, 84, 22-39. doi:10.1111/bjep.12002
- Faryadi, Q. (2007). Enlightening Advantages of Cooperative Learning. *UiTM Malaysia*, 1-10.
- Gillies, R. M. (2004). The effects of cooperative learning on junior high school students during small group learning. *Learning and Instruction* 14, 197-213. doi: 10.1016/S0959-4752(03)00068-9
- Johnson, D.W., & Johnson, R.T. (1999). Making cooperative learning work. *Theory into Practice*, 38(2), 67-73.
- Johnson, D. W., & Johnson, R. T. (2013). Cooperative, competitive, and individualistic learning environments. *International guide to student achievement*, 372-375.

- Kagan, S. & Kagan, M. (2009). Kagan Cooperative learning. *San Clemente, CA: Kagan Online Magazine*, 12-15.
- Klem, A. M., & Connell, J. P. (2004). Relationships matter: Linking teacher support to student engagement and achievement. *Journal of school health*, 74(7), 262-273.
- Koda, K. (2007). Reading and language learning: Crosslinguistic constraints on second language reading development. *Language learning*, 57, 1-44.
- Kost, C. R., Foss, P., & Lenzini Jr, J. J. (1999). Textual and pictorial glosses: Effectiveness on incidental vocabulary growth when reading in a foreign language. *Foreign Language Annals*, 32(1), 89-97.
- Li, M. & Lam, B. (2013). Cooperative learning. *The Active Classroom, The Hong Kong Institute of Education*, 1-33.
- Long, M. H. (1985). A role for instruction in second language acquisition: Task-based language teaching. *Modelling and assessing second language acquisition*, 18, 77-99.
- Machemer, P. L., & Crawford, P. (2007). Student perceptions of active learning in a large cross-disciplinary classroom. *Active learning in higher education*, 8(1), 9-30.
- Macleod, S., Sharp, C., Bernardinelli, D., Skipp, A., & Higgins, S. (2015). *Supporting the attainment of disadvantaged pupils: articulating success and good practice: Research report November 2015* (No. DFE-RR411, pp. DFE-RR411). Department for Education.
- Macpherson, A. (2015). Cooperative Learning Group Activities for College Courses. *Surrey, BC Canada: Kwantlen Polytechnic University*, 1-13.
- Magennis, S. & Farrell, A. (2005). Teaching and Learning Activities: Expanding the Repertoire to Support Student Learning. *Emerging Issues in the Practice of University Learning and Teaching*, 45-54. Retrieved 4 September 2018 from <http://www.aishe.org/readings/2005-1/>
- McGlynn, A. P. (2005). Teaching millennials, our newest cultural cohort. *Education Digest*, 71(4), 12.
- Michael, J. (2006). Where's the evidence that active learning works? *Advances in Physiology Education*, 30, 159-167. doi:10.1152/advan.00053.2006
- Noels, K. A., Pelletier, L. G., Clément, R., & Vallerand, R. J. (2000). Why are you learning a second language? Motivational orientations and self-determination theory. *Language learning*, 50(1), 57-85.
- Rheinberg, F., Vollmeyer, R., & Engeser, S. (2003). Die Erfassung des Flow-Erlebens. *Institut für Psychologie, Universität Postdam*, 1-18.
- Richards, J. C., & Schmidt, R. W. (2002). *Longman Dictionary of Language Teaching and Applied Linguistics*, 3<sup>rd</sup> edition. London: Longman.
- Ryan, M., Carlton, K. H., & Ali, N. S. (1999). Evaluation of traditional classroom teaching methods versus course delivery via the World Wide Web. *Journal of Nursing Education*, 38(6), 272-277.



