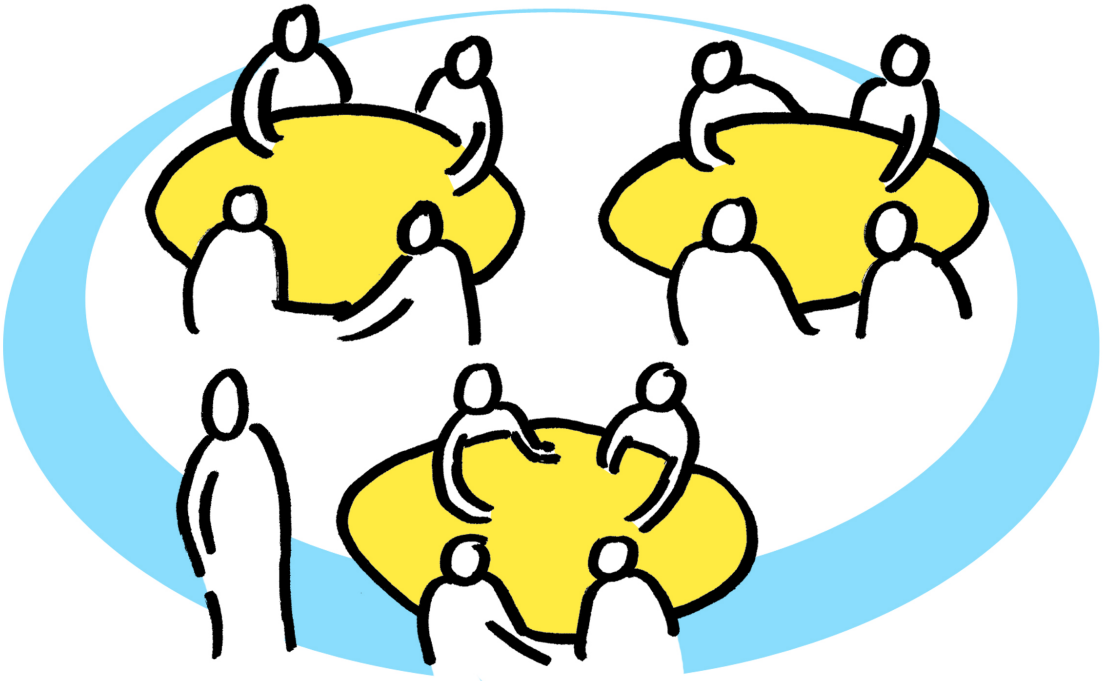
I think, therefore I talk

Assessing the efficacy of teaching group facilitation skills as a means of improving L2 students' (exploratory) talk and decreasing anxiety



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Foreword

In helping us complete this research project, we would like to thank a number of people. First of all, we would like to thank all our students at the Europese School, Huygens College and the Berger Scholengemeenschap who participated in this research and carried out all the tasks without bias, providing the necessary data for our research project. Without them, this research would not have been possible. Second, we would like to thank our supervisor Margriet Heim for her input and feedback and for making us go the extra mile. Third, we would like to thank Peter Reimann for his endless support during this project. His unrelenting enthusiasm for and extensive experience with group facilitation have certainly paved further ways for its application in the secondary school. Fourth, we would like to thank Liz Dale for her assistance during the early stages of our research, guiding us in the right direction and allowing us to narrow down our scope to a feasible research project. Fifth, we would like to thank Monique Pijls for her consistent guidance throughout the entire process. Sixth, we would like to thank all our colleagues and especially Linda Cooper for participating in this study. Finally, we would like to thank our partners, families and friends for their infinite support, assistance and patience.

Abstract

While teachers recognise the pedagogical effectiveness of group work, its practical efficacy is often limited. Although theory suggests that collaborative learning in the second language classroom effectively constructs a positive learning environment, motivates learners, promotes critical thinking, improves the quality of students' talk and provides opportunities for multiplying talk in the English foreign language classroom, it also suggests that implementing collaborative learning can be problematic. Students often value consensus over careful consideration of the topic at hand and dominant students can control discussions, while others do not participate. Further, students often revert to their shared common language in order to complete tasks more quickly. For these reasons, group work is often side tracked in the second language classroom and more emphasis is given to the teaching and practice of receptive skills.

This research was developed as a response to the above-mentioned complications. It sought to examine a more effective approach to collaborative work. This pre-experimental quantitative research measured the effect of teaching group facilitation skills on secondary school students' spoken English and their anxiety levels when participating in collaborative decision-making tasks. The results of this research suggest that teaching students group facilitation skills creates a more effective environment for collaborative work in the English foreign language classroom.

During the eight-week intervention period, students were taught group facilitation skills and these were implemented in the context of collaborative decision-making tasks. During the pre-test, the students were asked to carry out a decision-making task in groups of four or five. Once they reached consensus, they filled in a questionnaire designed to evaluate their levels of foreign language classroom anxiety. Subsequent to the intervention, all groups were asked to carry out another decision-making task and fill in the same foreign language anxiety questionnaire during the post-test. The intervention was carried out in three classes at three secondary schools. At the Europese School fourteen students in their fourth year, the equivalent of 3 *atheneum*, participated. At the Huygens College, 28 *havo* 4 students carried out the intervention and at the Berger Scholengemeenschap, 24 *atheneum* 4 students participated.

The research was done by measuring the students' use of keywords that indicate exploratory talk, their overall amount of talk and the variety of task-based words when

discussing decision-making tasks. In addition, their levels of foreign language anxiety were measured in both the pre- and post-test conditions. The research was quantitative and carried out by using transcriptions of the students' talk and the foreign language anxiety questionnaires. In order to measure talk, recordings of three groups from each school were transcribed for a total sample of 35 students. In order to measure anxiety, the questionnaire results of all 59 participants were considered. The questionnaire results of the 35 students whose recordings were transcribed were also reported separately.

The results are reported and discussed per sub question. They suggest that teaching secondary school students group facilitation skills has a positive effect on both their spoken English and their levels of anxiety. While the statistical tests indicated that results are statistically significant, it must be noted that this research was executed with a relatively small population which makes it difficult to make generalizations. Therefore, supplemental research is needed to further substantiate these results. Despite this fact, the teacher/researchers found that teaching students group facilitation skills has potential for paving the way for efficacious group work in a secondary school classroom setting.

Samenvatting

In de dagelijkse lespraktijk ligt het accent vaak op receptieve vaardigheden, terwijl spreekvaardigheid een ondergeschoven kindje blijft. Uit diverse onderzoeken blijkt dat samenwerkend leren (collaborative learning) in het talenlokaal zorgt voor een positieve leeromgeving: het motiveert de leerlingen, bevordert hun kritisch denkvermogen en verbetert en vergroot daarnaast hun gebruik van de doeltaal Engels. Een grote valkuil is echter dat tijdens groepsdiscussies de uitkomst belangrijker wordt geacht dan het proces. Dit kan leiden tot 'groepsdenken', het fenomeen dat de groep al snel akkoord gaat met een suggestie, waarbij de sterkere, communicatief vaardigere leerlingen het voortouw nemen, wat leidt tot een ongelijkwaardige participatie.

Dit pre-experimentele onderzoek poogt het effect van het aanleren van 'group facilitation skills' (vaardigheden om het uitwisselen van informatie in groepen te faciliteren) op het gesproken Engels van middelbare scholieren vast te stellen. Ook wordt onderzocht of de angst om in een vreemde taal te spreken afneemt door het gelijkwaardig participeren in groepswerk.

Drie docent/onderzoekers hebben gedurende acht weken de interventie 'group facilitation' uitgevoerd in hun reguliere lessen Engels. De interventie is uitgevoerd op drie verschillende scholen bij 28 leerlingen uit 4-havo van het Huygens College te Heerhugowaard, veertien vierdejaars leerlingen op 3-atheneumniveau van de Europese School Bergen en 24 leerlingen uit atheneum-4 van de Berger Scholengemeenschap. Voor de voormeting hebben leerlingen in groepen van vier of vijf een 'decision-making task' uitgevoerd, een opdracht waarbij de groep tot één gezamenlijke conclusie moet komen. Nadat de leerlingen instructies hadden ontvangen over het concept van 'group facilitation' en hier meerdere malen mee geoefend hadden, vond de nameting plaats. Deze was qua inhoud identiek aan de voormeting.

Het onderzoek betrof de uitwerking en beantwoording van de vraag of het aanleren van vaardigheden voor 'group facilitation' enerzijds de Engelse spreekvaardigheid vergroot en verbetert en anderzijds de angst om in een vreemde taal te communiceren vermindert. Het onderzoek bestond uit kwantitatieve analyses van audio-opnames van de groepsdiscussies en van een vragenlijst die werd afgenomen om de spreekangst te meten. Opnames van negen groepen met in totaal 35 leerlingen zijn getranscribeerd en geanalyseerd voor het aantal gebruikte sleutelwoorden, de mate waarin er Engels gesproken

werd en het aantal verschillende taak-gerelateerde Engelse woorden dat de leerlingen gebruikten tijdens het uitwisselen van informatie in groepsverband. In totaal hebben 59 leerlingen de vragenlijst over spreekangst ingevuld.

Uit de resultaten van het onderzoek kan geconcludeerd worden dat het doceren van vaardigheden om het uitwisselen van informatie in groepen te faciliteren in alle drie de scholen een positief effect heeft gehad op zowel het gesproken Engels als op het verminderen van spreekangst in een vreemde taal. De verschillen zijn statistisch significant. Een kanttekening is dat deze resultaten zijn gebaseerd op een relatief kleine onderzoeksgroep, wat de generaliseerbaarheid van de uitkomsten limiteert. Aanvullend onderzoek zou deze resultaten verder kunnen onderbouwen. De positieve resultaten rechtvaardigen echter de conclusie dat het aanbieden van de technieken voor 'group facilitation' mogelijkheden biedt tot effectief groepswerk tijdens de Engelse les op middelbare scholen.

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1 Introduction

The seeds for this research were planted when one of the current teacher/researchers was asked to participate in an informal pilot project in 2012 to explore whether or not teaching secondary students group facilitation skills would help them work more effectively in groups. This teacher/researcher worked with Peter Reimann, a Professor of Education at the University of Sydney, who was involved in *Next-Tell,* a four year long international research programme funded by the European Union (Johnson, Reimann, Bull & Fujita, 2011; Kay, Reimann, Diebold, & Kummerfeld, 2013; Reimann, Bull, Halb, & Johnson, 2011; Reimann, Bull, & Ganesan, 2012; Reimann, Kickmeier-Rust & Albert, 2013; Vatrapu, Reimann, Hussain & Beratung, 2012). The pilot project that explored the teaching of group facilitation skills to secondary school students was one of many projects executed by *Next-Tell*.

Students were trained to work together in groups and given strategies to help them elicit information from group members, collaboratively analyse the information and consolidate it into a group decision. As students worked collaboratively on a web-based newspaper, the teacher noticed that students who participated in the project appeared to improve fluency in spoken English. Further, they seemed to improve in both the amount of talk and the way that they could access their target language when discussing cognitively challenging material. Moreover, students who were often passive and reluctant in collaborative learning situations participated more confidently during group discussions. While these observations were anecdotal, they led to the development of this current research. Peter Reimann found this apparent side benefit interesting as well. When this research was developed, he agreed to act as an advisor to the researchers involved.

1.1 Rationale

While current educational research promotes collaborative learning in the second language (SL) classroom, it seems to be underused and underrated. Teachers are ambivalent with regard to its effectiveness and group work sessions often seem chaotic and ineffective. The extent of this problem is explored in detail in chapter 2. This research was developed to examine a way of structuring group work so that it would be effective for both teaching and learning. Further, it sought to explore the way in which effective group work practices might

improve the amount of talk students produce and the way that the students access their SL when challenged to think critically.

1.2 Collaboration between researchers

This research resulted from a collaboration between three teacher/researchers. This allowed them to conduct the research at three different schools and work with a larger body of data. The report was also written collaboratively with one teacher/researcher taking primary responsibility for a particular section while the other two teacher/researchers collaborated on that section. The teacher/researchers carefully planned and frequently met together to discuss all aspects of the research and to create an equitable division of labour. For an overview of the division of labour for this research see Appendix 1.

1.3 Organization of the report

This report continues with a further explication of the research problem (chapter 2), followed by the theoretical framework (chapter 3) in which the key concepts are discussed, ending in the discussion of the research question, hypotheses and the conceptual framework. Chapter 4 consists of a description of the intervention that provided the basis of the research. In chapter 5, the type of research, the participants, the data collection process as well as validity and reliability issues are addressed, before discussing the results in chapter 6. As this research was carried out at three different schools, the results of each school as well as the combined results are reported. Chapter 7 contains the final conclusions and discussion and the teacher/researchers' recommendations can be found in chapter 8. Finally, all the material referred to in the report can be found in the appendices. Each chapter starts with a short description of its contents.

1.4 Abbreviations and terms used in the study

The following abbreviations and terms (in alphabetical order) are used throughout this study.

BICS: Basic Interpersonal Communication Skills

CALP: Cognitive Academic Language Proficiency

CEFR: Common European Framework of Reference for languages

CLIL: Content and Language Integrated Learning

CUP: Common Underlying Proficiency

EFL: English as a Foreign Language

ESL: English as a Second Language

FLA: Foreign Language Anxiety

FLCAS: Foreign Language Classroom Anxiety Scale

L1: Language One

L2: Language Two

SL: Second Language

SLA: Second Language Acquisition

2 Research Problem

This chapter explicates the concerns that led to the development of this research. Information was gathered from a combination of informal interviews with both language teachers and students and a global review of literature on the topic of collaborative work and second language acquisition (SLA). The analysis of the problems associated with group work clarified the need to develop research in this area.

The importance of interlanguage talk and the effectiveness of collaborative learning in the language two (L2) classroom have been recurrent topics in SLA research for the past twenty years. While early research focused on the pedagogical usefulness of interlanguage talk, later research considered the psycholinguistic rationale for group work in the L2 classroom (Long & Porter, 1985). In current SLA literature, there is general agreement that group work can provide an effective means of developing the L2 student's grasp of his target language, yet many secondary school teachers are ambivalent with regard to its practical effectiveness in the classroom. This ambivalence will be considered in the following paragraphs.

The intervention was performed at three different secondary schools in the Netherlands. The four participating teachers (three teacher/researchers and one teacher who carried out the intervention for one of the teacher/researchers) are experienced English as a second language (ESL) secondary school teachers. The teacher/researcher at School A had had three years teaching experience at the time of the research and is a near native English speaker. The teacher/researcher at School B had had eleven years of teaching experience at the time of the research and is a native English speaker. The teacher and teacher/researcher at School C are both native English speakers and each had had more than twenty years teaching experience at the time of the research. As the teacher/researcher of School C had participated in a pilot project using group facilitation with the class that she taught at the time of this research, her colleague carried out the current intervention in a different class. This colleague was, however, familiar with the teaching of group facilitation skills as she also participated in the pilot project in 2012. The teacher/researcher from School C assisted her colleague and was present for both the pre- and post-tests.

School A is a Dutch language public comprehensive school[1] with a strong emphasis on both the plastic and performing arts. The school encourages students to explore and develop their creativity, resulting in a large number of events (music nights, fashion shows, auctions, et cetera) during which students perform or display their work. Moreover, students in the upper secondary school who are interested in the English language and enjoy learning the language can apply for the Cambridge programme that is taught by a native speaker of English who is also a member of the English department.

At the time of this research, the English department of this school consisted of seven members. Six were experienced teachers, four having taught for over fifteen years and two having taught for just less than fifteen years and the remaining member was in her third year of teaching L2 English. One was a native English speaker and two other members had lived in England for an extended period of time. There were mixed attitudes towards class and task organization in this department. While four teachers at School A were open to developing collaborative strategies, two teachers preferred a more traditional approach to language teaching and were not enthusiastic about the possibility implementing innovative methods into their teaching programmes. As each teacher was free to organize parts of his own teaching programme, these mixed philosophies affected the general programme.

School B is a Dutch language public comprehensive school[2] offering a two-year bridging period to students, thereby, giving them the opportunity to find their appropriate level of learning. The school encourages students to learn independently by allowing them to decide which subject they will follow every fourth lesson of every school day. Furthermore, students are able to choose additional classes in sport, theatre, business and science. At the time of this research, the English department consisted of seven members. Three were experienced teachers (more than ten years of teaching experience) one of these was a native English speaker. The four remaining members were all in their first or second year of teaching L2 English. The teacher/researcher taught in the upper school together with an experienced near native English speaker and both were keenly interested in improving the effectiveness of collaborative work in their parallel classes.

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[1] *Berger Scholengemeenschap voor mavo/vmbo-t, havo en atheneum* in Bergen, NH.
[2] *Huygens College, een openbare scholengemeenschap voor vmbo, havo en vwo* in Heerhugowaard.

School C is a private school[3] that has three language sections (English, Dutch and French). Eligible students who do not have a mother tongue language section in the school (Italian, Hungarian, Polish, Italian, Portuguese, German, Spanish, et cetera), stream into one of the three language sections offered in the school, but still receive language lessons in their mother tongue. The school also has a nursery and primary school and students who have been in the school from the beginning start L2 lessons in the first grade (6-years-old). The school fosters a rich linguistic environment and there is a strong emphasis on communicative and collaborative learning. Further, students mix socially with peers from a variety of mother tongues and take history and geography in their L2 from the third year of secondary school (the equivalent of the second year in Dutch schools). Students begin tuition in a third language from 11-years-old. At the time of this research, all but two of the L2 teachers were mother tongue teachers. The native speakers also taught English as a first language (L1) in the English section of the school. There were two teachers, one Dutch and one Belgian, who were not mother tongue speakers of English. All of the teachers in the department had had more than fifteen years experience teaching English. The leaving certificate in the school is the European Baccalaureate. The class that participated in the intervention was a class comprised of students who were all in the Dutch section, but studied English as their L2. In this school, the effectiveness of group work was recognised, along with its pitfalls.

When queried as to their experiences using group work in the ESL classroom, teachers' reactions were mixed. In principle, collaborative tasks should provide opportunities for interlanguage talk, but in practice, students often revert back to their shared mother tongue for group discussion. Teachers in all three schools identified this problem. Teachers at Schools A and B noticed that although the *Common European Framework of Reference for Languages*' (CEFR's) core aims stress that receptive and productive skills are of equal importance, they do not receive equal attention in the language teaching classroom. These teachers stated that students are well drilled in receptive skills (reading and listening), but not in speaking. This was reflected in both the departmental planning and the testing programme of these schools. Other teachers

[3] *Europese School, Bergen*, NH, a European school controlled jointly by the member states of the European Union which offers the European Baccalaureate as its leaving certificate.

questioned at Schools A and B remarked that the lesson programme was full and group work activities consumed too much valuable lesson time.

Teachers at School C had the freedom to use group work and collaborative learning, but still found it challenging to keep students speaking in their L2 for the duration of the activity. When students at School C were asked why they are so quick to revert to their shared mother tongue for L2 collaborative learning tasks even when the teacher explicitly requests that they use their SL for discussion purposes, they gave several answers to justify their actions. First, the students want to accomplish the task as quickly and effortlessly as possible and their mother tongue facilitates this. Second, their interlanguage vocabulary is often not sufficient for the task given. Third, they do not want to look stupid in front of their friends, and finally, they find it strange to speak in a foreign language with their peers during the lesson when, in all other contexts, they communicate in their shared common language.

Teachers at Schools A and B noticed that as students enter adolescence, they seem to become more insecure in front of their peers. One teacher at School A mentioned that she thought that peer pressure was one of the reasons students are hesitant to speak in their target language in classroom situations. Learners seem to experience some kind of barrier when attempting to speak English. She noticed that her first year students were very confident when speaking English, but it seemed that the older students got, the less confident they became. A teacher at School B remarked that when students reached adolescence, they became very self-conscious.

Teachers at School C commented that teachers and students are at cross-purposes when confronted with collaborative tasks. Students are more concerned with the product of the task at hand and their goal is to complete the task as quickly and efficiently as possible. This is one of the reasons they quickly revert to their shared mother tongue for group discussion. Teachers, on the other hand, see the product as a means to an end and this end is embedded in the process, namely, the improvement of the students' target language as a result of the socio-linguistic processes that occur as they use this language in group discussion.

The teachers questioned at all three schools stated that group work requires constant monitoring so that students stay 'on task' and use their target language in all steps of the process. A number of teachers at Schools A and B thought that group work was not 'worth the trouble' and that they could maintain more control over the learning taking place

with other kinds of tasks such as receptive tasks (reading or listening) or individual writing tasks. Yet, these teachers also recognised that without collaborative work, there are limited opportunities for students to 'create speech' and use the language that they know for communicative purposes. Despite the fact that the CEFR's core aims stress that receptive and productive skills are of equal importance, many secondary L2 classrooms fail to reflect this, in part, because of teachers' ambivalence with regard to the effectiveness of group work (Beeker, Fasoglio, van Til & Trimbas, 2011).

While teachers at all three schools recognise the pedagogical effectiveness of group work in principle, they often find its practical effectiveness hit or miss. Sometimes it seems to accomplish the teachers' goals, and other times it seems like wasted time. These teachers admitted that group work is most effective when it is carefully planned and students have clear understanding of the task at hand and how it should be accomplished. Teachers at Schools A and C also noticed that sometimes more linguistically able students dominate the discussion during group work, while less able students remain quiet and withdrawn.

The complications that arise when attempting group work in the L2 classroom raise the question as to whether it is possible to develop an approach to group work that is effective for both teaching and learning. This study was developed in response to this question. The following chapter provides a theoretical framework for the intervention that formed the core of the research that was devised in response to the challenges that group work creates for both teachers and students.

3 Theoretical Framework

Chapter 3 develops the theoretical framework for this research. First, it examines research centred around the efficacy of collaborative learning as a means of increasing SL acquisition and developing academic proficiency in that language (section 3.1). Second, it discusses research on the importance of integrating thinking skills into L2 teaching in order to obtain academic proficiency in spoken English due to lack of transference in child and adolescent learners (section 3.2). Third, the chapter elucidates research centred around the difficulties that arise from the use of collaborative learning in the classroom (section 3.3). Fourth, it considers research on the key concepts embedded in the formulation of the research questions of this study (section 3.4). Fifth, it posits the research question that was formed as a basis for this research and the hypotheses of the teacher/researchers with regard to this question and it presents the conceptual framework developed on the basis of these hypotheses (section 3.5).