- Sears, D. A., & Reagin, J. M. (2013). Individual versus collaborative problem solving: divergent outcomes depending on task complexity. *Instructional science*, 41(6), 1153-1172.
- Siyli, N. A., & Kafes, H. (2015). Overrunning speaking anxiety through audio journals. *International Journal of Language Studies*, 9(1).
- Slavin, R. E. (1991). *Student team learning: A practical guide to cooperative learning*. National Education Association Professional Library.
- Slavin, R. E. (2011). Instruction based on cooperative learning. *Handbook of research on learning and Instruction*, 344-360.
- Slavin, R. E. (2014). Cooperative learning and Academic Achievement: Why Does Groupwork Work? *Anales de psicologia* 30(3), 785-791.
- Smith, M. S. & Candlin, C. N. (2014). Second language learning: Theoretical foundations. *New York Routledge*.
- Vanneste, Y., Feron, F. J., van Mook, M. A., & de Rijk, A. (2017). Towards a Better Understanding of Sickness Absence in Adolescence: A Qualitative Study among Dutch Intermediate Vocational Education Students. *BioMed research international*, 2017.
- Vaughn, K. A., & Hernandez, A. E. (2018). Becoming a balanced, proficient bilingual: Predictions from age of acquisition & genetic background. *Journal of Neurolinguistics*, 46, 69-77.
- Vollmeyer, R. & Rheinberg, F. (2006). Motivational Effects on Self-Regulated Learning with Different Tasks. *Educational Psychology*, 18, 239-253. doi:10.1007/s10648-006-9017-0

## Appendices

### Appendices A: Explanation CEFR Levels

#### Global Scale

Proficient	C2	Can understand with ease virtually everything heard or read. Can summarise information from different spoken and written sources, reconstructing arguments and accounts in a coherent presentation. Can express him/herself spontaneously, very fluently and precisely, differentiating finer shades of meaning even in more complex situations.
User	C1	Can understand a wide range of demanding, longer texts, and recognise implicit meaning. Can express him/herself fluently and spontaneously without much obvious searching for expressions. Can use language flexibly and effectively for social, academic and professional purposes. Can produce clear, well-structured, detailed text on complex subjects, showing controlled use of organisational patterns, connectors and cohesive devices.
Independent	B2	Can understand the main ideas of complex text on both concrete and abstract topics, including technical discussions in his/her field of specialisation. Can interact with a degree of fluency and spontaneity that makes regular interaction with native speakers quite possible without strain for either party. Can produce clear, detailed text on a wide range of subjects and explain a viewpoint on a topical issue giving the advantages and disadvantages of various options.
User	B1	Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can describe experiences and events, dreams, hopes & ambitions and briefly give reasons and explanations for opinions and plans.
Basic	A2	Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate need.
User	A1	Can understand and use familiar everyday expressions and very basic phrases aimed at the satisfaction of needs of a concrete type. Can introduce him/herself and others and can ask and answer questions about personal details such as where he/she lives, people he/she knows and things he/she has. Can interact in a simple way provided the other person talks slowly and clearly and is prepared to help.

## Appendices B: FKS questionnaire

What is your gender?

- ☐ Male
- ☐ Female

		not at all				very much			
1	I feel just the right amount of challenge.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2	My thoughts/activities run fluidly and smoothly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3	I don't notice time passing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4	I have no difficulty concentrating.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5	My mind is completely clear.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6	I am totally absorbed in what I am doing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7	The right thoughts/movements occur of their own accord.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8	I know what I have to do each step of the way.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9	I feel that I have everything under control.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10	I am completely lost in thought.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## Appendices C: The questionnaire Evaluation Cooperative learning

Today you have worked together with your group. You have read an article and then discussed it with each other so that everyone understood what the article was about. Subsequently, everyone had to give his/her opinion about the article (in English) and you taped this with a voice recorder. Besides this, you also taped the overall conclusion from your group with the voice recorder.

Below you see a few statements about working together (cooperative learning). For each statement you have to tick the most appropriate box. You have to indicate whether you disagree, more or less agree, or totally agree.

	Disagree	More or less agree	Totally Agree
Everyone listened to each other.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
All group members participated. For example, everybody helped explaining words and the pronunciation of words.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We quickly agreed on what our final conclusion should be.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I liked it to work in a group on this assignment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Because we worked in a group, it was difficult for me to understand what we had to do. .	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
By working in a group, I learned more than when I had to do the assignment alone.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I think I have expressed my opinion well.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have introduced many explanations, meaning of words and arguments.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We looked each other in the eye while working together.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We let each other speak without interrupting.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I have learned a lot from this assignment.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We gave each other compliments on a regular base.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We have considered the arguments of all group members.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
We first discussed how we would tackle the task.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I found it scary to ask for help in the group.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I am satisfied with our final conclusion about the article.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I tried to understand what someone else meant.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Today's speaking minutes of the English language: \_\_\_\_\_