3.1 Collaborative learning

The connection between the efficacy of group work, interlanguage talk and effective SL acquisition has long been established. As early as 1985, five arguments were posited for the pedagogical effectiveness of group work as a means of increasing opportunities for interlanguage talk in the SL classroom. Long and Porter (1985) stated that group work increases opportunities for language practice in the student's target language, improves the quality of student talk, individualizes instruction, promotes a positive learning environment and motivates learners. There have been many observational studies that have documented that more traditional teacher driven L2 instruction allowed for only one hour of SL talk per student in the course of an entire school year (Long & Porter, 1985). Effective group work offers an opportunity to multiply the amount of student talk in the ESL classroom.

The philosophical justification for group work is grounded in a neo-Vygotskian social interactionist perspective (Wegerif & Mercer, 1997a). Vygotsky stressed a holistic approach to learning that emphasised the importance of learning by interaction. Central to his approach is the concept of mediation where a mediator (a parent, teacher or peer) acts as a guide in the social construction of knowledge (Williams & Burden, 1997). According to Vygotsky, social interaction with a mediator allows students to work within their 'zone of proximal development', the level of skill knowledge just beyond the level that the student

would be able to cope with when working alone (Williams & Burden, 1997). Collaboration between the learner and the mediator provides the framework within which learning takes place.

Bruner first coined the term 'scaffolding' to describe the provision of a framework or structure that allows a learner to complete a task that might be too cognitively challenging without the provision of this structure (Bruner, 2006). He refers to this interaction between the mediator and the learner as 'scaffolding' or talk that provides a structure for learning (Bruner, 2006). While this social constructivist perspective is often offered as the philosophical rationale for group work, this does not provide an accurate conceptual model for what actually occurs in the process of effective group work (Bakhtin in Wegerif & Mercer, 1997a). The problem lies in the fact that Vygotsky's theory is centred on the learning of individuals interacting with a mediator and group work focuses on collaborative learning.

The Russian philosopher Mikhail Bakhtin provides a better conceptual model for collaborative learning (Wegerif & Mercer, 1997a). Bakhtin stated, "meaning is like an electric spark that occurs only when two different terminals are hooked together" (Bakhtin in Wegerif & Mercer, 1997a, p.51). Thus, meaning is created in a dialogue where participants have different voices and different perspectives (Wegerif & Mercer, 1997a). Research also shows that collaborative talk is useful for reasoning with language, thinking and educational purposes (Mercer, 1995). To be effective, collaborative talk must be talk where ideas are clearly presented and can be jointly evaluated, where collaborators reason together, possible solutions are shared and agreed upon, collaborators have a shared understanding of the purpose of the activity and there is a free exchange of ideas amongst all participants (Mercer, 1995). This model diverges from the Vygotskian model in that meaning is constructed by the learners themselves. They construct both the scaffolding and the knowledge through their interaction.

3.2 Collaborative learning in the L2 classroom

While Wegerif and Mercer (1997a) have extensively researched the role of collaboration in the joint construction of knowledge amongst learners, the majority of their research has focused on L1 primary school learners. Oxford, however, describes collaborative learning as one of the "three communicative strands" of learning in the L2 classroom (1997, p.443). In addition, collaborative learning is the structuring of learners into

"knowledge communities" who work within their zone of proximal development in a relationship characterised by cognitive apprenticeship (Oxford, 1997). The two other strands of language learning described by Oxford are cooperative learning, where processes and outcomes are more closely prescribed by the teacher, and interaction, which allows teachers, learners and others to engage in meaningful ways in a variety of contexts (1997). In this model, collaborative learning is clearly student, rather than teacher, driven.

Moreover, Thomas and Wright (1999) argue post-modern epistemology requires a restructuring of the foreign language classroom along dialogical lines. The idea that knowledge is constructed and negotiated postulates the importance of process based language learning where students learn to cooperate and deal with group dynamics, learn to learn and manage their learning, learn to teach, learn to respond and learn to use language correctly to construct, interpret, produce and interact with culture (Thomas & Wright, 1999). Effective collaborative talk provides opportunities for these processes to be practiced in a meaningful context.

In addition to this, collaborative talk provides opportunity for the teaching of thinking skills in a L2 context. Lightbown (2000) highlighted various shifts in thinking with regard to SLA and L2 teaching. One recent development is the move away from understanding L2 teaching as simply providing a new vocabulary and syntax for the information that students have acquired in their mother tongue (Lightbown, 2000). While it was once thought that students would naturally access thinking skills from their first language and implement them into their second language, current research implies that this is not an accurate description of how L2 learners learn to think in their target language.

Cummins' (1999) concept of common underlying proficiency (CUP) and the distinction between basic interpersonal communication skills (BICS), and cognitive academic language proficiency (CALP), have helped to clarify the complications of L2 learning with regard to the transferability of skills. Cummins (1999) argues that there is a misconception that students who are learning a new language only need to learn to communicate effectively in their L2 in order to guarantee academic success. He divides language proficiency into two sorts: BICS and CALP. BICS can be learnt by L2 students within two years. This gives L2 teachers the misconception that these students are able to function effectively in an academic L2 environment. CALP takes at least five years to develop and often, it must be specifically taught in a L2 programme that addresses what Cummins

describes as “cognitive skills, academic content and critical language awareness” (1999, p.6). Cummins (1999) stresses that there is a CUP in L2 learners that is based in their mother tongue, but it would be naive to assume that this proficiency necessarily includes the capacity for CALP.

Further, Carson & Kuehn’s (1994) study concluded that “transfer of ability to L2 can only occur if individuals have already acquired that ability in their L1” (Carson & Kuehn in Jiang & Kuehn, 2001, p.655). Jiang and Kuehn (2001) examined the transference of academic skills from L1 to L2 in post-secondary students. They found that students who were late immigrants who had a firm grounding in their L1 were able to transfer cognitive skills from their L1 to their L2 more effectively than early immigrants. This underpins the importance of teaching cognitive and academic skills, as well as language skills, to secondary school language learners (Jiang & Kuehn, 2001). McGuinness (1999; 2005) outlines the elements of a curriculum that teaches cognitive skills in such a way that transference is more likely across disciplines. These elements include critical thinking, creative thinking, problem solving, planning and decision-making. Each of these elements are practiced in a collaborative context (McGuinness, 2005).

Swain and Lapkin (1995; 2002) have focused research on the role of output in SL learning. In the course of their research, they moved from regarding output as a means of information processing to considering it in a socio-cultural context. This shift in focus is significant as output is no longer viewed as a way of communicating a message, but as a part of cognitive activity (Swain and Lapkin, 2002). Embedded in collaborative work amongst L2 language learners there is an inherent meta-talk or “talking about language” (Swain & Lapkin, 2002, p.286). This is a cognitive activity that moves L2 talk beyond the realm of simply communicating a message to thinking about language itself. It is precisely this cognitive activity that develops both thinking about language and critical thinking in the learner’s L2.

While many acknowledge the potential gains of collaborative work, there is concern as to its effectiveness in a mixed level L2 classroom. Watanabe and Swain (2007) researched the effect that a student’s proficiency in his target language had on the efficacy of collaborative work. They discovered that collaboration had a positive effect on adult language learners’ progress whether they worked with peers of the same proficiency level or peers with a higher or lower proficiency level. This confirms Wegerif and Mercer’s (1997a)

theory that collaboration does not necessitate the voice of an expert in the co-construction of knowledge.

3.3 The problems of collaborative learning

Apart from Swain and Lapkin (1998; 2002) who researched collaborative learning amongst adolescent French immersion students and Liang (2004) who researched collaborative learning amongst Chinese adolescent immigrant students, much of current research in collaborative learning is not done with adolescent learners. Often research takes place on university campuses where EFL students are highly motivated as they are learning English in order to matriculate into English language academic programmes (Jiang & Kuehn, 2001; Storch, 2001; Lee, 2004) or with first language primary school students (Schmitz & Winskel, 2008; Rojas-Drummond, Mercer & Dabrowski, 2001; Grau & Whitebread, 2012). Transferring the findings of research done with young children or adults and the teaching methods that follow from it into an adolescent environment presents its own unique set of challenges.

Further, although it may be true that group work and collaborative learning are considered effective for L2 learning in theory (Long & Porter, 1985), their practice produces a number of pitfalls and challenges. Chou (2011) discovered that although students had increased opportunity to communicate in their target language while preparing group presentations, the majority of students still preferred to produce individual presentations. The reasons that they gave for this were that they did not have enough control over the content of the presentation, negotiation was time consuming and ineffective and there were always group members who did not carry their share of the workload. The students in the study were concerned with the product they would produce and found the cooperation that group work requires detrimental to the production of this product, while the instructors were focussed on the language learning benefits that collaboration created (Chou, 2011).

Research points to the pedagogical benefits of cooperative learning from the educator's perspective, yet often learners are less enthusiastic (Liang, Mohan & Early, 1997). A study of Chinese students reported that learners often have conflicting ideas with regard to group work. Students were ambivalent when asked whether or not they enjoyed group work experiences in the L2 classroom. Much of their ambivalence rested in their socio-cultural expectations (Liang, 2004). Storch (2001) examined the processes students used to

collaborate during a paired writing task and determined that simply pairing students for an assignment does not guarantee that they will work collaboratively. Yet, when students in the study did collaborate, they produced a higher standard of writing. This begs the question as to whether there is an approach to collaborative learning and group work that maximizes the teacher perceived pedagogical benefits of group work for SLA, while minimizing student perceived frustrations and insecurities with regard to collaborative learning.

3.4 Background to this study

Having discussed prior research with regard to collaborative learning and collaborative learning in a L2 context, what follows is a discussion of the concepts relevant to this research, namely, group facilitation skills and collaborative decision-making, increasing exploratory talk, the relevance of increasing L2 talk and anxiety in L2 learning.

3.4.1 Group facilitation skills and collaborative decision-making

Group facilitation finds its roots in the business world and teaches both groups and facilitators strategies for organising effective meetings (Kaner, Lind, Toldi, Fisk & Berger, 2007). The purpose of group facilitation training is to create groups that work effectively in brainstorming, gathering and analysing ideas, creating informed group consensus in decision-making and allocating tasks equally (Kaner *et al.,* 2007). Meetings are run by a facilitator, who has prior knowledge of the task at hand and plans activities to help the group effectively carry out this task.

The facilitator's primary goal is to lead the group to a decision that is truly collaborative. His role is to eliminate "groupthink", the phenomenon that occurs when decisions are made giving the illusion of an agreement. In "groupthink", members attempt to minimize conflict and maximize cohesiveness. This leads to their reaching a consensus without critically testing, analysing or evaluating ideas (Cline, 1990).

The facilitator's responsibilities could be divided into activities carried out before the meeting (planning, developing an agenda and preparing artefacts that assist in the decision-making process), during the meeting (adhering to the meeting plan, assuring that everyone participates, ensuring that all ideas are treated seriously and analysed effectively, paraphrasing participants' contributions to acknowledge that they were heard and understood, recording the meeting in a collaborative space and taking meeting notes) and

after the meeting (preparing a set of meeting minutes or a written report of the meeting's outcomes and reflecting on the process of group facilitation as used in the meeting) (Kaner *et al.,* 2007). The use of physical artefacts that act as collaborative spaces in meetings promote wider participation and encourage participants to think with more cognitive creativity (Neilsen, 2012).

3.4.2 Increasing exploratory talk

Mercer (1995) outlined three ways of talking and thinking when learners work in collaborative settings. The first of these is disputational talk where participants disagree; no attempt is made to explore together and decisions are made individually. The second is cumulative talk where participants add to one another's assertions in a positive, but uncritical way. Cumulative talk is characterised by repetition and little evidence of synthesis or critical evaluation of information is provided. The third of these is exploratory talk which is characterised by a positive, yet critical, exchange of ideas. In exploratory talk there is clear evidence that group members listen and interact critically to one another's ideas as "knowledge is made more publicly accountable and reasoning is more visible in the talk" (Mercer, 1995, p.104).

Students who were taught skills for implementing exploratory talk and who exhibited these skills during collaborative talk also improved their scores in individual reasoning tests (Schmitz & Winskel, 2008). Mercer, Dawes, Wegerif and Sans (2004) examined evidence of exploratory talk, or talk that evidenced complex thinking, by searching for certain keywords such as 'if', 'because', 'I think' and 'I agree'. Mercer (2000) includes 'why' in the list of words that signify exploratory talk. Wegerif and Mercer (*in* Mercer, 2000) noticed that children who had participated in a study to improve exploratory talk used these words considerably more than students in their control group who completed the same problem-solving task without participating in the talk lessons. Evidence of these keywords indicated evidence of more complex sentence structures being used and evidence of reasoning as these are words that are used to account for and explore differences of opinion (Mercer, 2000).

Wegerif and Mercer (1997b) argued that using computer based text analysis to search for keywords in context that demonstrate evidence of co-reasoning facilitates a method of text analysis that circumvents the problems of both quantitative and qualitative methods of text analysis. Methods of text analysis that are traditionally thought to be

quantitative utilize coding schemes that are publicly verifiable and can analyse a large corpus of text, but cannot measure how knowledge is constructed over time (Wegerif & Mercer, 1997b). Moreover, these coding schemes consider text while often ignoring alternate meanings in particular contexts (Wegerif & Mercer, 1997b).

By contrast, qualitative text analysis offers a method that is able to consider context, but is limited in its scope as it only works with small segments of larger transcripts (Wegerif & Mercer, 1997b). Additionally, qualitative text analysis is questionable as it allows for the possibility that the researcher will choose portions of text that verify, rather than falsify his hypothesis (Wegerif & Mercer, 1997b). Searching for keywords in context allows the researcher to use a quantitative method (counting) to explore a qualitative concept (evidence of reasoning). Wegerif and Mercer (1997b) argue that this integration of both quantitative and qualitative text analysis is both quantifiable and contextualized. Schmitz and Winskel (2008) utilized the method of coding validated by Wegerif and Mercer (1997b), but adapted the keywords that were coded to account for the fact that the students in their study were older than those in previous studies and to allow for cultural differences in language use found in the Australian English of their research context.

3.4.3 Increasing L2 talk

As previously mentioned in section 3.1, more traditional SL classroom models are teacher led and allow for limited opportunities for student talk (Long & Porter, 1985). However, effective language teaching environments must allow opportunities for pushed output (Swain & Lapkin, 1995; 2002) given the fact that language is communicative and must be utilized for communicative purposes. Students learn to access the language that they know when they are given tasks to transact in their target language (Tulung, 2009). These tasks allow for negotiated meaning, interaction and opportunities for students to consider form as well as meaning in their target language (Tulung, 2009). This, in turn, increases students' acquisition of their target language and their ability to use it in collaborative tasks.

3.4.4 Anxiety in L2 learning

Two hypotheses by Krashen (1982) may help to explain the ambivalence some students feel when confronted with group work. Krashen (1982) stated that students who experience anxiety when attempting to learn a second language raise a filter that hinders

their ability to learn. This filter can be raised by anxiety, lack of confidence or insecurity. The uncertainty of group work and its outcomes, combined with the stress of having to present ideas to peers in a language that is not one's own, may lead to anxiety and the raising of the affective filter. This affective filter must be lowered in order to provide optimal conditions for learning. Lightbown and Spada echo this when they state that "a learner's willingness to communicate has also been related to anxiety" (2006, p.62). In a study involving tenth grade students in Pakistan, a link was drawn between anxiety and negative performance in the students' target language (Hussauna, Shahidb & Zamac, 2011).

Moreover, Horwitz (1986) outlined three factors that are aspects of foreign language anxiety: fear of negative evaluation, test anxiety and communication apprehension. Each of these creates a situation where students experience stress in foreign language learning situations. Horwitz, Horwitz, & Cope (1986) have developed a foreign language anxiety scale (FLCAS). This scale measures the level of anxiety that individual students experience in foreign language learning situations and has been validated by Trang (2012).

Although the scale has been criticised by Sparks and Granschow (*in* Trang, 2012), these criticisms seem to be centred on the debate as to whether L2 anxiety could create differences with regard to learning. In support of the FLCAS, McIntyre (*in* Trang, 2012) argued that anxiety arousal could be a causal agent that creates differences in individual language learning. Trang concluded that the Horwitz scale has played a large role in foreign language anxiety (FLA) research and that while it may not be perfect, it has been demonstrated to be valid and the "most accepted working hypothesis" (Trang, 2012, p.73).

3.5 Research question and conceptual framework

The above mentioned research focused on the efficacy of collaborative learning as a means of increasing SLA, the importance of integrating thinking skills into L2 teaching, the difficulties that arise from the use of collaborative learning in the classroom and the key concepts embedded in the formulation of the research question of this study. An examination of this research led to the formulation of the research question that follows.

3.5.1 Research question

In light of the theoretical framework outlined in sections 3.1 to 3.4, the purpose of this study was to test the prediction that teaching students group facilitation would improve

both their amount of exploratory talk and their overall amount of talk, variety of words used in discussion and decrease their anxiety in the L2 classroom. This research aimed to show that group facilitation would increase students' (exploratory) talk, variety of words used and decrease their anxiety during peer interaction activities. This study's main research question was thus formulated as follows:

Main question:

Does teaching group facilitation skills to ESL students' affect their spoken English and their anxiety in spoken English?

This question led to the conceptual framework depicted below.

3.5.2 Conceptual Framework

In this section, the conceptual framework is depicted and the four accompanying hypotheses are described.

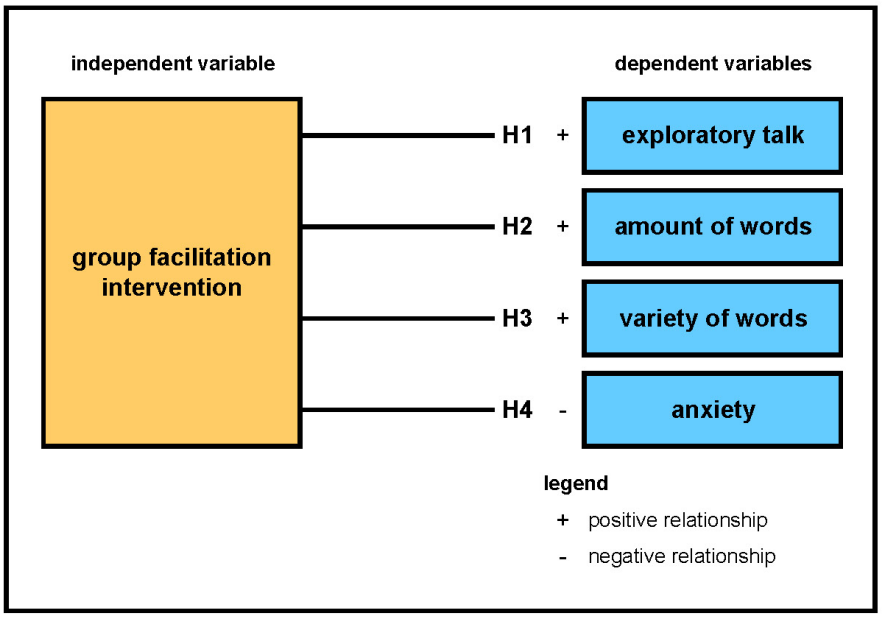

Figure 1: Conceptual framework of the four hypotheses

Hypothesis 1 (H1) amount of exploratory talk

H1 was that the group facilitation intervention would increase the amount of exploratory talk used in conversation during a collaborative decision-making task. By searching for certain keywords such as 'if', 'because', 'I think' and 'I agree' during

collaborative talk, it was predicted that evidence of exploratory talk or talk that evidenced complex thinking would be found (Mercer, Littleton & Wegerif, 2004).

Hypothesis 2 (H2) amount of talk

H2 was that the group facilitation intervention would increase the amount of L2 talk during a collaborative speaking task. H2 was based on the premise that providing a structure for group discussion and creating a vehicle for establishing decision-making criteria for collaborative decision-making tasks would provide scaffolding that allowed students to access more of their L2 during these tasks (Cummins, 1999; McGuinness 1999; 2005). Additionally, the decision deck provided a means for avoiding "groupthink" that leads to decisions made too hastily without adequate thought and analysis (Cline, 1990).

Hypothesis 3 (H3) variety of words

H3 was that the group facilitation intervention would increase the variety of words used during a collaborative decision-making task. H3 was based on the premise that creating opportunities for pushed output (Swain & Lapkin, 1995; 2002) would not only increase the instances of regularly used lexicon, but would provide for the possibility of accessing a richer variety of words (Tulung, 2009).

Hypothesis 4 (H4) anxiety

H4 was that the group facilitation intervention would decrease the students' anxiety with regard to speaking. H4 was based on the premise that collaborative group work would promote a positive learning environment and motivate learners, thereby positively affecting the students' anxiety levels (Long and Porter, 1985).

4 Intervention

In this chapter, the design principles of the group facilitation intervention are discussed (section 4.1), followed by a description of the intervention materials and an outline of the procedure of the intervention (section 4.2). Figure 2 on page 33 depicts the procedure of the intervention.

4.1 Design Principles

The researchers examined the elements of the group facilitation process and realised that many of these provided a natural vehicle for implementing language teaching strategies that have been proven effective in the L2 classroom. The different elements of meetings constructed around group facilitation allow for rich input (Krashen, 1982) and pushed output (Swain & Lapkin, 1995; 2002) and the effectiveness of the facilitation process provides opportunity for meta-cognition that is important for transference to other learning situations (McGuinness, 2005). Further, these elements (paraphrasing, artefacts such as a group memory or a decision deck, et cetera) allow a variety of approaches to help L2 learners connect language with the task at hand. This variety of approaches to the meeting content should allow for more potential language learning 'hits' for a wider variety of learners (Westhoff, 2004).

While group facilitation processes seemed to provide a means of creating the conditions for effective collaborative talk and improved L2 acquisition, group facilitation finds its roots in the corporate world. For this reason, the teacher/researchers adapted the critical elements of group facilitation processes to make them more suitable to a secondary school classroom setting. The following paragraphs describe the way in which the process of group facilitation was adapted for this study.