Today's number of new read/learned words: \_\_\_\_\_

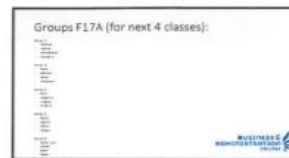


## Essence lesson 1

- Students work in groups of four persons with a different level of English
- Students divide articles and they all read a different articles about the same topic
- They make a poster about the highlights of the articles, while doing this they discuss in English what they would like to show on the poster and they include a wordlist with the translation
- Eventually they show and explain the poster to the other pair in their group and they discuss the topic, all in English
- Afterwards there is an evaluation about the assignment

1. Teacher supervision: the instructor should always monitor group activity in order to make sure that learners are not veering too far off the assigned task. Also, the instructor should also be available for answering questions raised by the learners and guiding them through the discussion.
2. Heterogeneous groups: groups of diverse levels of ability should be created.
3. Positive interdependence: to achieve positive interdependence, the group should work towards a reward or final learning objective.
4. Face-to-face interaction: the teacher should encourage the learners to use verbal and nonverbal communication to explain learning materials to each other or deal with problems encountered.
5. Individual accountability: learners are assigned specific roles in the group (when possible) to ensure they are all accountable for completing their tasks. In addition, each member of the group should assist the whole group in meeting the learning outcome.
6. Social skills: cooperative learning promotes social skills such as speaking in an appropriate manner, being respectful, and wisely utilizing the time allocated to a task.
7. Group processing: learners should reflect on the way the group functioned during learning activities.
8. Evaluation: assessment can take the form of both individual and group assessment.

## Lesson 2



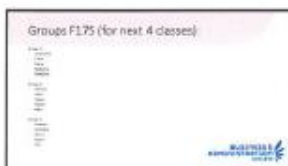
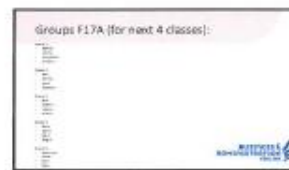
## Essence lesson 2:

- Students work in same groups of four persons with a different level of English as the first lesson
- Students looked up four different articles they find interesting (four different topics)
- They read the articles, make notes on a special poster in the middle of their table and switch to the next article
- They answer each others questions about the articles, discuss each others opinions, discuss meaning of words and other remarks written on the special poster (all English)
- Eventually they also explain in short their own chosen article to the group, all in English
- Afterwards there is an evaluation about the assignment

1. Teacher supervision: the instructor should always monitor group activity in order to make sure that learners are not veering too far off the assigned task. Also, the instructor should also be available for answering questions raised by the learners and guiding them through the discussion.
2. Heterogeneous groups: groups of diverse levels of ability should be created.
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7. Group processing: learners should reflect on the way the group functioned during learning activities.
8. Evaluation: assessment can take the form of both individual and group assessment.



## Lesson 3



### Essence lesson 3:

- Students work in same groups of four persons with a different level of English as the previous lessons
- Students have to solve a story puzzle together by reading the cards out loud, working together, and putting part of texts in the right order.
- When they are ready with the story puzzle, they are going to write a short summary.
- During the whole process they have to talk English and read very careful all (English) sentences
- Eventually they explain to the other groups their summary and they will also explain how the group process went
- Afterwards there is an evaluation about the assignment

1. Teacher supervision: the instructor should always monitor group activity in order to make sure that learners are not veering too far off the assigned task. Also, the instructor should also be available for answering questions raised by the learners and guiding them through the discussion.
2. Heterogeneous groups: groups of diverse levels of ability should be created.
3. Positive interdependence: to achieve positive interdependence, the group should work towards a reward or final learning objective.
4. Face-to-face interaction: the teacher should encourage the learners to use verbal and nonverbal communication to explain learning materials to each other or deal with problems encountered.
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8. Evaluation: assessment can take the form of both individual and group assessment.

## Lesson 4

Questionnaires [altijd individueel invullen]

- Voor 165 deelnemers eerst een vraag, Engelen eerst invullen
  - Vragen die (in twee delen) 3 antwoorden
- Evaluatie computer training (Hoeveel beter vrees voor vraag)
  - Engelen vrees (vrees)
  - Vrees van het vrees van de vrees



Wetenschappelijk Instituut voor de Arbeid

Group #17A (for next 4 classes):

[illegible]

**Working in groups to improve your reading and speaking skills**

- You can learn from each other and improve your English.
- You can practice your reading and speaking skills.
- You can learn to work with others and be a team player.
- You can learn to listen to others and understand their point of view.
- You can learn to express your own ideas and opinions.