First, facilitators in business are often external individuals who have no personal interest in the group and its outcomes. The student groups in this study were led by a facilitator/participant who was expected to create the conditions for participatory decision-making while at the same time participating in the task. This model provided a more realistic picture of collaborative decision-making in a class setting.

Second, group facilitators in business settings work with a meeting plan, a group memory and meeting minutes. These elements were combined into a single document called a 'decision deck' specifically designed to lead students through collaborative decision-

making protocol. The decision deck acted as a way for the facilitator to think through the discussion before the meeting (replacing meeting notes). In addition, it provided a collaborative working space for the group (replacing the group memory) and a space for recording the processes and outcomes of the collaborative task (replacing meeting minutes). After each session, both the facilitators and participants reflected on the session in a learner report which provided opportunity for meta-cognition or thinking about thinking (McGuinness, 1999; 2005).

Third, the decision-making tasks developed or chosen for the pre-test, post-test and the intervention group discussions needed to fill certain criteria in order to operationalize the study. Suitable decision-making scenarios needed to be centred around a group problem or ethical dilemma. This was important as group facilitation training teaches collaborative decision-making. In addition, the scenarios involved a situation where there was not an easy solution or clear answer. The task needed to allow for a variety of possible outcomes with no clear right or wrong answer to the dilemma. Moreover, each possible solution had potential consequences that would affect the group or organization to which the group belonged. Although the topics of the tasks varied, they could only be included in the study if they met the aforementioned criteria.

Finally, as group facilitators were given their decision-making task and decision deck several days before the task had to be completed, they had ample time to prepare, plan and think about how they would organize the meeting. This thinking and preparation may have removed the anxiety some students face when leading a group as the students had time to think through both the task and the language needed to accomplish the task (Krashen, 1982; Lightbown & Spada, 2006). Facilitators were taught to create an atmosphere where all ideas were valued and considered equally. This may have helped to decrease the anxiety that some participants may experience when offering suggestions in a group situation (Horwitz, 1986; Hussauna, Shahidb & Zamac, 2011). The importance of the exploration of ideas through brainstorming, analysing and ranking solutions to a problem or challenge is embedded in the entire process of group facilitation; the use of exploratory talk is critical to this process (Mercer, 2000; McGuinness, 1999; 2005).

4.2 Description of intervention

As the researchers of this study had to adapt group facilitation to suit the L2 classroom, the following section describes the lessons and materials used in this intervention. Before the start of the intervention the teachers/researchers involved in this study attended a workshop on group facilitation (see section 4.2.3 for further information).

4.2.1 Group facilitation training materials

The group facilitation training for the students was designed to be given in four to five lessons. All materials can be found in the appendices (Appendices 2 to 16). The teacher's notes ensured that all three classes, in all three schools received the same information. During the first lesson students started with a warming up activity in which they were asked to discuss the advantages and disadvantages of group work before watching a presentation that introduced the concepts of group facilitation.

In the second teaching session consisting of two lessons, students were encouraged to elicit what the facilitator should do in a variety of situations in the form of discussion cards that were handed out to the groups. This activity was to highlight the role of the facilitator. The second part included handing out the decision deck and the first practice decision-making task. Using the PowerPoint presentation on the decision deck, students were introduced to the materials and shown step by step how the facilitator would plan the meeting and lead students through the decision deck during the meeting.

During the final phase of the training, students were asked to work in their groups to practice the planning and running of a meeting using the second practice decision-making task and the group facilitation pack. At the end of this session, the groups were brought together to compare notes and discuss any problems they may have experienced working with the materials.

4.2.2 Practice materials

A series of seven decision-making tasks were designed according to the criteria of the design principles, namely the task was centred around a group problem or ethical dilemma to allow for feedback and reflection, the task was open-ended to allow for a variety of possible outcomes with no clear or easy right or wrong answer, and finally, each possible

solution had further repercussions which would affect the group or organization to which the group belonged (see Appendices 2 to 8).

4.2.3 Procedure of intervention

In this section the procedure of the intervention will be outlined in five steps. See Figure 2 on page 33 for a depiction of the procedure of the group facilitation intervention in the three participating schools.

Step 1: Pilot intervention

As mentioned in the design principles of the intervention, group facilitation originated in the corporate world and had to be adapted to suite the L2 classroom. The decision deck was created by Peter Reimann[4] and was tried out in a parallel class at School B and a class at school C who had participated in a group facilitation pilot project during the previous school year. It was decided that in order for the students to work more effectively, the decision deck had to be further simplified. The decision-making tasks were also piloted in classes not involved in the study before using them for this intervention.

Step 2: Workshop

Peter Reimann held a workshop for the four teachers in February 2014. During the workshop, the teachers were introduced to the practice of group facilitation and to the materials (described in section 4.2) that would be used in the intervention. The workshop ensured that all teachers were trained to carry out the intervention in the same way and thus enhanced the reliability of the study.

Step 3: Pre-test

Before implementing the intervention, the three classes were asked to form groups of four or five. The facilitator of each group was given the decision-making task (task 1, see Appendix 2) and general instructions (see Appendix 9) several days prior to the pre-test. The first lesson started with the pre-test decision-making task (task 1) and ended with the students filling in the 33-question questionnaire (FLCAS, see Appendix 17). For more information on the procedure of the pre-test, see section 5.5.

[4] See introduction for more information on Peter Reimann, page 10.

Step 4: Group facilitation training

Group facilitation training and practice was implemented over a period of six weeks. The students were taught what group facilitation was and each member of the group was given the opportunity to practice as a facilitator in group work on a decision-making task. All tasks (task 2-6, see Appendix 3-7) carried out by the students were similar in length and context.

Step 5: Post-test

The post-test data again consisted of a decision-making task (task 7, see Appendix 8) and the filling in of the same questionnaire as during the pre-test. For more information, see section 5.5.

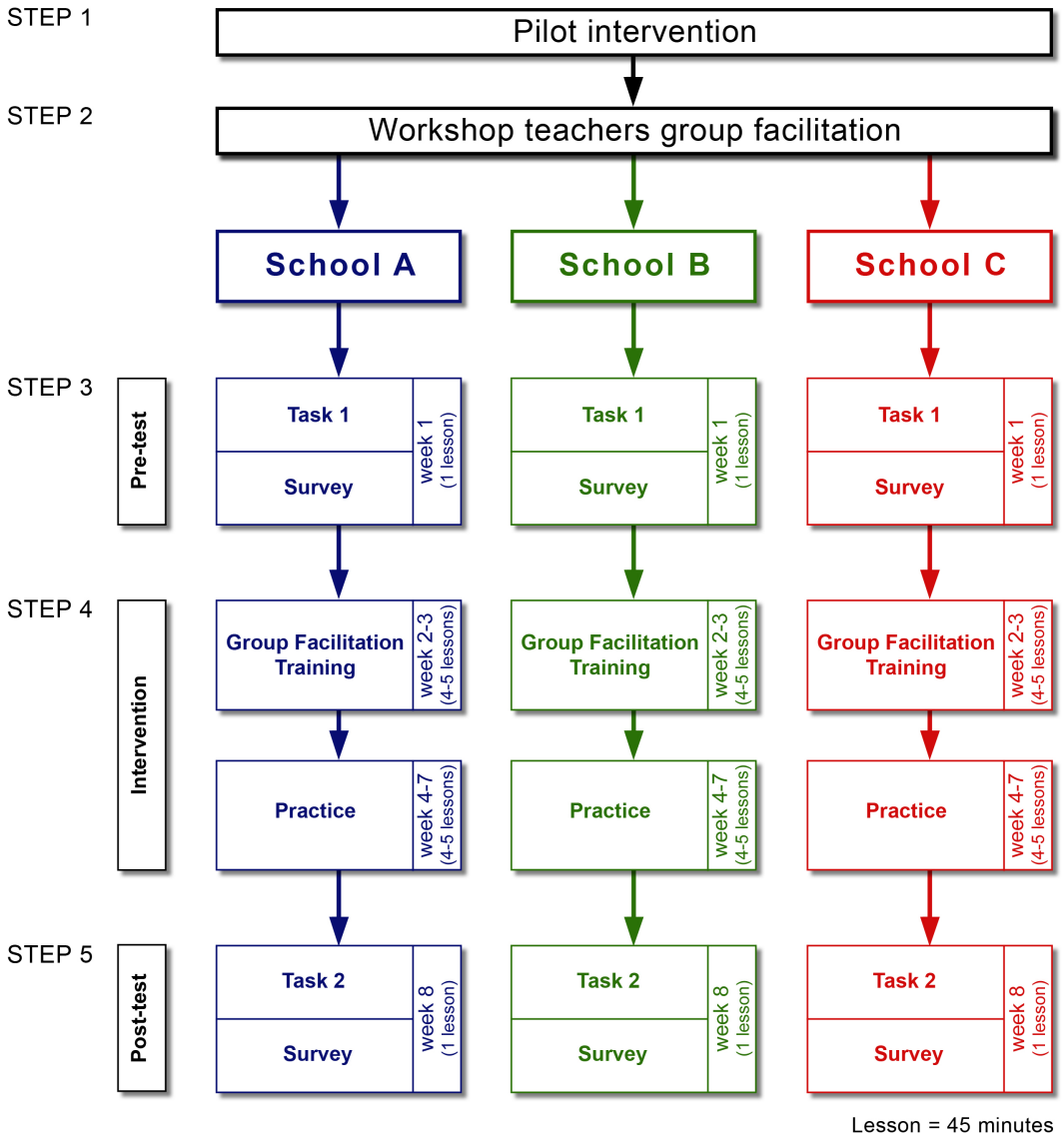

Figure 2: Study design

5 Methodology

In this chapter a definition of the type of research is provided (section 5.1) as well as a description of the research questions (section 5.2), participants (section 5.3) and research instruments (section 5.4). This is followed by an explanation of the data collection, processing and analysis of the two research instruments (section 5.5) as well as an explanation of the statistical analysis of the data (section 5.6). Finally, an account of the validity and reliability of the research is provided (section 5.7).

5.1 Type of Research

This evaluative research was aimed at measuring the difference in the participants' amount of (exploratory) talk, their variety of words used and their anxiety levels before and after the teaching of group facilitation skills as an intervention. As the research evaluates the effectiveness of the intervention by means of examining quantitative data, its questions are difference questions. Hence, a pre-experimental research design was created in order to compare the results before and after the intervention.

The research was aimed at exploring the effects of the intervention; this was done without including a control group. There was one available parallel class and it was used to pilot the intervention materials and, therefore, could not be used as a control group. Any possible control group would have had to have been one group of students that were a part of a larger class that had access to the intervention. Thus, creating a 'pure' control group would have been difficult, as the group would have received some instructions, possibly affecting the validity and reliability of their results. Therefore, it was preferable to use a pre-experimental research design as opposed to a pure experimental design or a quasi-experiment (Baarda, Bakker, Van der Hulst, Fischer, Julsing, van Vianen & de Goede, 2012).

5.2 Research Questions

In order to examine the effect of teaching group facilitation skills on ESL students' spoken English and their anxiety in spoken English, a number of sub questions were formulated. These were designed to assess whether teaching students group facilitation would improve both their amount of exploratory talk and their overall amount of talk,

variety of words used in discussion and decrease their anxiety in the L2 classroom. This study's main and sub questions were thus formulated as follows:

Main question:

Does teaching group facilitation skills to ESL students' affect their spoken English and their anxiety in spoken English?

Sub questions:

1) Does teaching group facilitation skills affect the amount of keywords indicating exploratory talk spoken by ESL students during a collaborative decision-making task?
2) Does teaching group facilitation skills affect the amount of English words spoken by ESL students during a collaborative decision-making task?
3) Does teaching group facilitation skills affect the variety of different words spoken by ESL students during a collaborative decision-making task?
4) Does teaching group facilitation skills affect ESL students' anxiety when speaking English?

5.3 Participants

Due to the fact that each school and, therefore, each group of participants varied, the following section describes them separately. Each teacher/researcher chose a class where this type of research would be feasible as some classes had exams and others full existing programmes. The common denominator of the three selected classes was that each class from each school was in the middle or upper years of secondary school. All participants filled in a written form of consent prior to the research taking place in the classroom. This form explained that this intervention was for research purposes only and their information would remain confidential and anonymous, but the research could be published (see Appendix 18). Additionally, a letter informing the parents/caretakers about the research, asking them to contact the researchers if they objected to their child's participation was sent as well (see Appendix 19).

The 24 students from School A, who participated in the research, were in their fourth year of pre-university secondary education.[5] Their ages ranged between 15 and 16 and all students studied Dutch as their L1 and English as their L2.

The 28 students from School B were in their fourth year of higher general secondary education.[6] Their ages ranged between 15 and 18. Thirteen students first completed their general secondary education[7] before being allowed to continue with higher general secondary education, which explains the differences in age. Their L1 was Dutch and L2 was English.

The fourteen students from School C were aged between 14 and 15. They were in their fourth year of private secondary school education and they were in the Dutch section of the school with English as their L2.[8] In addition to their L2 English lessons three times a week, they had also studied history and geography in English for two years. Besides three L2 English lessons, they had an additional two lessons of history and two lessons of geography in English each week for a total of seven lessons in English or content and language integrated learning (CLIL) English courses each week.

A participant's data could only be used if he was present during both the pre- and post-test and had attended 70% of the intervention lessons. For this reason, the data of five students of School B and of two students of School C were left out of the analyses. The total number of participants per school is presented in Table 1 on page 37. All 59 students filled in a FLCAS questionnaire (see section 5.4.2). The analyses of spoken English production were conducted on a subgroup of 35 students.

Before carrying out the pre-test and implementing the intervention, the three classes were asked to form groups of four or five. The students were allowed to form their own groups as working together with unfamiliar classmates could have had a negative effect on the cooperation within the group (see section 5.7.2 *group composition*). To ensure that a true comparison could be made, the groups and the facilitators were the same during the pre- and post-test.

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[5] *Atheneum 4.*
[6] *Havo 4.*
[7] *Vmbo-t.*
[8] The equivalent of the *Atheneum 3* in the Dutch secondary system.

At School A, three groups (all consisting of four participants) were selected randomly. This resulted in a sample of twelve students.

Due to students' absences throughout the intervention only three groups' data could be used at School B. Two groups with four participants and one with five participants. The group with five participants had one participant missing in the pre-test and another participant missing in the post-test. For this reason, the data from these participants were excluded from the data set, resulting in a sample of eleven students.

School C had two groups of five participants and one group of four participants. During the pre-test one participant from a group of five was absent, which occurred again during the post-test with another participant from the second group of five, resulting in a sample of twelve students (three groups of four participants).

Table 1: Participant selection per school

		H1 = amount of exploratory talk **H2 = amount of talk** **H3 = variety of words** *Selected participants per school*			**H4 = anxiety** *All students per school*		*Students' ages*
School A	Group 1	4	N=12	N=35	N=24	N=59	15-16
	Group 2	4					
	Group 3	4					
School B	Group 1	4	N=11		N=23		15-18
	Group 2	4					
	Group 3	3					
School C	Group 1	4	N=12		N=12		14-15
	Group 2	4					
	Group 3	4					

Hence, three groups per school were selected. Although the recordings from the remaining six groups were discarded, their anxiety levels were measured and analysed, providing information on the possible effect of the intervention. Further information about the N values can be found in section 5.6.

5.4 Instruments

In the following section, an account of the research instruments used to gather the data for this research is provided. Section 5.4.1 discusses the observations of (exploratory) talk and section 5.4.2 considers the FLCAS questionnaire.

5.4.1 Observations

In order to measure the influence of group facilitation on the students' spoken English, audio recordings were made of all nine selected groups during the pre- and post-test. These recordings were transcribed and analysed by the teacher/researchers, as further discussed in section 5.5.

The amount of students' exploratory talk both before and after the intervention was measured and analysed, applying a coding method initially used by Wegerif and Mercer (1997b). While Wegerif and Mercer's (1997b) method of counting keywords in context that indicate exploratory talk has been validated, their research has centred around L1 primary school students.

There are three major justifications as to why counting keywords that demonstrate exploratory talk is a valid way of examining L2 talk. First, it allows for an assessment of the depth of thinking expressed by students' pushed output when they talk in their target language (Swain, 2005). Second, it measures negotiated meaning in the L2 classroom (Swain & Lapkin, 1998; 2002). Finally, it indicates a clear link between thinking and CALP language acquisition (Cummins, 1999; McGuinness, 1999; 2005). Each of these concepts is explained in detail in chapter 3.

In this study, this method of coding was, therefore, used in order to measure exploratory talk which is evidence of complex thinking. Comparable other studies using this method of coding (Mercer, Dawes *et al.,* 2004; Mercer, Littleton *et al.,* 2004; Mercer, Wegerif & Dawes, 1999; Schmitz & Winskel, 2008) involved children from English speaking countries who were generally younger than the participants of the present study. Therefore, similar to Schmitz and Winskel (2008), the list of selected keywords was expanded because of the age difference and considerable differences in language use. So, in addition to some of the keywords selected by Wegerif and Mercer (1997b) and Schmitz and Winskel (2008), for example 'if', 'because', 'I think', 'maybe', 'but', 'why' and 'actually', two other keywords ('I agree' and 'if...then') as well as certain variations of the previously mentioned keywords

were taken into consideration as well (see Table 2 on page 42 for an overview of all selected keywords).

5.4.2 FLCAS questionnaire

The *Foreign Language Classroom Anxiety Scale* (FLCAS) designed by Horwitz, Horwitz and Cope (1986) was used in order to measure whether the students' levels of anxiety had decreased after the intervention (see Appendix 17). The FLCAS is written in English therefore the students were told they could ask for clarification if they did not understand a question. These questionnaires were processed and analysed by the teacher/researchers, as further discussed in section 5.5.3.

The FLCAS is "an instrument to measure anxiety levels as evidenced by negative performance expectancies and social comparisons, psychophysiological symptoms, and avoidance behaviours" (Trang, 2012, p.71). It is a 5-point Likert scale, ranging from 1 (strongly agree) to 5 (strongly disagree), and contains 33 statements with "significant part-whole correlations with the total scale, aiming to assess communication apprehension, test anxiety and fear of negative evaluation associated with language anxiety" (Trang, 2012, p.72). Therefore, the highest outcome is 165 and the lowest 33; a high score indicating low levels of anxiety and vice versa.

The data were gathered using a structured, yet indirect approach as the participants' anxiety levels could not be analysed immediately. Since anxiety is a complex construct, it is not easy to measure. By giving participants an already verified anxiety test, the teacher/researchers were able to elicit information without influencing the participants in any way.

5.5 Data collection, processing and analysis

In the following section, an account of the data collection, processing and analysis of the instruments is provided. See section 5.5.1 for the data collection and section 5.5.2 for the processing and analysis of the observations of (exploratory) talk. See section 5.5.3 for the data collection and section 5.5.4 for the processing and analysis of the FLCAS questionnaire.

5.5.1 Recording and transcribing of observations

During the pre- and post-test, audio recorders were placed with each group in order to record their spoken language. The recorders were switched on at the start of the activity and stopped once the participants had reached a unified, collaborative decision. For this reason all recordings varied in length. All participants were informed that they were entitled to, but did not necessarily have to, use the entire lesson to carry out the task and were asked to indicate when they had reached consensus. The reason for this being that the teacher/researchers were more concerned with the groups reaching a unified decision than finishing in a set time frame, as the process of collaborative decision-making is central to the practice of group facilitation and this process is not necessarily time dependent. For an overview of the approximate lengths of the recordings, see Appendix 20. After the pre- and post-test, the recordings were imported into ELAN, a voice transcription software developed by the Max Planck institute (Max Planck Institute for Psycholinguistics, 2010), to be transcribed.

5.5.2 Coding and analysis of the transcribed recordings

The amount of students' exploratory talk both before and after the intervention was measured and analysed, applying a coding method initially used by Wegerif and Mercer (1997b), as discussed in section 5.4.1.

Before agreeing upon transcription protocol and finalising the list of keywords that would be used to identify exploratory talk, the teacher/researchers each listened to one of their recordings. The differences in their approaches to transcribing were discussed until consensus was reached. After this, a codebook was developed that included a protocol for transcription and data analysis (see Appendix 21). All transcriptions were exported from ELAN as lists of words spoken by individual participants and imported into Excel, where the lists were further pruned by discarding all unrelated entries, according to the codebook (for example [Dutch], [Misc.], [X], [...] and punctuation, see Appendix 21). The resulting data were comprised of a list of English task based words for each individual student. Data were discarded if a student was absent from either the pre- or post-test.[9] The remaining lists

[9] See Appendix 22 for the data codebook.

could be combined and analysed both at group and school level.[10] See Appendix 24 for the final dataset.

By looking for and counting these keywords before and after the intervention, it could be established whether there was an increase in exploratory talk (sub question 1). This provided ordinal variables, as the amount of connectives were counted. Since the selected keywords (see Table 2) were known before analysing the participants' transcriptions, a structured analysis could be carried out. However, the participants' talk could not be analysed during the decision-making tasks themselves, but were transcribed and analysed afterwards. For this reason, an indirect approach was taken with regard to the analysis of the data. By counting connectives, the teacher/researchers were allowed to elicit information without influencing the participants in any way, thus answering the first question by using a quantitative approach.

In order to establish whether the intervention affected the amount of English words spoken by the students (sub question 2), the transcriptions were exported as lists of words[11] and then further processed. While transcribing, great care was taken to label words that were not task-related as 'miscellaneous', and these were consequently taken out of the word count. The words that remained were added up and, therefore, provided ordinal results as well.

Whether teaching group facilitation skills affected the variety of different words spoken by students (sub question 3) could also be answered using the processed lists of words. All the unique, task-related words spoken by the participants were added up, providing the number of different words used talking about the decision-making tasks during the pre-test and the post-test, generating ordinal results.

[10] See Appendix 23 for samples of the transcriptions.
[11] See Appendix 25 for a sample of the exported list of words.