**LET'S WORK TOGETHER**

1. Choose a topic to discuss.  
2. Read the text and discuss it.  
3. Write a short report on the topic.  
4. Present your report to the class.  
5. Discuss the report and give feedback.

**WORKSHEET 1**

**Check**

- Did I read in two (or) more papers?
- Did I read in one (or) more journals (or) magazines?
- Did I quote the correct author?

**WETZEL**  
 E-LEARNING  
 2013/14

Today:

Time	Learning Objectives, Activities, Assignments
10:00	Readers discuss what you're going to do today
10:30	We will read a paper. That narrative is the product. Made a shift up for presenting and writing
11:00	Group discussion with group and then short practice. We'll do presentations


 UNIVERSITY OF WISCONSIN  
 MADISON

Groups F125 (for next 4 classes):

#### Essence lesson 4:

- Students work in same groups of four persons with a different level of English as the previous lessons
- Students have to come up with a solution for one of the four different cases
- Together they read the cases and decide which one they would like to solve
- Then they are going to discuss the problem, give clarifications and discuss the possible solutions
- They decide which one is the best solution and together make a short powerpoint to help them with the short presentation
- Together they decide who is going to say what and prepare for the short presentation
- Eventually together (as a group) they present (in short) their solution to the problem in their case. Other students can ask questions and they have to answer them (all in English).
- Afterwards there is an evaluation about the assignment

1. Teacher supervision: the instructor should always monitor group activity in order to make sure that learners are not veering too far off the assigned task. Also, the instructor should also be available for answering questions raised by the learners and guiding them through the discussion.
2. Heterogeneous groups: groups of diverse levels of ability should be created.
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7. Group processing: learners should reflect on the way the group functioned during learning activities.
8. Evaluation: assessment can take the form of both individual and group assessment.

## Short explanation cases in lesson 4

### Casus 1:

#### Gegevens:

Je werkt nu ruim een jaar als bedrijfsadministrateur binnen een bedrijf. Je vindt je werk leuk, je krijgt goed betaalt en je kunt het goed vinden met je collega's (inclusief je manager).

Er is echter 1 collega die door jouw manager steeds zwart gemaakt wordt, krijgt rotklusjes en via de groepsapp worden er ook steeds nare opmerkingen gemaakt. Niemand zegt er iets van, bang om zijn/haar baan te verliezen en andere collega's doen zelfs regelmatig mee. Pesten is een hot issue, 1 op de 6 medewerkers wordt (weleens) gepest op het werk. Je realiseert je dat wanneer je hier wat van zou zeggen, jouw baan op het spel staat. Je manager heeft immers grote invloed.

#### Opdracht:

Kom met een oplossing voor dit pestprobleem en schrijf een anti-pestbeleid welke geschikt is voor bedrijven en ROC's.

### Casus 2:

#### Gegevens:

Zo'n 40% van de Nederlandse beroepsbevolking heeft ooit een mbo-diploma behaald. Dagelijks werken 56.000 professionals met veel enthousiasme om de ruim 530.000 studenten op te leiden naar één van de 700 vakken en beroepen in de sectoren economie, groen, techniek en zorg en welzijn. Hiermee is het mbo de hofleverancier van onze arbeidsmarkt. Desalniettemin worden studenten op het MBO gezien als een vrij moeilijke doelgroep omdat een deel van de studenten niet gemotiveerd is, veel spijbelt, geen huiswerk maakt en dus moeilijk in beweging is te krijgen.

#### Opdracht:

Kom met een oplossing/diverse oplossingen hoe docenten om kunnen gaan met dit type studenten, hoe ze deze studenten kunnen motiveren, in beweging kunnen krijgen en uiteindelijk enthousiasmeren voor school/studie.

### Casus 3:

#### Gegevens:

Het mbo is anders dan het vmbo en weer heel veel anders dan de havo. Je leert in het mbo echt een beroep. Je bent niet veel met losse vakken bezig, maar je werkt samen in projecten of voert praktijkopdrachten uit. Ook stages zijn een groot onderdeel van de opleiding. Afgelopen jaren is er enorm geïnnoveerd in het onderwijs maar het onderwijs is en blijft in ontwikkeling. Onze maatschappij verandert, de studenten veranderen en ook het onderwijs verandert mee. Maar nog niet (goed) genoeg.

#### Opdracht:

Hoe ziet voor jullie de ideale (en super goede) ((financiële)) opleiding er uit? Hoe lang duurt deze opleiding, welke vakken krijg je en hoe zit het met stage?