Table 2: Selected keywords that indicate exploratory talk

Actual word	Function within exploratory talk
actually	Justify/clarify
because	Provide reasoning
but	Constructive challenging or clarification
I agree *(I disagree, I don't agree, I do not agree)*	Indicate consensus
I think *(I don't think, I do not think)*	Introduce ideas
if	Reason about the problem
if...then	Reason with cause and effect
maybe	Introduce ideas
why	Ask a task related question

5.5.3 FLCAS questionnaire

In order to measure the difference in the participants' anxiety levels, they were asked to fill in the FLCAS questionnaire individually after completing the pre-test and post-test tasks. Hence, the students filled in the FLCAS before they were trained in group facilitation skills and again after the intervention had taken place in order to measure the difference in their anxiety levels. The students carried out the decision-making tasks before filling in the questionnaire to ensure they all had a similar, recent experience talking in English. The participants were told to answer the questions honestly and were reassured that the data would be processed anonymously. However, the participants were asked to put their names on the questionnaire in order to correlate the results of the FLCAS to the other results. In order to prevent non-response, the researchers checked whether all questions had been answered by the participants the moment the questionnaires were handed in.

5.5.4 Processing and analysis of the FLCAS questionnaire

To calculate each participant's anxiety level, the mean of their responses to all 33 questions was calculated (Machida, 2011). There are some reverse-scored questions on the FLCAS (question 2, 5, 8, 11, 14, 18, 22, 28 and 32). While the majority of the questions are

negatively formulated (for instance “I never feel quite sure of myself when I am speaking in my foreign language class”), nine questions are positively formulated (for example “I don't worry about making mistakes in language class”) (Horwitz, Horwitz & Cope, 1986). As Horwitz explained, “for these items, you will need to switch your students’ response” (2008, p.235). Therefore, the scores were recoded. This provided ordinal variables, ranging from one to five.

In order to report the results of this research, the scores were reversed so that a low score indicates low levels of anxiety and a high score suggests a high level of anxiety. The scores from all 59 participants who filled in the FLCAS were calculated and used to assess their levels of anxiety and to test the internal validity of the questionnaire itself (Cronbach’s Alpha, see section 5.7.1). However, when examining the relationship between the participants’ use of English and the anxiety levels, only the FLCAS scores from the nine groups whose recordings were transcribed (the 35 selected participants) were taken into consideration.

Similar to the transcriptions, the data from the questionnaires were only used if the participants were present at both the pre- and post-test and at least 70% of the group facilitation training and practice. Moreover, participants that did not fill in all the 33 questionnaire questions were excluded from the data. See Table 1 for an overview of the participants. Since the teacher/researchers checked this at the time the FLCAS questionnaires were handed in, this did not occur. A quarter of the digitalized scores in Excel were checked by a second teacher/researcher to confirm their accuracy.

5.6 Statistical analysis of the data

As seen in Table 1 on page 37, the students’ use of (exploratory) talk and the variety of words used was analysed on the basis of N=35 (the nine groups) and the students’ anxiety was analysed on the basis of N=35 (the nine groups) as well as N=59 (all participants). Moreover, the effect of the intervention on group level (N=9) was also analysed, which will be further discussed in chapter 6.

In order to analyse whether the results from the pre-test differed significantly from the post-test with regard to the variety and amount of (key) words spoken in English by the participants, paired samples t-tests were carried out using the results from all nine groups. Moreover, given the fact that the sample is relatively small (N=35), nonparametric Wilcoxon

signed-ranks tests were executed as well. This test is more suitable to test results from small groups and improves the reliability of these results (Baarda *et al*., 2014). Since it was hypothesized that the post-test results would be more positive than the pre-test results, the possibility of negative results was disregarded. Therefore, all tests concerning the first three hypotheses on (exploratory) talk and variety of words (see chapter 3.5.2) were one-tailed, concentrating on one side of the probability distribution.

In order to analyse the results from the FLCAS filled in by the participants during the pre-test and the post-test, a paired t-test was executed in order to test whether the differences between the two tests were statistically significant. Moreover, given the fact that the sample is relatively small, the nonparametric Wilcoxon signed-ranks test was executed as well. While it was hypothesized that the post-test results could be more negative, indicating less anxiety, than the pre-test results, the teacher/researchers acknowledged the possibility of positive results, indicating more anxiety. Therefore, all tests concerning the fourth hypothesis are reported one- and two-tailed, concentrating on both sides of the probability distribution.

Furthermore, although both statistical tests indicate whether the differences between the pre- and post-test are statistically significant, this does not automatically imply that the effect is important in practical terms (Baarda *et al*., 2012; Field, 2009). In order to examine whether the effect is substantive, the effect size (r) was also calculated. Hence, as the substantive significance (effect size, r) and statistical significance (P value) are essential in order to determine the actual effectiveness of the intervention (Sullivan & Feinn, 2012), these results are both reported in chapter 6. In order to examine the differences between the three schools, the results of each individual school were put into bar graphs (see chapter 6).

5.7 Validity and reliability

As this research was pre-experimental, several precautions were taken in order to ensure the validity (section 5.7.1) and the reliability (section 5.7.2) of the research as discussed below.

5.7.1 Validity

Instruments

In order to increase the validity of this research, the teacher/researchers chose to apply previously validated instruments for measuring exploratory talk and the students' anxiety levels. As with Mercer and Wegerif's *(in* Mercer, 2000) coding method used for analysing the transcriptions, the FLCAS questionnaire is a validated instrument for measuring anxiety. However, in order to test the validity of the questionnaire, a Cronbach's Alpha test was carried out in order to measure the internal consistency of the FLCAS in this particular research. The data of all 59 participants who filled in the FLCAS were used to measure the Cronbach's Alpha, resulting in a α-score of .949, indicating that the internal consistency of the FLCAS was excellent and, therefore, a reliable tool for measuring the anxiety levels of the participants.

Pilot

Moreover, as mentioned in section 4.2.3, the decision deck and the decision-making tasks (including the pre-test and post-test tasks) were piloted in a class uninvolved in the study to test the appropriateness of the materials for this research.

5.7.2 Reliability

Size of the dataset

In order to increase the dataset, and therefore the validity and representativeness of the research, the same research was performed at three schools. Moreover, by conducting this research at three different secondary schools, the scope of the research was enlarged by incorporating a variety of ESL students, thereby improving the representativeness of the sample.

Workshop

As mentioned in section 4.2.3, a workshop for the participating teachers was held by Peter Reimann to ensure all would carry out the intervention similarly, thereby enhancing the reliability of the final results.

Group composition

Since the entire project was carried out in groups of four or five participants, it was decided to allow students to choose their own 'friendship groups' to work in during this intervention. As the students were used to working in their self-determined friendship

groups, allowing this improved the ecological validity of the research. Additionally, by not allowing them to choose their own 'friendship groups' their performance during the intervention could have been negatively affected (Arvaja, Hakkinen, Rasku-Puttonen, & Etelapelto, 2002; Azmitia & Montgomery, 1993). The group composition remained the same in both the pre-and post-test and during the intervention.

Facilitators

During the pre- and post-test, the same participant acted as facilitator and led the discussion, thereby enhancing the comparability of the final results.

Tasks

To further enhance the reliability of the research, the pre-test task and the post-test task were similar in context and complexity. As mentioned above, these tasks were also piloted in advance to ensure their suitability.

Recordings

In order to transcribe accurately, all recordings were made with high-quality audio recorders. As all recordings were transcribed using an agreed upon transcription protocol and codebook (see Appendix 21), this maximised the reliability of the transcription method.

Moreover, one transcription from each school was randomly selected and checked by each teacher/researcher in order to determine whether the protocol was consistently followed. Where there were differences, the teacher/researchers discussed these until consensus was reached.

Questionnaire

Furthermore, in order to prevent skewed answers, the title of the original FLCAS questionnaire, *Foreign Language Classroom Anxiety Scale*, was replaced with the generic word 'questionnaire' (see Appendix 17).

Dataset

As previously mentioned, great care was taken to discard data from any participants who did not meet the attendance criteria (see section 5.3). Additionally, the teacher/researchers attempted to maximize the amount of usable data by stressing the importance of attendance during the pre- and post-test and the intervention lessons. Further, they checked each participant's FLCAS questionnaire as it was returned to assure that all questions were answered, thus avoiding non-response. Additionally, twenty-five per

cent of the digitalized scores in Excel were checked by a second teacher/researcher to confirm their accuracy.

The above chapter outlines the method and procedures for this research. Chapter 6 contains a report of the results of the research which was carried out in the spring of 2014.

6 Results

Chapter 6 reports the results of this research with regard to the amount of keywords (section 6.1), the amount of words (section 6.2) and the variety of different words (section 6.3) spoken by ESL students during a collaborative decision-making task, as well as their anxiety when speaking English (section 6.4). Each school's results with regard to the above is discussed separately before reporting the combined results from all three schools.

6.1 Amount of keywords (sub question 1)

At School A, group 1 showed a slight decrease and group 3 showed a considerable decrease in the number of keywords used in the post-test. Group 2 showed an increase in the number of keywords used in the post-test (see Figure 3). Overall, School A showed a decrease in the number of keywords used in the post-test (see Figure 6).

At School B, all three groups showed an increase in the number of keywords used in the post-test (see Figure 4). Overall, School B showed an increase in the number of keywords used in the post-test (see Figure 6).

At School C, all three groups showed an increase in the number of keywords used in the post-test (see Figure 5). Overall, School C showed an increase in the amount of keywords used in the post-test (see Figure 6).

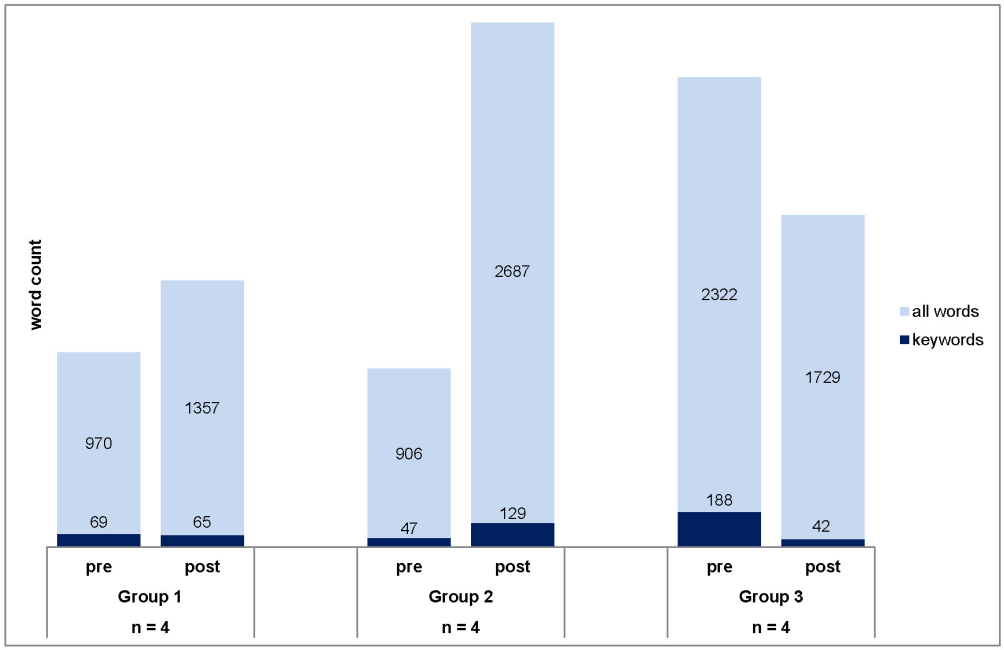

Figure 3: The 3 groups of School A: (key)word usage pre- and post intervention

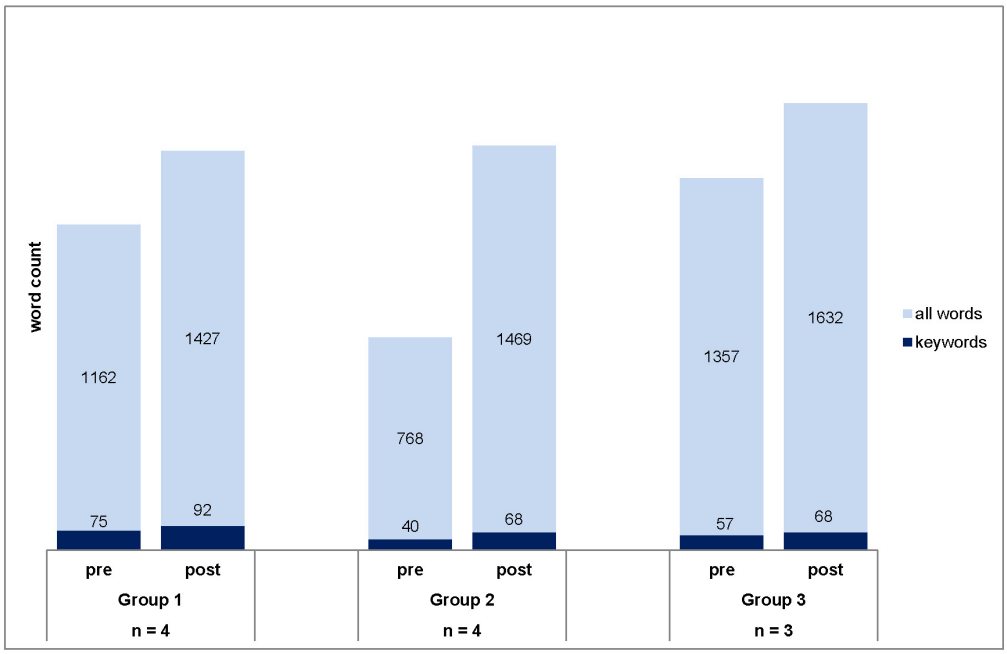

Figure 4: The 3 groups of School B: (key)word usage pre- and post intervention

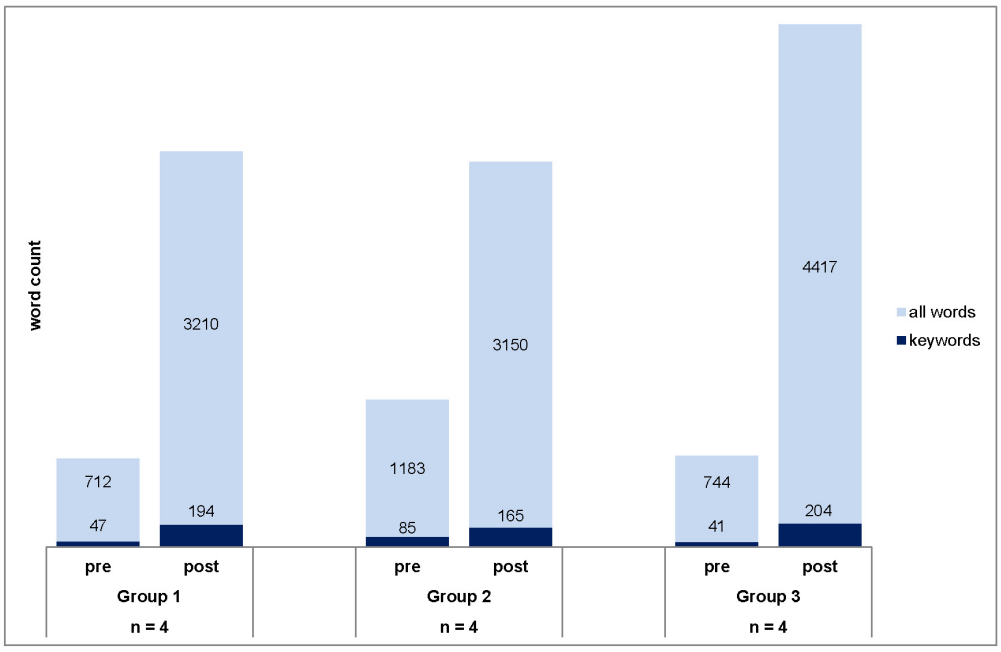

Figure 5: The 3 groups of School C: (key)word usage pre- and post intervention

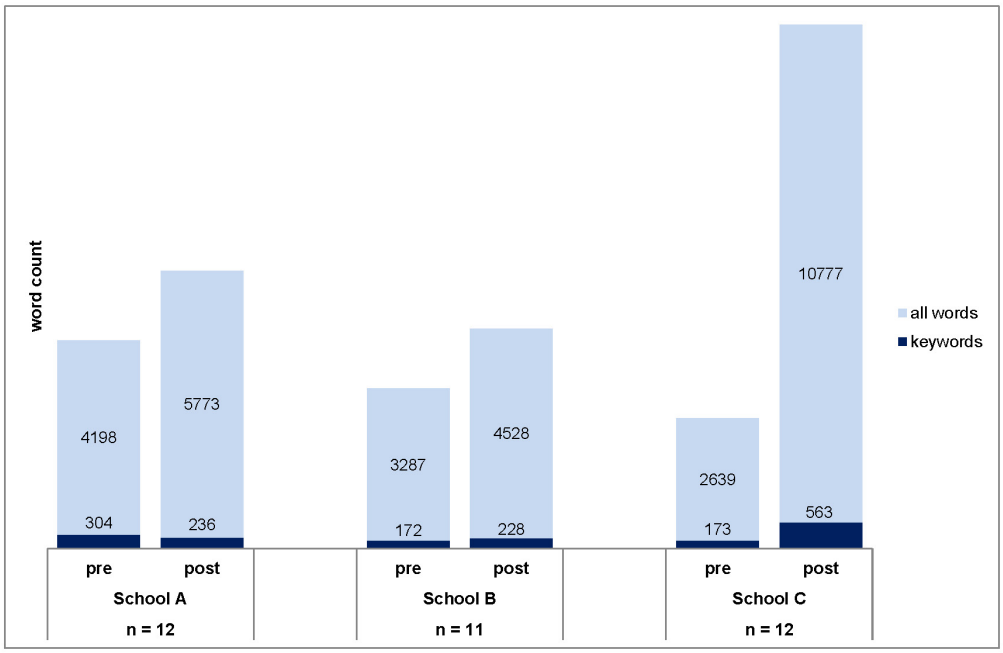

Figure 6: The 9 groups of School A, B, C: (key)word usage pre- and post intervention

When combining the results from all three schools (see Figure 6), the overall amount of keywords increased in the post-test. Of the nine participating groups, seven groups showed an increase in the amount of keywords used in the post-test supporting hypothesis 1 that this intervention would increase the amount of exploratory talk.

A paired-samples t-test was conducted to compare the difference between the pre-test and post-test with regard to the amount of keywords indicating exploratory talk spoken by ESL students during a collaborative decision-making task. On average, the 35 participants as a group scored higher on the post-test (M= 33,54; sd= 24,23) than on the pre-test (M= 21,97; sd= 23,86). This difference is statistically significant; t= -2,068; df= 34; p <.023 (1-tailed); r= .33[12]. Further, Cohen's effect size value (r= .33) suggested a medium practical significance[13]. Thus, the intervention can account for 11% of the difference between the pre- and post-test.

Further, nonparametric Wilcoxon signed-ranks tests were performed to test whether the pre- and post-test results with regard to the number of keywords spoken were significant when tested on the basis of N=9 (group level) and N=35 (participant level).

The difference between the pre- and post-test with regard to the students' use of keywords is statistically significant (Z= -1,72; p= .043) when conducted on the basis of the

[12] See Appendix 27 for all the tables containing the statistical information.
[13] These benchmarks are taken from Cohen (1988, p.79-80).

nine selected groups (N=9). Of the nine groups, seven used more keywords during the post-test and two used less. The null hypothesis (the median of differences between the pre- and post-test equals 0) can therefore be rejected. There were no ties. Further, Cohen's effect size value (r= -.40) suggested a medium to large practical significance. Thus, the intervention can account for 16% of the difference between the pre- and post-test.

Moreover, on the basis of the 35 selected participants (N=35), there is a statistical significant difference (Z= -3,15; p= .001) too. Of the 35 participants, 26 used more keywords during the post-test and nine used less. There were no ties. The null hypothesis can therefore be rejected. Further, Cohen's effect size value (r= -.38) suggested a medium practical significance. Thus, the intervention can account for 14% of the difference between the pre- and post-test.

6.2 Amount of words (sub question 2)

Groups 1 and 2 from School A showed an increase in the amount of English words spoken in the post-test and group 3 showed a decrease in the amount of English words spoken in the post-test (see Figure 3). Overall, School A showed an increase in the amount of English words spoken in the post-test (see Figure 6).

The three groups at School B showed an increase in the amount of English words spoken in the post-test (see Figure 4). Overall, School B showed an increase in the amount of English words spoken in the post-test (see Figure 6).

In School C, all three groups showed an increase in the amount of English words spoken in the post-test (see Figure 5). Overall, School C showed an increase in the amount of English words spoken in the post-test (see Figure 6).

When combining the results from all three schools, as shown in Figure 6, there was a significant increase in the amount of task based English words spoken by the ESL students in the post-test. Eight of the nine groups increased their amount of task based English talk. The prediction of hypothesis 2 that group facilitation would increase students' amount of spoken English is supported by these results.

A paired-samples t-test was conducted to compare the difference between the pre-test and post-test with regard to the amount of English words spoken by ESL students during a collaborative decision-making task. On average, the 35 participants as a group scored higher on the post-test (M= 602,23; sd= 446,70) than on the pre-test (M= 289,31; sd=

281,30). This difference is statistically significant; t= -4,471; df= 34; p< .000 (1-tailed); r= .61. Further, Cohen's effect size value (r= .61) suggested a large practical significance. Thus, the intervention can account for 37% of the difference between the pre- and post-test.

To see whether the results differ when conducting the test based on N=9 (the nine participating groups) and N=35 (all participants), the nonparametric Wilcoxon signed-ranks test was executed.

On the basis of the nine selected groups (N=9), there is a statistical significant difference (Z= -2,19; p= .014) between the pre- and post-test with regard to the students' use of words. Of the nine groups, eight used more English task-related words during the post-test and one used less. There were no ties. The null hypothesis (the median of differences between the pre- and post-test equals 0) can therefore be rejected. Further, Cohen's effect size value (r = -.52) suggested a large practical significance. Thus, the intervention can account for 27% of the difference between the pre- and post-test.

Moreover, on the basis of the group of 35 selected participants (N=35), there is a statistical significant difference (Z= -4,10; p= .000) between the pre- and post-test as well. Of the 35 participants, 29 used more English words during the post-test and six used less. There were no ties. The null hypothesis can therefore be rejected. Further, Cohen's effect size value (r= -.49) suggested a medium to large practical significance. Thus, the intervention can account for 24% of the difference between the pre- and post-test.

6.3 Variety of words (sub question 3)

At School A, all three groups showed an increase in the variety of different words used in the post-test (see Figure 7). Overall, School A showed an increase in the variety of different words used in the post-test (see Figure 10).

At School B, groups 2 and 3 showed an increase in the variety of different words used in the post-test and group 1 showed a slight decrease in the variety of different words used in the post-test (see Figure 8). Overall, School B showed an increase in the variety of different words used in the post-test (see Figure 10).

At School C, all three groups showed an increase in the variety of different words used in the post-test (see Figure 9). Overall, School C showed an increase in the variety of different words used in the post-test (see Figure 10).

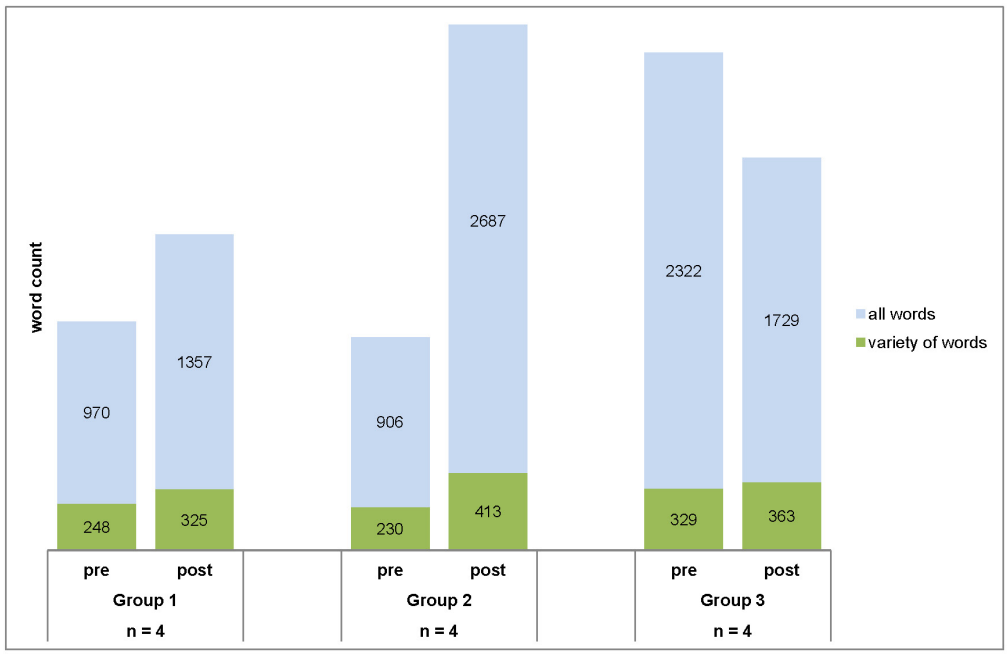

Figure 7: The 3 groups of School A: variety of words pre- and post intervention

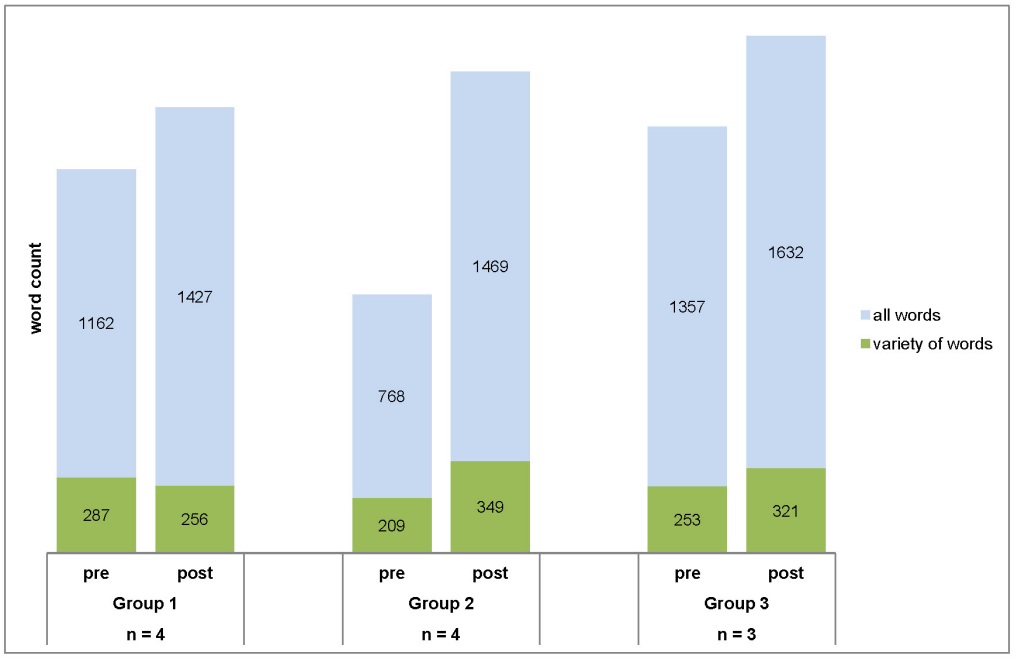

Figure 8: The 3 groups of School B: variety of words pre- and post intervention

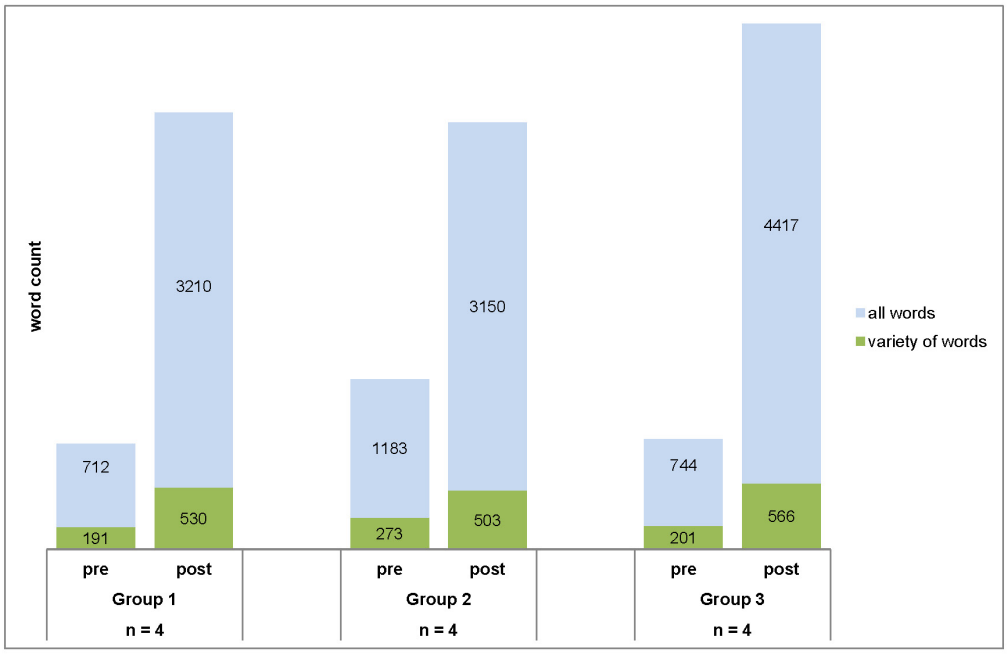

Figure 9: The 3 groups of School C: variety of words pre- and post intervention

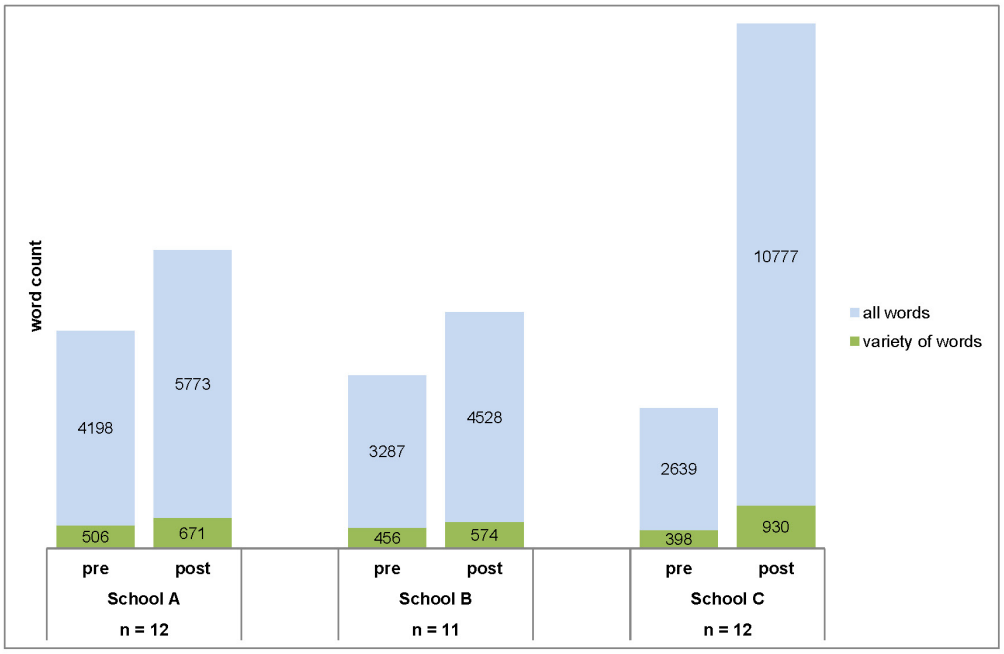

Figure 10: The 9 groups of School A, B, C: variety of words pre- and post intervention

When combining the results from all three schools, as shown in Figure 10, there was a significant increase in the variety of different words spoken by the ESL students in the post-test. Eight of the nine groups increased their variety of different words spoken. Hypothesis 3 is validated by these results.

A paired-samples t-test was conducted to compare the difference between the pre-test and post-test with regard to the variety of different words spoken by ESL students during a collaborative decision-making task. On average, the 35 participants scored higher on the post-test (M= 180,00; sd= 85,86) than on the pre-test (M= 107,74; sd= 58,09). This difference is statistically significant; t= -5,797; df= 34; p <.000 (1-tailed); r= .71. Further, Cohen's effect size value (r= .71) suggested a very large practical significance.[14] Thus, the intervention can account for 50% of the difference between the pre- and post-test.

Additionally, nonparametric Wilcoxon signed-ranks tests were performed to test whether the pre- and post-test results with regard to the variety of English task-related words spoken were statistically significant when tested on the basis of N=9 (group level) and N=35 (participant level).

There is a statistically significant difference (Z= -2,55; p= .006) between the pre- and post-test on the basis of the nine selected groups (N=9). Of the 9 groups, 8 used a larger variety of English, task-related words during the post-test and 1 used less. There were no ties. The null hypothesis (the median of differences between the pre- and post-test equals 0) can therefore be rejected. Further, Cohen's effect size value (r= -.60) suggested a large practical significance. Thus, the intervention can account for 36% of the difference between the pre- and post-test.

Furthermore, on the basis of the 35 selected participants (N=35), there is a statistically significant difference (Z= -4,33; p= .000) between the pre- and post-test too. Of the 35 participants, 29 used a larger variety whereas 6 used a smaller variety of English, task-related words during the post-test. There were no ties. The null hypothesis can therefore be rejected. Further, Cohen's effect size value (r= -.52) suggested a large practical significance. Thus, the intervention can account for 27% of the difference between the pre- and post-test.

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[14] In addition to Cohen's benchmarks indicating *small (.10), medium (.30)* and *large (.50)* effect sizes (1988), Rosenthal (1996) added an extra benchmark, this being *very large (.70)*. This benchmark is defined as being equivalent to, or larger than *r=.70.*

It must be noted that the variety of different words spoken per pupil was used for the statistical tests as opposed to the variety of different words spoken per group as portrayed in the figures. Although the values are not very different it is important to realize that the variety of words per group is not the sum of the variety of different words per participant and that double entries were deleted.

6.4 Anxiety (sub question 4)

At School A, groups 1 and 3 showed a slight increase in their anxiety levels in the post-test and group 2 showed a slight decrease in anxiety in the post-test (see Figure 11). Overall, School A showed a negligible increase in the anxiety levels in the post-test (see Figure 14).

At School B, all three groups showed a decrease in their anxiety levels in the post-test (see Figure 12). Overall, School B showed a decrease in anxiety in the post-test (see Figure 14).

At School C, all three groups showed a decrease in their anxiety levels in the post-test (see Figure 13). Overall, School C showed a decrease in the anxiety in the post-test (see Figure 14).

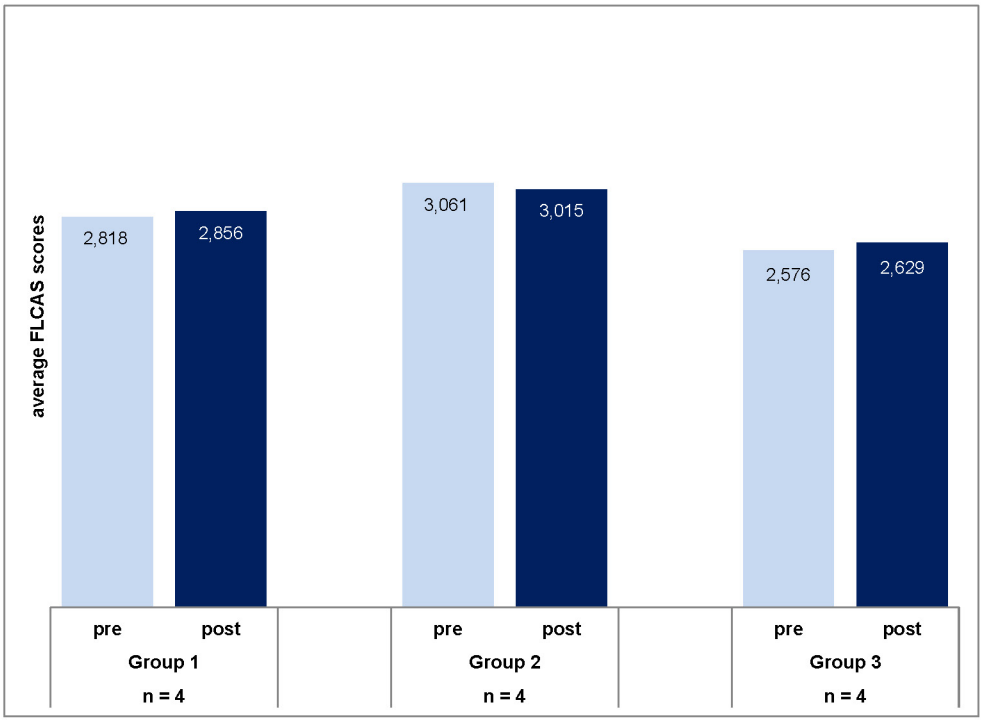

Figure 11: The 3 groups of School A: anxiety levels pre- and post intervention

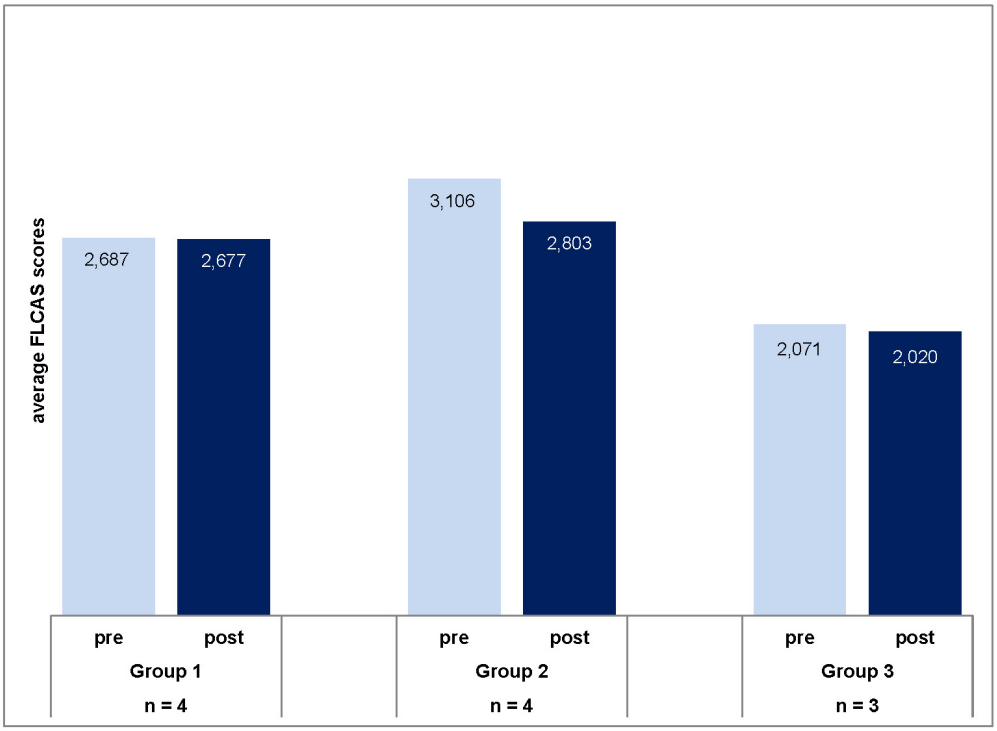

Figure 12: The 3 groups of School B: anxiety levels pre- and post intervention

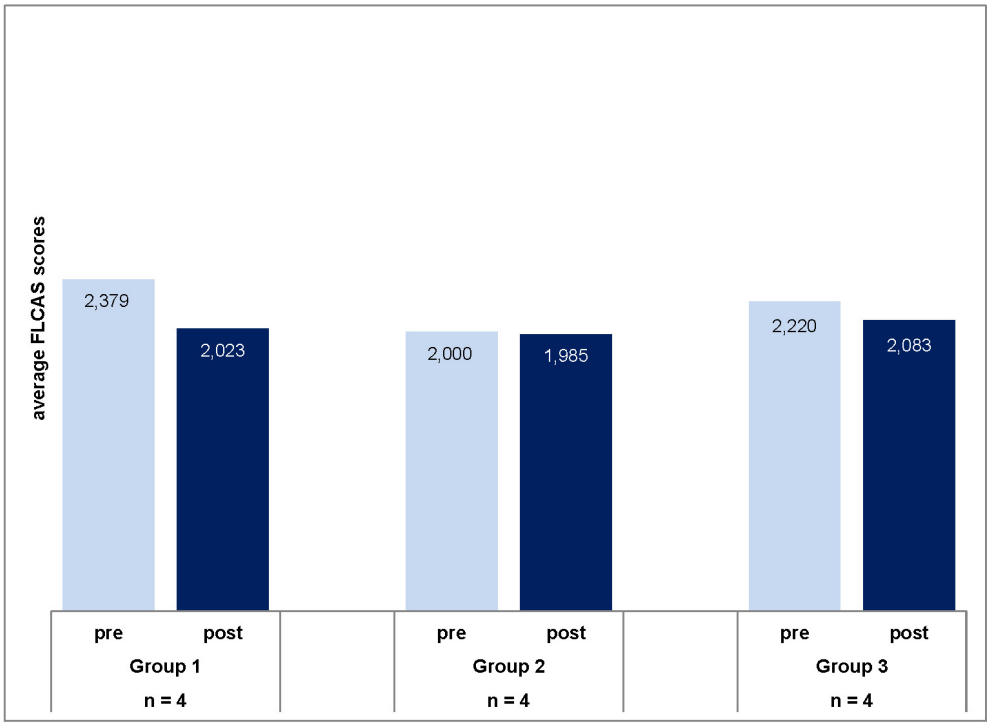

Figure 13: The 3 groups of School C: anxiety levels pre- and post intervention

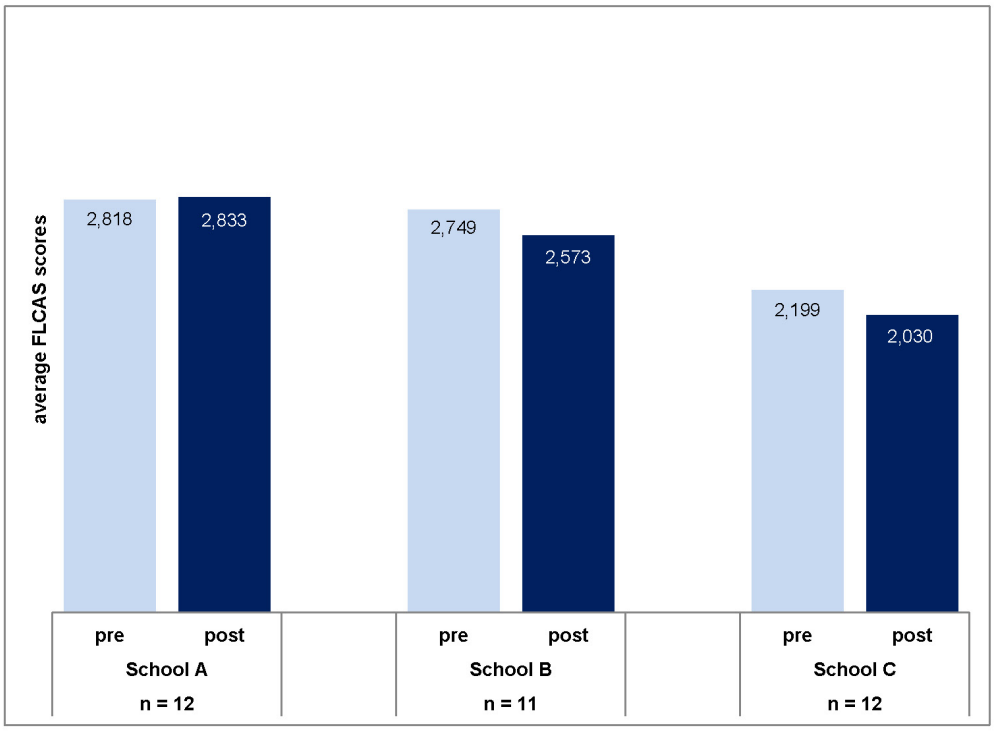

Figure 14: The 9 groups of School A, B, C: anxiety levels pre- and post-intervention

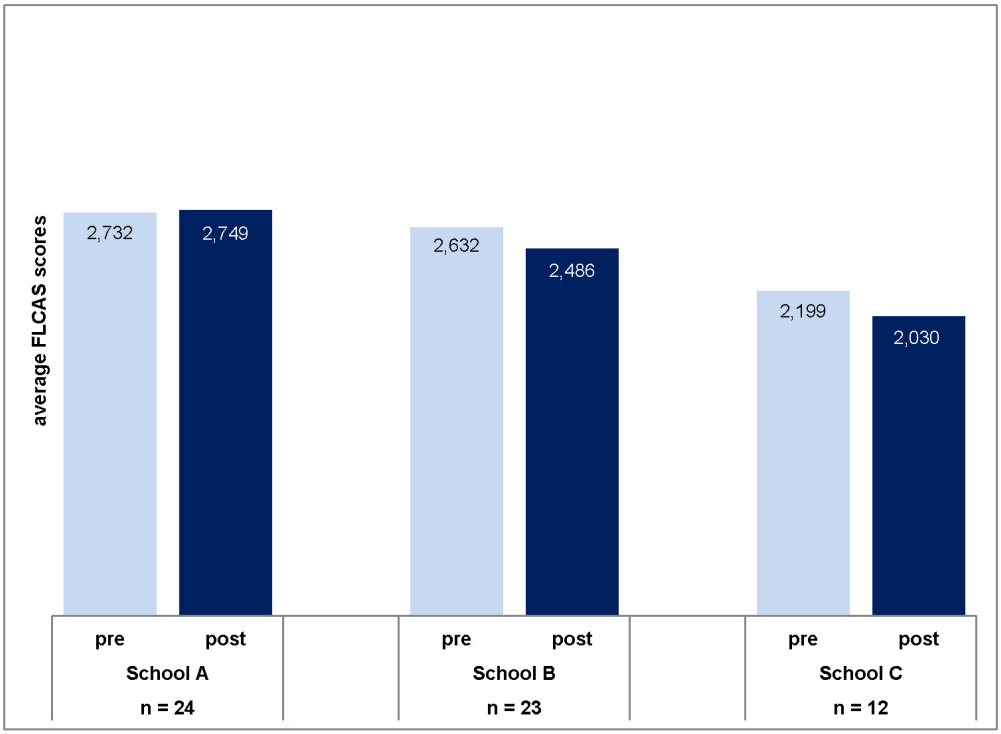

Figure 15: All 59 participants of School A, B, C: anxiety levels pre- and post intervention

In the combined results of the nine groups (N=35), the anxiety levels (see Figure 14) show a slight decrease. As seen in Figure 15, the results are the same when considering the FLCAS scores of all 59 participating students (N=59).

Two paired samples t-tests indicate the overall result difference as statistically significant and substantiate hypothesis four that group facilitation would likely decrease students' anxiety levels in the L2 classroom. These tests were conducted to compare the difference between the pre-test and post-test with regard to the students' anxiety, one based on the 35 selected participants (N=35) and one based on all participants (N=59). On average, the selected sample of 35 participants scored lower on the post-test (M= 2,48; sd= .55) than on the pre-test (M= 2,58; sd= .56). This difference is statistically significant; t= 2.482; df= 34; p <.018 (2-tailed); p <.009 (1-tailed); r=.39. Further, Cohen's effect size value (r= .39) suggested a medium practical significance. Thus, the intervention can account for 15% of the difference between the pre- and post-test.

When conducting the same test on the FLCAS results of all 59 participants, the results are comparable. On average, they scored lower on the post-test (M= 2,50; sd= .53) than on the pre-test (M= 2,59; sd= .56) with regard to the students' anxiety. This difference is statistically significant; t= 2.765; df= 58; p <.008 (2-tailed); p <.004 (1-tailed); r= .34. Further, Cohen's effect size value (r= .34) suggested a medium practical significance. Thus, the intervention can account for 12% of the difference between the pre- and post-test.

Moreover, the nonparametric Wilcoxon signed-ranks test was executed to see whether the results differ when conducting the test based on N=9 (the nine participating groups) and N=35 (all participants). The test was not executed on the basis of N=59 as the Wilcoxon is designed to test small samples (<30).

On the basis of the nine selected groups (N=9), the difference is not statistically significant (Z= -1,60; p= .109 2-tailed; p=.055 1-tailed) between the pre- and post-test with regard to the students' level of anxiety. Of the 9 groups, 7 became less anxious as a result of the intervention whereas 2 indicated to be more anxious. The null hypothesis (the median of differences between the pre- and post-test equals 0) therefore has to be retained. It must be noted that the groups who indicated to be more anxious after the intervention came from the same school (School A), however, the overall increase in anxiety when looking at the school's average results is negligible. Further, Cohen's effect size value (r= -.38) suggested a

medium practical significance. Thus, the intervention can account for 14% of the difference between the pre- and post-test.

On the contrary, there is a statistically significant difference (Z= -2,10; p= .036 2-tailed; p= .018 1-tailed) between the pre- and post-test on the basis of the 35 selected participants (N=35). Of the 35 participants, 17 became less anxious as a result of the intervention whereas 12 indicated to be more anxious. There were 6 ties, indicating that the score on the pre- and post-test was identical. The null hypothesis can therefore be rejected. Further, Cohen's effect size value (r= -.25) suggested a small to medium practical significance. Thus, the intervention can account for 6% of the difference between the pre- and post-test.

Table 3: Summary of the overall results

Hypothesis	School A	School B	School C	Overall
H1 exploratory talk	-	+	+	+
H2 amount of words	+	+	+	+
H3 variety of words	+	+	+	+
H4 anxiety	+	+	+	+

+ *hypothesis is supported by statistical analysis*
- *hypothesis is not supported by statistical analysis*

Table 3 provides a summary of the results of this research. While the amount of exploratory talk decreased in School A, the hypothesis that teaching students group facilitation skills would increase the amount of exploratory talk is supported by the results of Schools B and C. Similarly, the amount of exploratory talk increased overall. Moreover, the hypotheses that teaching students group facilitation skills would increase both the amount of talk and the variety of words used by students was supported by the results of the three individual schools as well as by the overall results. Finally, the hypothesis that teaching students group facilitation skills would decrease their foreign language anxiety is supported by the results of Schools A, B and C, as well as by the overall results. In the following chapter these results will be further discussed.

7 Conclusions and discussions

The purpose of this research was to test the way in which teaching group facilitation skills affects students' spoken English and levels of anxiety. This chapter reports and discusses the conclusions of this research. First, the primary research question on the influence of the students' spoken English and levels of anxiety is answered (section 7.1). This answer is followed by a discussion of the results as they pertain to the theoretical framework of the research (section 7.2). Next, the statistical significance of the results (section 7.3) are considered. Finally, an evaluation of the praxis of the research in question is considered (section 7.4).

7.1 Conclusion

The results of the quantitative research indicate that teaching students group facilitation skills has a positive effect on both their spoken English and their levels of anxiety. Most of the nine groups spoke longer (eight groups), used more keywords (seven groups) and used a greater variety of words (eight groups) during the post-test condition. Moreover, the majority of the students decreased their levels of anxiety after the group facilitation intervention.

While collaborative learning has been a focus of current SL research (Oxford, 1997; Thomas & Wright, 1999; Lightbown, 2000; Swain & Lapkin, 1995; 2002), little research has examined ways to increase the effectiveness of collaborative work for language learning. Several pieces of research have focussed on students' ambivalence with regard to collaborative learning (Chou, 2011; Liang, 2004) or on the lack of collaboration that sometimes occurs when students are told to work together (Storch, 2001), but few studies have examined possible means of overcoming these pitfalls when working with adolescent learners. The results of this study suggest that teaching students the processes of collaborative decision-making provides a scaffolding (Bruner, 2006) that makes collaboration more effective. Similarly, focussing on the process of group work (in this case collaborative decision-making), rather than the product alone (the decision itself), provides the means for students to avoid "groupthink" (Cline, 1990). Storch (2001) stated that placing students together does not necessarily guarantee that they will work collaboratively. The results of this research suggest that teaching students a process for collaboration increases the likelihood that students will, in fact, collaborate.

Moreover, teaching students the processes of collaborative decision-making and providing opportunities for students to practice these processes allows for pushed output in the L2 classroom (Swain and Lapkin, 1995; 2002). Collaborative work is a reciprocal activity as students are pushed to utilize the language that they know. They 'feed' off of the vocabulary provided by the other participants in their group and assimilate these words into their working vocabulary. This reciprocality increases the students' confidence and their ability to use the language that is at their disposal. The decision deck provided students with the scaffolding that allowed them to extend this reciprocal process by extending the amount of talk on task (Bruner, 2006).

The increase in the number of words, the variety of different words and amount of exploratory talk in the post-test condition suggests that teaching students group facilitation skills is an effective means of improving L2 talk. This confirms the hypothesis of Thomas and Wright (1999) that foreign language classrooms are more effective when constructed along dialogical lines. Moreover, the use of the 'decision deck' provides opportunities for critical thinking, cognitive thinking, problem solving, planning and decision-making that encourages transference of these skills from L1 to L2 (McGuinness, 1999; 2005). Further, the 'decision deck' and the discussions around the tasks encourage meta-talk, or talking about language (Swain & Lapkin, 2002). This meta-talk facilitates both thinking about the topic and thinking about the language used to access the topic, thus increasing both the quantity and quality of students' talk.

In addition, this study has shown that teaching ESL students group facilitation skills increases the amount of keywords indicating exploratory talk. This suggests that the practice of group facilitation is a vehicle for the development of talk that demonstrates thinking together about a topic (Mercer, 1995). Moreover, the increase in the use of these keywords further indicates that group facilitation practices create opportunities for the development of Cognitive Academic Language Proficiency in L2 students (Cummins, 1999). The differences in the number of keywords in the pre- and post-test in the combined results from all schools indicated that using group facilitation practices in the process of group work may help students to develop cognitive academic proficiency in their second language (Cummins, 1999). These results are discussed in the following section.

7.2 Discussion of the results

Although Wegerif and Mercer's (1997b) method of counting keywords is an effective way of testing a qualitative construct (the quality of talk) by quantitative means (counting keywords), the teacher/researchers noticed that Mercer and Wegerif's list of keywords may not take into consideration the breadth of the vocabulary that adolescent learners adopt when thinking together. Mercer and Wegerif's research on exploratory talk has been centred on primary school L1 learners. The codebook for this research was developed from Mercer's list and adapted to take into account the age of the learners (Schmitz and Winskel, 2008). Yet, the transcripts revealed that alternate 'thinking' phrases such as "I assume", "We can assume", "What is the most logical option we are able to do *[sic]*", "On what criteria have you based this decision?", "So, our unified decision is" or "I mean" were used by some students. Further, while the word 'so' was sometimes used as conversational filler, it was often used as a replacement for the word 'therefore'. While these words were not used repeatedly or broadly, their use indicated that the more sophisticated one's use of language, the more difficult it is to create a clearly defined list of keywords that includes all instances of exploratory talk. While the number of keywords used in the post-test condition increased, there would have been a more significant increase in the number of keywords used in relation to the total number of words used had these alternate constructions been taken into account. This will be further discussed in section 7.4.

While the overall number of keywords increased in the combined results of all nine groups, two groups from School A did not increase in the number of keywords used. These two groups showed either a slight (group 1) or significant (group 3) decrease in the number of keywords used in the post-test. The teacher/researcher from School A noticed that the facilitators of these groups were serious students and were very prescriptive in their use of the decision deck. As a result, the use of the decision deck became an end in itself, rather than a means to an end. The tight rein that the facilitators held on their groups may have been a reason for the decrease in the number of keywords used in the post-test.

Further, group 3 from the same school showed a marked decrease in both the number of keywords and the overall number of words used in the post-test. The teacher/researcher from School A noted that the students in this group lost their initial enthusiasm during the post-test as a result of having carried out similar collaborative decision-making tasks repetitiously for several weeks. Additionally, during the post-test, a

wasp flew into the classroom and groups 2 and 3 were distracted by this interruption. Much of their resulting talk was not talk on task, was coded as miscellaneous and consequently removed from the final word count. After this distraction the students in group 2 managed to continue with talk on task, however group 3 experienced difficulties resuming their original discussion. This may have led to the decrease in both the number of keywords and the overall decrease in the amount of talk.

Given the fact that the data from students who were absent during the pre and/or post-test had to be discarded, this may have affected the results in a negative way. The teacher/researcher from School B observed that a sizable part of the post-test transcription from group 3 had to be discarded, due to the fact that one student was absent during the pre-test, but was present during the intervention and positively contributed to the post-test discussion. Although the results of group 3 were still positive with regard to the total amount of words used, the total amount of keywords and the variety of words used, including this fourth student's talk may have produced an even greater increase in the overall results.

As noted in chapter 5, the participants were allowed to choose friendship groups in order to strengthen the ecological validity of the research. This decision was based on research that suggested that students in friendship groups function more effectively in collaborative work (Arvaja *et al*., 2002; Azmitia & Montgomery, 1993). Some students formed themselves into groups that were of mixed ability and other students chose friendship groups that contained students of similar language ability. The teacher/researchers noticed that the friendship groups that were of mixed ability talked more, used more exploratory talk and used a larger variety of words than friendship groups of similar ability (School A, group 2; School B, groups 2 and 3 and all groups in School C).

Watanabe and Swain (2007) discovered that collaboration has a positive effect on students' proficiency in their target language regardless of whether they work with students of higher, lower or similar ability. While this may be true, it is also possible that heterogeneous grouping creates the potential for more significant improvement than homogeneous grouping during collaborative activities. The teacher/researchers noticed that the transcripts from students in mixed ability groups included more instances of alternate formulations of exploratory talk, more instances of negotiated meaning and more evidence of meta-cognition than groups comprised of students of a similar ability. Tulung (2009)

posited the idea that collaborative learning provides a place where negotiation of meaning occurs. Further, Swain & Lapkin (2002) suggested that meta-talk, or talking about language, is embedded in the process of collaborative work. While the process of group formation was not the focus of this research, the difference in performance between similar ability and mixed ability groups was noticed by the teacher/researchers.

The results of the FLCAS suggested that there was an overall slight decrease in anxiety in the post-test condition. Although the teacher/researchers initially thought that anxiety was a condition that could markedly affect students' talk, the pre-test results showed that, in general, the students in this study were not particularly anxious when speaking a foreign language, in this case, English. Even so, the levels of anxiety decreased for seven of the nine groups in the post-test condition. Statistically there was a significant decrease in the anxiety levels of the students when measured on the basis of N=35 and N=59. Only when conducting the statistical test using N=9 the result is not statistically significant (see section 6.4). Although the overall decrease in anxiety from seven of the nine groups is slight, it is possible that more practice with group facilitation over a longer period of time might result in a more significant change in anxiety levels. What follows is a discussion as to why two groups from School A may have increased in their levels of anxiety.

Whereas the students at School C are accustomed to collaborative work as it is a much-applied work form, it must be noted that the participants from School A and B are less adept at applying this method having experienced a more traditional approach to teaching. This might, therefore, have influenced their efficiency during group work, affecting the results as well. Moreover, whereas students at School C receive seven lessons in English or Content and Language Integrated Learning English courses each week, students at School A and B only receive three lessons in English a week. The spoken output produced during these three lessons is minimal, often consisting of short, basic utterances. Thus, students at School C have more exposure to the English language and could be more aware of their actual level of spoken English.

When anecdotally asked whether they had become more anxious after the intervention, students from School A indicated that they only realised their level of English was lower than initially expected after carrying out the decision-making tasks. This, as they were asked to discuss topics they would not discuss in regular English lessons and noticed that they lacked the appropriate vocabulary to express themselves adequately. This could be

an example of the communication apprehension that Horwitz (1986) posited as one of the three aspects of foreign language anxiety. As these students generally perform well on their assessments, it is not surprising that they initially demonstrated low anxiety levels as their confidence was stimulated by their former achievements. This could therefore explain the slight increase in the anxiety levels of groups 1 and 3 from School A. It is, however, noteworthy that these are the same two groups that showed a reduction in the number of keywords used. Krashen (1982) posited the theory that students learn most effectively when their affective filter is lowered. While there could be a possible relationship between anxiety and performance in the case of these two groups from School A, it is difficult to connect these two definitively.

7.3 Statistical significance of the results

Given the fact that the sample size was relatively small, great care was taken selecting the appropriate statistical tests. Whereas the paired samples t-test suffices when working with populations larger than 30, the Wilcoxon signed-ranks test was executed as well to test the statistical significance of the results when selecting smaller samples. Although the p-value differs slightly when conducting both tests on the same sample, this does not affect the overall statistical significance of the results.

However, it must be noted that this research did not take the nesting, the interdependence within the groups and the schools, into consideration. As the students are influenced by one another simply by being part of a group and by functioning in a particular school, this might have affected the results as the participants are, statistically speaking, dependent upon one another. In order to account for the nesting and to obtain more reliable estimates of effects of variables at the individual level, multilevel regression analyses could have been executed as well (Baarda, van Dijkum & de Goede, 2014). However, this exceeded the scope of this research. Still, as it was anticipated that the assumed nesting increases the likability of the error of the first kind (the null hypothesis[15] is falsely rejected), assuming that there was a positive effect as a result of the intervention whereas this was not in fact the case, the statistical results were also considered using a stricter significance level ($\alpha = .001$ rather than $\alpha = .005$) in order to increase the validity and reliability of the research.

[15] The median of the pre- and post-test equals 0, indicating that the intervention did not have an effect.

Consequently, when considering the effect the intervention had on the 35 selected participants, it can still be concluded that the intervention was effective when it comes to the variety (p=.000) and amount (p=.000) of English words spoken by the students. Moreover, according to the Wilcoxon signed-ranks results, the results from the amount of keywords used by the students remain statistically significant as well (p=.001). When it comes to the participants' anxiety levels however, the results are not statistically significant as p= >.001 with N=9, N=35 and N=59.

Still, the calculated effect size with regard to (exploratory) talk, amount of talk and variety of words used as well as anxiety levels indicate that on average, there is a large practical significance meaning that the measured effect of the intervention is substantial.

7.4 Evaluation of the research

As with any research, this project created challenges for the teacher/researchers involved. These challenges and the choices made in response to these challenges will now be considered.[16]

First, this was a repeated measures study where students were tested before and after an intervention to test the effect of that intervention. The teacher/researchers considered the possibility of a control group who would discuss the same issues over the same period of time without being exposed to the processes of group facilitation. Unfortunately, there were not enough suitable classes available in each of the three schools to allow for a control group that practiced the group discussions without access to the group facilitation intervention. School B had one parallel class available, but this class was used as a pilot group for testing the materials that were developed for the intervention. The teacher/researchers decided that testing the suitability of the materials was more critical to the overall reliability of the research than including a control group. This choice was validated by the fact that the materials underwent significant revision after they were tested to make them more suitable for use with adolescent students.

Second, as School C only had three groups and this was a comparable study between the three schools, it was of essence that the teacher/researchers from School A and School B selected the recordings of three groups as well. Although this limited the sample size, this

[16] An extensive discussion of confounding factors that were considered can be found in Appendix 26.

decision made the research feasible as it must be noted that transcribing recordings of group work is a complicated and time-consuming activity. Moreover, great care was taken with transcribing the recordings and several recordings were checked collaboratively by the researchers to ensure the reliability. This should be taken into account by researchers who might consider duplicating this research with a larger dataset.

Third, as mentioned in 7.2, the initial codebook of words based on Wegerif and Mercer's (1997b) method of counting keywords to measure exploratory talk did not include all examples of talk that demonstrated evidence of thinking found in the recordings. When the teacher/researchers noticed this during the transcription process, there was much discussion as to whether the codebook should be adapted to include alternate constructions of keywords that were not in the initial codebook. There were concerns that adapting a tried and tested codebook developed for quantitative research on the basis of qualitative observations made by the teacher/researchers as they transcribed the recordings, could negatively affect the reliability of the research. For this reason, it was decided that the codebook would not be adapted. While this preserved the reliability of the research, it meant that some alternate constructions of keywords were not included in the dataset.

Finally, group facilitation is centred on the use of discussion to brainstorm, to create and analyse criteria for decision-making and to rank solutions to a problem. The goal is to enable students to reach a unified group decision that avoids "groupthink" and is truly collaborative. Participants were encouraged to reach consensus within the framework of a 45-minute lesson, but were not given a specific time limit for the discussion. The teacher/researchers initially considered selecting, collecting and transcribing data from a pre-selected 10 minute time segment of each recording and using this to answer the first three sub questions. However, after listening to the recordings, the teacher/researchers realised that choosing a set time segment from each recording was not a viable option for the following reasons. The recordings varied in length from 10 to 40 minutes. Moreover, some of each group's recorded time involved non-verbal actions such as reading the decision-making task or writing down criteria for making a decision. As each group worked at its own pace, any ten minute segment may include a significant amount of talk on task for one group and little for another. Additionally, talk on task from students that were absent in the pre- or post-test had to be excluded from the recordings, making it impracticable to select ten suitable minutes. Furthermore, the students' rate of speaking was not comparable

given the fact that some students are more fluent than others. Selecting a ten-minute segment of the recordings to transcribe was, therefore, problematic and would not be an accurate way of measuring students' L2 talk. Consequently, it was decided by the teacher/researchers that it would be more accurate to transcribe the entire recording of each discussion, extract miscellaneous talk and count the task based English words as opposed to using a pre-selected timed segment of the recordings as a means of measuring the amount of L2 talk.

8 Recommendations

This research suggests that teaching group facilitation skills to L2 students can have a positive effect on their spoken English. The significant increase in the number of keywords used, the amount of talk and the variety of words in the three schools suggests that group facilitation provides a constructive framework for facilitating L2 talk. This chapter will provide suggestions for future research (see section 8.1) as well as make recommendations for schools that consider implementing the teaching of group facilitation skills into their curriculum (see section 8.2).

8.1 Recommendations for future research

First, it is important to note that although the results of this research are promising, this study includes a small sample of participants and may not be representative of a larger population of students. Therefore, the first recommendation would be to repeat the same intervention but with more participants as this may further validate the results and the generalizability of this research. However, as discussed in 7.4 it is important to note that recording and transcribing students' talk is complicated and time consuming.

A second recommendation would be to repeat the same intervention but with a control group. Within the limitations of this research, the teacher/researchers decided that testing the intervention materials with a pilot group would prove more valuable than using the pilot group as a control group (see section 7.4), but it could be constructive to compare the results of students who carry out the group facilitation intervention to those who do not. This could provide additional information with regard to the differences between the control group and the research group.

As discussed in sections 7.3 and 7.4, the list of keywords used in this research to measure exploratory talk did not include all examples of talk that demonstrated evidence of thinking. Future research could investigate the different constructions of exploratory talk utilized by students at a B1 or higher level. This research could take a qualitative approach and examine transcripts of adolescent students' talk in an attempt to create a more complete codebook of exploratory talk specific to adolescent L2 learners.

In order to eliminate group tension which could affect the anxiety of the students, the teacher/researchers in this research allowed the students to form friendships groups (see section 7.2). However, it was noted that groups comprised of students of mixed

language ability outperformed groups comprised of students of similar language ability by talking more, using more exploratory talk and a utilizing a larger variety of words. Therefore, it may be beneficial to further explore the dynamics of mixed language ability groups with regard to the efficacy of group facilitation.

Moreover, as discussed in 7.2, results suggest that students' vocabulary increased as a result of communicating together. It may be worthwhile examining whether teaching students the processes involved in group facilitation might function as a more beneficial method for increasing their corpus than traditional methods of acquiring vocabulary that are an integral part of many language learning programmes.

Finally, no statistical tests were carried out considering the correlation between H1-3 and H4. Thus, observations regarding the connection between the students' performance and their levels of anxiety cannot be statistically underpinned. Anecdotally, the teacher/researchers noticed that overall the students spoke more and became less anxious. Future research could examine whether or not there is a statistical connection between these two factors.

8.2 Recommendations for implementation in schools

In order to assess the effectiveness of teaching group facilitation skills as an intervention that improves L2 students' talk, the scope of group facilitation was simplified to suit the L2 classroom. However, group facilitation entails much more and can be used as a framework for many collaborative even cross-curricular projects. Keeping this in mind, the teaching of group facilitation skills has far greater potential for use in the classroom context. Schools that implement more traditional teaching methods could benefit from using this approach to teaching language and, even more specifically, the productive skills that require critical thinking in the students' foreign language. The teacher/researcher from School C, who has used group facilitation practices in other projects and subjects, has observed that group facilitation can provide a dynamic platform, a collaborative space for exploratory talk that restricts "groupthink" and promotes effective learning. Conjointly, the teacher/researchers noticed that instead of students trying to finish the task as quickly as possible, reverting back to their mother tongue along the way, the process itself rather than the outcome became more important, suggesting that group facilitation is an effective aid to critical thinking in the classroom setting. Further, the teacher/researchers found that group

facilitation practices provided a framework for constructive group work in the FL classroom where students practiced in their L2. Moreover, although initially students found it awkward discussing topics in their L2, rather than in their shared common language, these same students began to overcome this awkwardness with extended practice. Teachers who are used to practicing more traditional classroom methods may be hesitant to implement group work into the classroom out of fear that the students will not stay on task and speak in their target language. However, teaching students the process of facilitating their own groups frees the teacher to monitor the groups and increases the effectiveness of this method.

The above highlights the potential for teaching group facilitation skills as a means of paving the way for efficacious group work in an L2 classroom setting. However, it is possible that its processes could be similarly effective in other foreign language settings, or in other subjects where critical thinking is required. Its potential for allowing teachers to multiply opportunities for exploratory talk in the classroom may contribute to a more effective overall learning environment that links language skills, critical thinking and collaborative thinking in a way that enhances overall teaching and learning. Further, it may offer a vehicle for teachers to work smarter, rather than harder, by providing students with the skills needed for student, rather than teacher directed learning.

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Appendix 1: Collaboration between teacher/researchers

It should be noted that this is a piece of collaborative research meaning that all teacher/researchers were equally active in all phases of research. There was, however, some division of labour during the production of the research document. Chapters one, two, seven and eight were written collaboratively in that each teacher/researcher took an equal role in the planning as well as the production of the text. Chapters three, four, five and six were planned collaboratively, but each of the researchers was the main writer of these chapters while the others commented and offered suggestions in the revision and editing stages of the production of the text. The primary writer for chapter three was Connie Helder. The primary writer for chapters four and six was Michelle de Kleijn and the primary writer for chapter five was Sanne Roosjen. However, it must be noted that sections of these four chapters moved to different chapters during the writing process, making this distinction equivocal.

Appendix 2: Task 1 (pre-test)[17]

Your school needs to attract new students and has scheduled an open day for this purpose. Your group is the steering committee for the organization of this day. You decided to centre this day around the theme of the *International Declaration of Human Rights*. Students have made artwork, photos, reports, plays and posters on this theme. The highlight of the open day will be a large exhibition of student work in the *aula* of the school. You have invited the local press and the mayor of your town will open the exhibition. The exhibition was set up a few days early and one of your Islamic students was offended by a poster that described the lack of human rights for women in some Middle Eastern countries. He reported this to his father who is very active in the Islamic community. A large minority of students in your school is also a part of this community. He has demanded that this poster be removed from the exhibition or he will discourage Islamic students from attending your school. When you went to the girl who made the poster and explained your reasons for moving it, she believed that her fundamental human right of free speech was being threatened. She also mentioned that her father is a journalist and that she would ask him to write a story about this if you take down her poster. Your school cannot afford bad publicity, nor can it afford to lose a large number of students. The open day is in two days and you have called an emergency meeting to decide what to do.

Should you take down the poster and risk bad publicity or leave the poster hanging and risk losing many students in your school? Is there another way to solve the problem? Discuss the issues involved and come to a unified decision.

[17] Task created by Connie Helder.

Appendix 3: Task 2[18]

You are the organizers of a large community fair that has been organized for charity. Among the other charities that will have booths at the fair, there will be several animal rights organizations represented. You have sold tickets for a barbecue that promises an organic chicken dinner to everyone who has a ticket. You have sold more than 300 chicken dinner tickets. All profits will be used to pay for the event and any leftover money will go to a local hospice. There is, however, a problem. Your group did not get an estimate on the price of the organic chicken before you sold the barbecue tickets and you have now realized that if you buy organic chicken, you will lose money instead of having money to donate to the hospice. The butcher has offered you specially-bred fast growing chicken (*plofkip*) at a price that would allow you to pay for the fair and have money to donate to the hospice. If you buy this cheaper chicken you will be able to donate money to a good cause and there is a good chance no one would ever know. What should you do? Lose money on the whole fair with no way to pay for it, use the cheap chicken and keep it a secret or is there a better solution? Discuss all possibilities and reach a unified decision.

[18] Task created by Connie Helder.

Appendix 4: Task 3[19]

You and your fellow class members have struggled to pass your economics class. The teacher assumes that you have more background knowledge than you do and moves much too quickly through the material. You have had to turn in several assignments and all of them have received low marks. Rebecca, one of your good friends who was also failing the class, has suddenly begun to receive excellent marks on all of her assignments. During the last lesson, the teacher told all of the class that they should follow her example and they would all improve. He also mentioned that her success is proof that the work is not too difficult for the class, so there was no point complaining about this anymore. When you asked Rebecca what she was doing she told you that her cousin, who is studying economics at University level, has been doing the assignments for her. She explained that if she doesn't have a high mark for this class, she will not be able to study International Business at University next year. She begged you not to tell on her because you are her friends and it is not her fault that the teacher is a bad teacher who has unfair expectations. If you tell, she will certainly fail the class and not be able to graduate at all. If you don't do anything, she may be the only one who passes the class. You and your friends have met together to decide what to do. Is there a way out of this situation? Discuss your options and reach a unified decision as to how you will solve this problem.

[19] Task created by Michelle de Kleijn and Sanne Roosjen.

Appendix 5: Task 4[20]

You are on the medical ethics committee of a large hospital and have been asked to make a decision in the following case.

Becky is a seven year old girl who is experiencing kidney failure and will die without a kidney transplant. She is on the waiting list for a kidney but no matching organ has been found. The doctor has recently discovered that Becky's five-year-old sister, Mandy, is a perfect match. They have discussed the possibility of Mandy donating one of her kidneys to save her sister's life. The parents agreed and so the doctors discussed the possibility with Mandy. They explained that she could live with only one kidney and that although the operation would be painful, she would recover completely and this could save her sister's life. Mandy does not want to go through with the operation—she is afraid and she does not want to go through life with one kidney. The parents told the doctors that Mandy is a child and that as her parents, they want the doctors to go against her wishes and take her kidney and give it to her sister. They believe she will understand their decision when she is older. The doctors have asked you to make a decision. They believe that it is their duty to protect both Becky and Mandy. If they go through with the operation, they are going against Mandy's clear wishes not to give up her kidney. If they do not go through the operation, Becky will die and her parents may blame Mandy. What should the doctors do? Discuss all possible options and reach a unified decision.

[20] Task adapted from a variety of well-known Medical ethics dilemmas by Connie Helder.

Appendix 6: Task 5

You are an 18 year-old group leader on a hiking trip in the Scottish Highlands with a group of seven pupils, three boys and four girls aged between 14 and 15. You are carrying your own food and tents. You have planned to be out of contact with other people for a whole week and are expected on Sunday at a small village on the Scottish west coast where you will be picked up by a bus.

Today is Thursday. It has been raining steadily since Tuesday night and everyone is wet and cold. You know that you have not come as far as you should have done by this time, and you start feeling anxious about getting to the meeting point on Sunday. During the morning a dense fog starts coming down, and within half an hour the mountains and the path are covered in thick fog. You have to walk by compass now, which slows the group down even further.

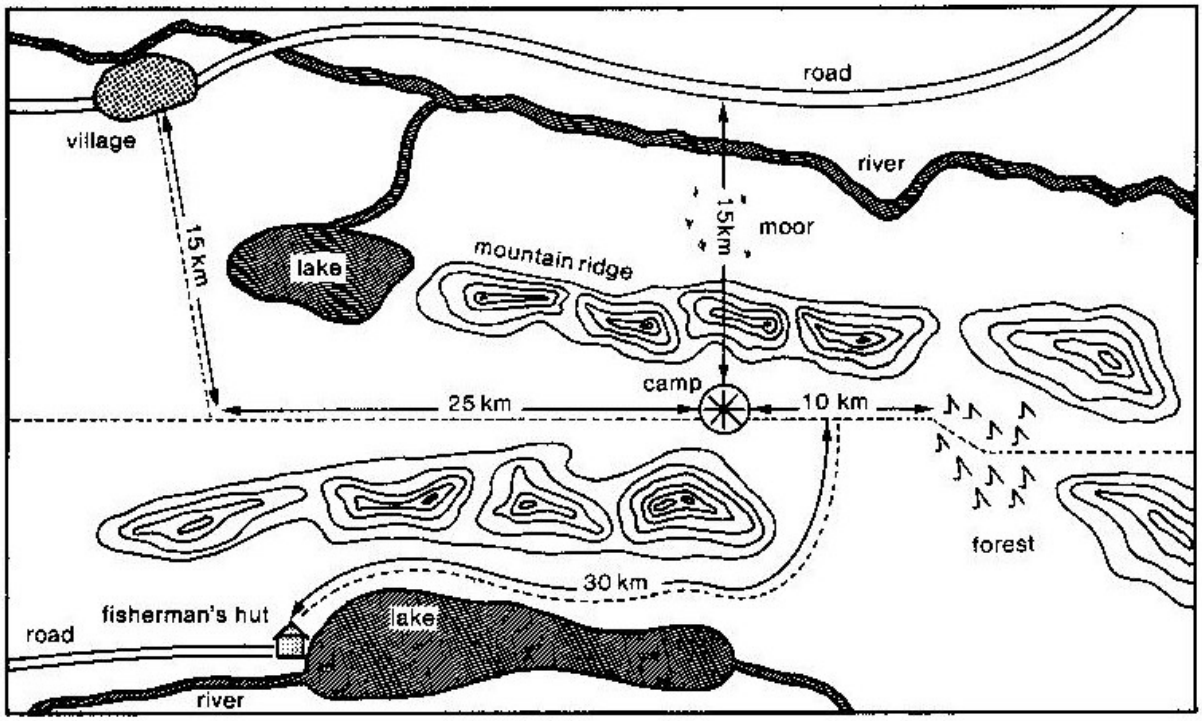
At lunchtime two boys and two girls start complaining about stomach pains, diarrhoea and feeling sick. You suspect that some of the water you took from mountain streams may have been contaminated. In the afternoon they feel worse and can only walk very slowly. While climbing down a steep hillside the youngest girl, Rosie, stumbles and falls. She cannot get up. Her leg is broken. You set up camp and discuss with your group what is to be done.

You are in a valley between two mountain ridges. The nearest road is about 15 kilometres away as the crow flies, but there is no path across the mountains and the moor is beyond them. There is no bridge across the river, and with all the rain of the last few days it may be too deep to wade across.

About 5 kilometres back the way you have come, a relatively easy path turns off which takes you to a lake and a fisherman's hut about 30 kilometres away. However, you do not know whether anybody lives in the hut or whether it has a phone. The next village is about 40 kilometres away. About 10 kilometres back the way you have come there is a small forest where you could find some firewood. You have enough food till Sunday and there are mountain streams nearby. You also have camping gas cookers and enough gas for three hot drinks and two warm meals a day, but there is no firewood. The only people who can read a map and use a compass, apart from you, are one of the sick boys and Fiona, the oldest girl (she is feeling all right). Rosie is in a lot of pain and needs a doctor soon.

What can you do?

Think of all the possible courses of action and decide on the best one. Give reasons for your choice.



Klippel, F. (1984). *Keep talking: Communicative fluency activities for language teaching*. Cambridge University Press. The activity is found on p.177.[21]

[21] This task was taken from Klippel and only minor details were adapted to make the task more relevant for the students (for example the age of the group leader) by Michelle de Kleijn.

Appendix 7: Task 6[22]

You and your group are on the students committee at school and have been given the task to select the best suitable candidate to receive a bursary. You have five potential students for the bursary.

1. A student who is extremely lazy and rude to his teachers but always passes with flying colours.
2. A student who has no money, works relatively hard and wants to become a singer, yet his singing talents are very questionable.
3. Your best friend, who probably will not pass this year.
4. Your biggest enemy that you and your group have fought with and despised ever since primary school, however who stands a good chance at passing, works fairly hard and whose parents aren't very well off.
5. The biggest nerd of the school who would really deserve this bursary but his parents are filthy rich.

Who gets the bursary? Why? Discuss all of the options and reach a unified decision.

[22] Task created by Michelle de Kleijn and Sanne Roosjen.

Appendix 8: Task 7 (post-test)[23]

Your group is the board of directors for a large charity that works with aids orphans in Africa. Your organization is well known and has a good reputation both on the African Continent and internationally. The director of your organization has just returned from a charity dinner that was attended by many world leaders, including an African President of X who is known to trade in blood diamonds. Although your director met the President briefly, she didn't discuss the work of her charity with him. In the middle of the night, she received a knock on the door and was given a velvet pouch with five large uncut stones. The three men who knocked on the door said, "These are a gift from the President of X."

Later, it was discovered that these stones were large, uncut diamonds worth an estimated three million euros! While your director knows that these diamonds were, most likely, collected under circumstances that violate the International Code of Human Rights, she also knows that three million euros could save or improve the lives of thousands of children. There is, however, a chance that the President will announce that he has given a 'gift' to the charity so that he can gain some positive publicity. She has reported this 'gift' to you and asked you as a group to decide what she should do with it.

Should you take the money and use it for good, return the diamonds to the President or report the gift to international authorities who are investigating this President's human rights record? Or is there another way? Discuss all of the issues involved and come to a unified decision.

[23] Task created by Connie Helder.

Appendix 9: General instructions group facilitators task 1 (pre-test)

Email to first group leaders:

Dear all,

Last week your class was divided into groups of 4/5 and you were selected as the first group leader. You are going to carry out the first task in your group during the English lesson on the 5th of March. You can find this task in the attachment (=bijlage).

As team leader it is your job to prepare this task before this lesson and make sure that all group members participate during the lesson. You can prepare any way you want, but do realise that your group members depend on you and expect you to tell them what the group needs to do in order to carry out the task.

To ensure that you have something to talk about during the lesson, I'd like to ask you not to discuss the contents of the task with your other group members beforehand.

Remember, the task is designed so that there is no right or wrong answer. It is your job as team leader to ensure that your group comes to a unified decision.

If you have any questions, please do not hesitate to contact me.
Good luck preparing and enjoy the rest of your holiday!

Kind regards,

Miss Roosjen / Ms Rothbauer / Ms Helder

Appendix 10: Lesson plans training

Lesson 1

Warm-up Activity

'Think about the last few times that you had to work with a group to accomplish a task. What were some of the positive things about group work? What are some of the pitfalls? How about when you meet together to plan and make decisions? What challenges can arise?
Take out a piece of paper and jot down the positive and negative aspects of group work and group meetings.'

Give students a few minutes to brainstorm. After this, ask them to collate their answers on the white board.

Teaching Activity

Transition into the Prezi. Use the prezi and the prezi notes to talk about "Group work that works" (see Appendix 12: Prezi and teacher notes for details).

Wrap-up

Return to the challenges/pitfalls of group work on the board. *Ask: 'How could a group run by a facilitator help with each of these challenges and pitfalls?'*

If time allows:

From memory, work in pairs and answer the following questions in your notebooks? What is a group facilitator and what is the facilitator's role in group work.

Share answers as class and fill in any gaps.

Today, we've learned what a group facilitator is and what he does; in tomorrow's lesson, we will learn how the group facilitator accomplishes this task.

Lesson 2

Warm-up

Print and cut out one set of discussion cards for each group (see Appendix 13). Have them work in their groups and discuss what a facilitator should do in each of the situations mentioned.

Discuss each example with the class.

Teaching Activity

Pass out copies of the *'Who gets the Heart Activity*' (see Appendix 15) and the *SOS Sheet for Group Facilitators.* Using the PowerPoint of the Decision Deck for "Who gets the heart" (see Appendix 14), to talk about how the facilitator would plan the meeting and run through the decision deck during the meeting. Take them step-by-step through the activity.

Wrap up

Are there any questions as to how the decision deck helps you plan and carry out a meeting? During our next lesson, you will have an opportunity to work as a group to plan a meeting using the decision deck.

Lesson 3

Warm-up

Take five minutes and brainstorm with your group. What are the five most important responsibilities of a good group facilitator? What are the five things that they should not do? Rank your two lists in order of importance (1 is most important).

Discuss the lists with the class.

Teaching Activity

Pass out copies of the Sample Decision task - Medical ethics (see Appendix 16) to each person and one stapled copy of the decision deck to each group along with the *SOS Sheet for Group Facilitators* (see Appendix 17). Have students work in their groups planning a meeting using the Decision Deck. After this, have them discuss how they would execute the meeting, filling out the decision deck as they do.

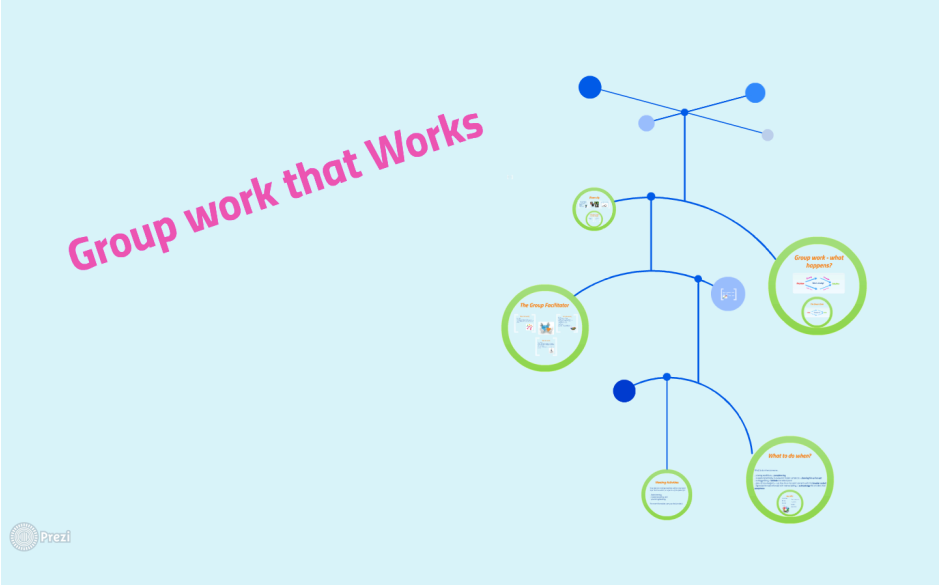
Bring the groups together and compare notes on the decision deck. Talk about any differences in planning. Where are places that the facilitator might have to step in and troubleshoot?

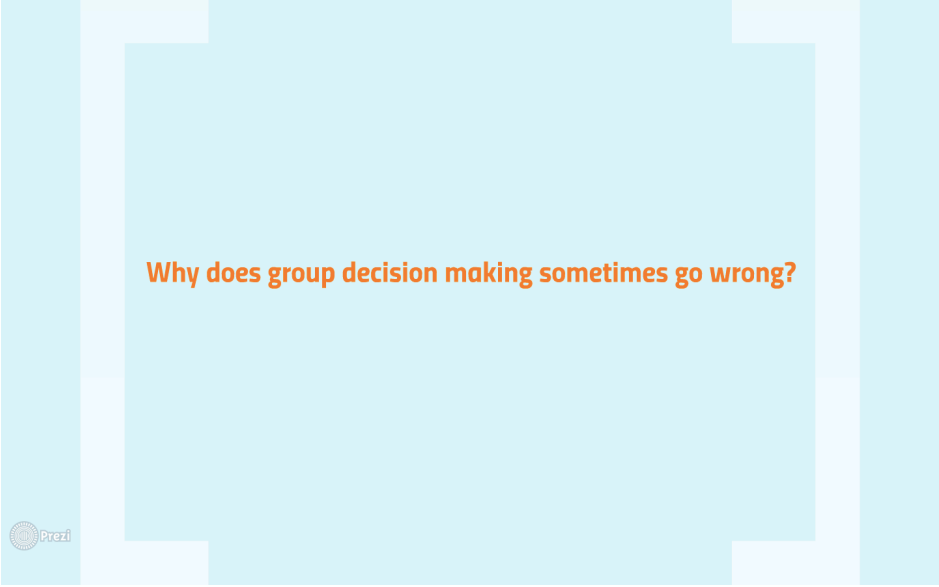
Discuss. Ask for questions.

Wrap-up

Explain the procedure for the time of the intervention practice rounds. Pass out decision deck and task to first set of facilitators for the following week. Remind them that they can e-mail you with any questions/concerns that they may have. Set the date for practice Round 1.

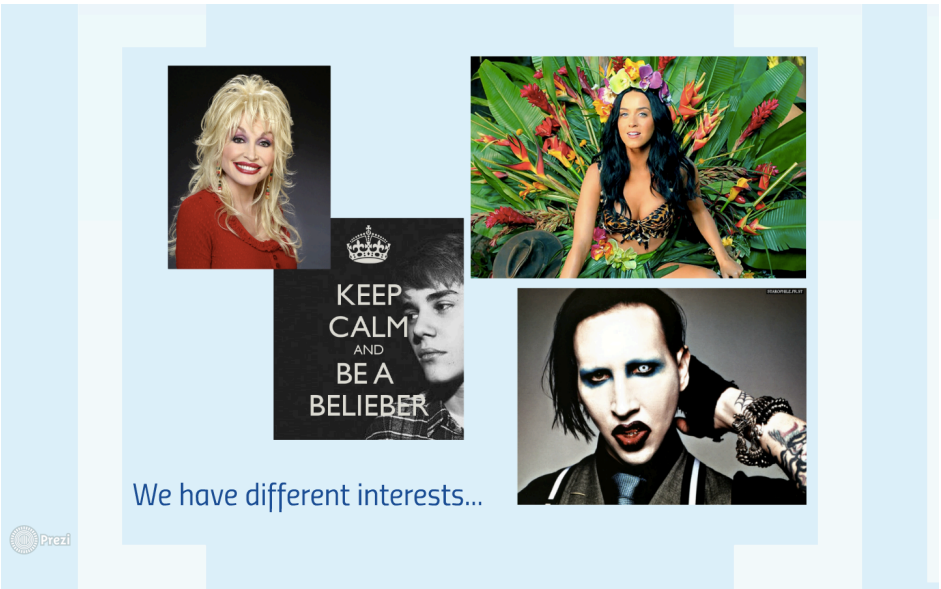
Appendix 11: Prezi and teacher's notes



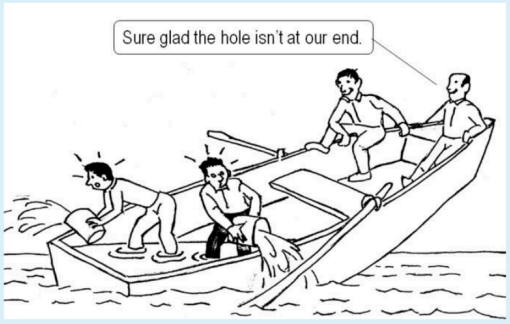



Diversity
We are all different!
- levels of motivation
- approaches
- interests
- ways of working
Differences should make us stronger
Prezi


We are all different!
- levels of motivation
- approaches
- interests
- ways of working
Prezi


KEEP CALM AND BE A BELIEBER
We have different interests...
Prezi

...and we also have different motivation and ways of working.



Prezi

Differences should make us stronger

Our different, interests, ways of working and ways of thinking should be a source of strength ...

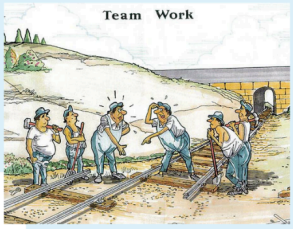
...but more often than not, they are a source of frustration.

Prezi

Our different interests, ways of working and ways of thinking should be a source of strength ...

Prezi

...but more often than not, they are a source of frustration.



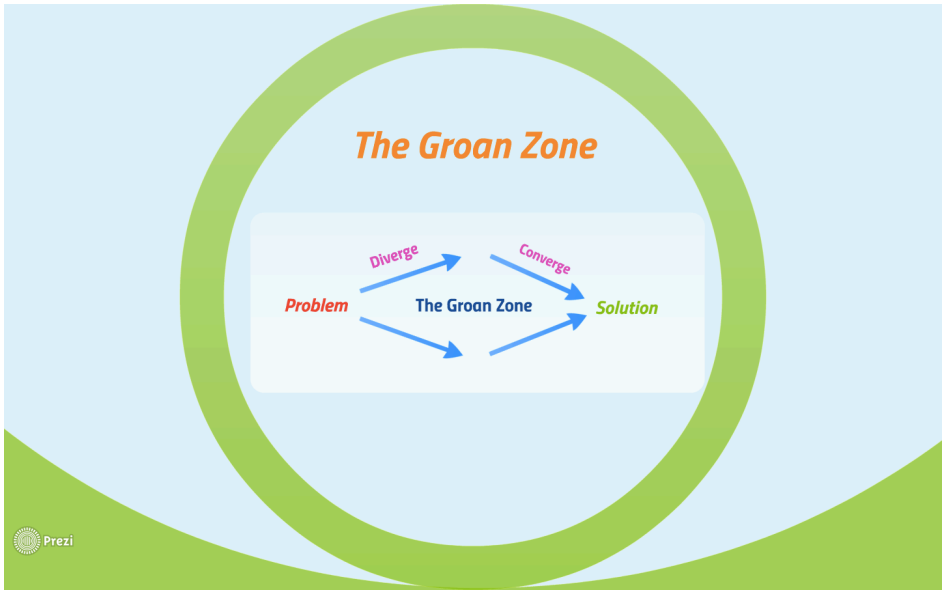
Prezi

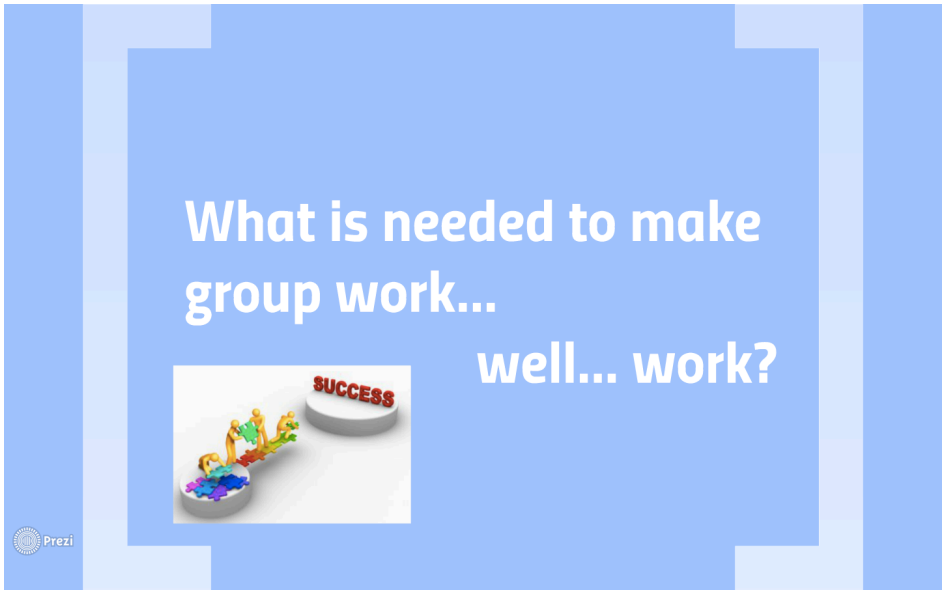
Group work - what happens?

The Groan Zone

Prezi

Prezi


The Groan Zone
Diverge
Converge
Problem
The Groan Zone
Solution
Prezi


What is needed to make group work...
well... work?
SUCCESS
Prezi


The Group Facilitator
Before the meeting
During the meeting
After the meeting
Prezi

Before the meeting

The facilitator...
- takes responsibility for preparing the meeting
- makes a time planning for each phase of the meeting
- does not talk about the task to his/her other team members

During the meeting

The facilitator...
- takes responsibility for a meeting
- does **NOT** control the outcome of the meeting
- cultivates equal participation: leader & all members
- encourages total participation of the group
- is a part of the group
- appreciates all views patiently
- is neutral
- stops 'groupthink'
- helps the group come to a unified decision
- makes sure that all group members speak English

After the meeting

The facilitator...
- fills in his/her learner report whilst his/her team members do the same, and hands this in to his/her teacher
- hands in the filled in decision deck to his/her teacher

What to do when?

What to do when someone...

...is being repetitious > **paraphrasing**
...is speaking haltingly, in awkward, broken sentences > **drawing him or her out**
...is exaggerating > **validate** the central point
...goes off on a tangent > ask how his or her point connects with the **broader context**
...expresses himself or herself with intense feeling > **acknowledge** the emotion, then **paraphrase**

Prezi

Key skills

Paraphrasing
Mirroring
Balancing
Linking

Drawing people out
Encouraging
Validating
Summarizing

Prezi

Meeting Activities

Your decision making meetings will be structured by a "decision deck", a sequence of templates for:

- brainstorming,
- clustering/sorting, and
- prioritizing/deciding.

For more information, see your decision deck.

Prezi

Teacher's notes on the Prezi Slides

Slide 1 *Group work that works*	We just brainstormed about the pitfalls of group work and what kinds of things can go wrong when groups have to make decisions together. Today, we are going to look at a plan for "Group work that works"—a way to work in groups that avoids some of the problems that we mentioned. But first let's think about . . .
Slide 2 *Why does group decision-making sometimes go wrong?*	Why does group decision-making sometimes go wrong?
Slide 3 *Diversity*	Well, this has something to do with diversity as..
Slide 4 *We're all different!*	…we are all different. When we are asked to work together, we come to the group with different levels of motivation, approaches, interests and ways of working. (Point at picture of brain with coloured bolts) These differences provide a rich source of ideas and they are what make us unique!
Slide 5 *Pictures of artists*	We have different tastes and interests. After all not everyone likes Justin Bieber, Dolly Parton, Katy Perry or Marilyn Manson—but some do!
Slide 6 *Men in boat picture*	But that means that we also have different motivation and ways of working.
Slide 7 *Differences should make us stronger*	However, these differences should make us stronger.
Slide 8 *Move mountains picture*	Our different interests, ways of working and ways of thinking should be a source of strength…
Slide 9 *Two team work pictures*	…but more often than not, they are a source of frustration. Either things aren't done properly or they don't happen at all, or someone ends up doing all the work whilst the other team members don't do anything.
Slide 10 *Group work – what happens*	So...what happens when groups try to make decisions?
Slide 11 *Diagram*	We start with the problem – or task. In the beginning, group members usually like to talk on what they know and feel confident about. It is a good way to start. And finding an answer can sometimes be easy. But sometimes there's no easy answer. The group might have to move away from familiar ways of thinking to explore something new.

	Starting with lots of ideas (point at different lightbulbs) is a great way to find choices you may not have thought of by yourself. A group of people discussing their ideas and possible choices at the start of a meeting can be called “divergent thinking”. The trick is knowing how to bring these different ways of thinking and doing closer together and achieve a successful outcome. When the group’s ideas start to move closer together and you can make some choices, this can be called “convergent thinking”, ultimately leading to a solution to the problem – or an outcome to the task. So, a group decision-making process should start with divergent thinking, move to convergent thinking, and end with a decision being made. However, sometimes when we work in a group, people find it difficult to accept new or unfamiliar ideas. Different opinions can be quickly rejected, with no one caring about how other people feel. The main aim is to find solutions to problems, but when ideas start to diverge, a meeting could become difficult to manage. Then what happens? Someone might “step back”, and try to organize the group; get things moving in one direction. Or maybe a person in charge thinks they have the answer, and everything stops. People can leave the meeting thinking ‘why was I here in the first place?” This doesn’t sound like the best way to come to a unified decision now does it? What is it that’s missing from this process that could make group meetings and decision-making smoother and more successful?
Slide 12 *The groan zone*	As soon as a group starts to move on to unfamiliar topics or ideas, finding a new direction through exploring different ways of thinking and doing is a normal part of the discovery process. So if it is going to happen, we should recognize that we are entering this place. This place we call THE GROAN ZONE. The Groan Zone is a period of the meeting where the exploration of those different ways of thinking and doing is encouraged, and everyone has a chance to make their contribution. Once a group crosses the line from presenting familiar opinions to exploring different perspectives, group members have to struggle in order to integrate new and different ways of thinking with their own. To make this a successful endeavour, a group such as this will need something or someone to make this process all come together, to make sure that the group achieves, significant results are achieved and stronger agreements will be made.
Slide 13 *What is needed to make group work, well…work?*	So then what is the magical ingredient needed to make group work, well…work?
Slide 14 *The group facilitator*	The group facilitator!
Slide 15 *Before the meeting*	The facilitator.. - takes responsibility for preparing the meeting beforehand - makes a time planning for each phase of the meeting - does not talk about the task to his/her fellow team members to make sure that he/she still has something to talk about *during* the meeting

Slide 16 *During the meeting*	The facilitator.. - takes responsibility for a meeting - does *not* control the outcome of the meeting - cultivates equal participation: leader & all members are *one* - encourages full participation of the group… - …and is therefore also a part of the group him/herself - appreciates all views and opinions patiently… - …and is therefore also neutral, he/she doesn't take sides - stops 'group think': when everyone agrees without fully considering the matter at hand. So, sometimes the facilitator has to play the devil's advocate and bring up issues that haven't been considered when a decision is reached too easily without considering all options. - helps the group come to a unified decision - and, last but not least, makes sure that *all* the group members speak English!
Slide 17 *After the meeting*	The facilitator.. Fills in the learner report and filled in decision deck together with his/her team members and hands this in with his/her teacher
Slide 18 *What to do when*	- When someone is **being repetitious**, a facilitator can use **paraphrasing** to help that person summarize his or her thinking. - When someone is **speaking haltingly**, in awkward, broken sentences, a facilitator can help the speaker relax by **drawing him or her out** with open-ended, nondirective questions. - When someone is **exaggerating or distorting**, a facilitator can **validate** the central point without quarrelling over its accuracy. - When someone **goes off on a tangent**, a facilitator can treat the speaker with full respect by asking the person to help everyone **see how his or her point connects** with the broader context. - When someone **expresses himself or herself with intense feeling**, a facilitator can first **acknowledge the emotion**, then **paraphrase** the content of the thought to ensure that the speaker's point does not get lost amid the group's gut reactions to the feelings.
Slide 19 *Key skills*	**Paraphrasing:** in your own words, say what you think the speaker said. **Drawing people out:** first paraphrase, then ask open-ended, non-directive questions. **Mirroring**: if the speaker has said a single sentence, repeat it back verbatim. **Encouraging**: use a phrase that gets other than the speaker to contribute, such as "Who else has an idea?", "are there comments from anyone who hasn't spoken for a while?" **Balancing**: get opinions which are different from the recent speaker's one. "Are there other ways of looking at this issue?" for instance. **Validating**: first, paraphrase; then assess whether the speaker needs additional support; third, offer the support (e.g. "I get why this matters to you"). **Linking**: first paraphrase; then ask the speaker to link the idea with the main topic; third, paraphrase and validate the speaker's explanation. Then encourage others to build on, or suggest to park the idea for the moment.

	Summarizing is a five step process: 1. Restate the question that began the discussion 2. Indicate the number of key themes you heard 3. Name the first theme, and mention one or two key points related to that theme 4. Repeat (3) for each key theme 5. Make a statement that bridges to the next topic/activity.
Slide 20 *Meeting activities*	Your decision-making meetings will be structured by a "decision deck", a sequence of templates for: - brainstorming - clustering/sorting, and - prioritizing/deciding We'll have a look at the decision deck later, and practice with it as well.

Appendix 12: Discussion cards

You are the facilitator and one of the group members, Roel the repeater, keeps making the same point over and over again without really listening to what the other members of the group are saying.
What should you do?

You are group facilitator and you notice that your group isn't really thinking through the task creatively and thoughtfully enough. One group member makes a decision and the others all agree out of either laziness, insecurity or lack of involvement. What do you do to stop this "groupthink"?

You are discussing a very complicated, many sided issue and Eric the exaggerator starts making wild claims that are not backed up by any kind of reason or fact. The more he talks, the more exaggerated his claims become. You are the facilitator, what do you do to bring some balance back into the discussion?

Brechtje is shy and often finds it difficult to speak in class. She is uncertain about her English as well. She keeps trying to say something, but she speaks in half-sentences and incomplete thoughts. You know that she has something to contribute, but the other group members keep talking over her. As facilitator, what should you do to help?

You are discussing animal testing and Vera the Vegan becomes very passionate about the issue, 'It is horrible. No one should hurt another living thing. How could you! Even those who eat animals are thoughtless, callous murderers . . . .'
The more she talks, the more emotional she becomes and you can see that she is almost crying. Some of the members of the group look a bit embarrassed for her and others look annoyed. One member is trying not to laugh. You are the group facilitator; how should you deal with the situation?

You are discussing the best venue for a school party and Rebecca the Rambler has gone off on a tangent.
'People these days just don't know how to have fun. Parties in the 1960's were much better. I saw some film footage on TV. You know, the Beatles were playing . . . .talk about great music, we don't have music like that today; except maybe . . . .' You are the group facilitator. What do you do to get the discussion back on track without making Rebecca feel stupid?

Appendix 13: PowerPoint of the decision deck

Decision Deck

Applied to heart dilemma

1. Initial voting

One person, one vote

Options/Alternatives	Votes
Patient A	Joe, Alisha
Patient B	
Patient C	Beat
Patient D	Karen

2. Discussion of initial voting

Notes from the discussion: Each student states reasons for voting decision

This to be filled with notes from facilitator of main discussion contributions from each team member.

3. Additional options?

What would be additional options? Write individually on a sticky paper and then place in your field.

This does not apply for the heart dilemma

(Name) ....

4. Criteria for comparing the options

How can the options be compared? Write individually on a sticky paper and then place in your field.

Joe	Alisha	Beat	Karen
Age Range; Other chronic diseases; Compliance; Urgency; Number of dependants;	Her ideas...	His ideas...	Her ideas....

5. Decide on criteria

One person, three votes: Cut-off value: (group decides)

Dimensions	Votes
1. Age	☆ ☆ ☆
2. Number of dependants	☆ ☆ ☆
3. Urgency	☆ ☆ ☆
4. Other chronic diseases	☆ ☆ ☆ ☆ ☆ ☆
5. Compliance	☆ ☆

6. Rank options on each criterion

Criterion: Urgency

Options	Rank (higher number = higher priority)				
	Joe	Alisha	Beat	Karen	Totals
Patient A	4	3	3	2	12
Patient B	2	4	1	3	10
Patient C	3	2	4	4	13
Patient D	1	1	3	1	6

7. Discuss group decision

Group decision: Patient C should get the transplant

Notes from the discussion:

Main contributions from each student

Appendix 14: Practice task for lesson 2

You are on the board of directors for transplant services. A donor heart has become available and you have four potential candidates for the heart. One of these people will get it, and the others will continue to wait. Who gets the heart? Why?

a) 57 year old male. Does not drink or smoke. Exercises daily and has been compliant with all treatment plans for his heart. Has a partner and works as a schoolteacher. Also has lupus but is controlled by medication. Without transplant he has approximately 2 years to live.

b) 32 year old female. Has smoked in the past and quit. Drinks in moderation. Does not exercise and is overweight. Single mother of three children ages 2 to 9. Works part time and attends school part time. Has been compliant with most of her treatment plan but admits to not taking care of herself as well as she should. Without a transplant she has less than a year.

c) 16 year old male. Has admitted to using cocaine but not on a regular basis. Has admitted to smoking marijuana on a more consistent basis. Exercises moderately and does well in school. Has not been as compliant with treatment plan as his doctors would have liked. Patient has also been treated for depression. Without a transplant he has less than a year.

d) 44 year old female. History of high blood pressure and kidney problems. Has never smoked, drank and limits caffeine intake. Has a history of anorexia but has been in treatment successfully for 4 years. Remains underweight but not at a dangerous level. This patient currently does not have health insurance and has been unemployed for a year. Has a husband but is separated and has three grown children and two grandchildren. Compliant with treatment plan and participates in alternative therapies as well. Without a transplant this patient has approximately 6 months to live.

Who gets the heart? Discuss all of the options and come to a unified decision. After the meeting, the facilitator should write a report outlining your discussion and the reasons for your decision.

Royal, D. (2007). Who gets the heart? [Web log post]. Retrieved from http://www.esletc.com/esl-materials/esl-activities/.

Appendix 15: Practice task for lesson 3

Health service costs have become so expensive that it is becoming impossible to treat all medical cases and soon they will have to be ranked in order of importance. Doctors are having to weigh up the cost of the operation and the benefits to the patient in terms of quality and duration of life. You are on the ethics committee of a hospital. An ethics committee is a group of people who have to decide what is 'morally' right to do in circumstances connected with a patient's health. Listed below are seven cases, the duty of the ethics committee is to prioritize these cases and choose who gets treatment. Further is it important to remember that should an operation be needed, and it is not done now, the opportunity will not rise again.

This man needs a heart transplant: he is very overweight. Heart transplants give a further life expectancy of around five years.
This man needs a sex change. He has been waiting for five years and has attempted suicide on three occasions. Sex change operations are known to have extremely high success rate, far higher than for any other surgical procedure.
This father is the sole income provider for a wife and five children. He needs a coronary bypass, which stands a 90% chance of being completely successful.
These five patients all need cataract operations. All have been waiting for over a year and all are unlikely to be able to do their current jobs if their eye problems are not resolved.
These two 60-cigarettes-a-day smokers need operations to have malignant tumours removed. Their life expectancy is thought to be no more than six months.
This two-month-old baby needs a heart and lung transplant. The surgery needed is so new that no one knows the chances of the baby's survival.
This 80-year-old lady has just had a very serious car crash and is now in a coma in the emergency ward.

Appendix 16: Group facilitation pack[24]

The Facilitator's Guide

Name:	
Group:	
Date:	
Topic:	

Contents

- **SOS for the Group Facilitators**
- **Decision Deck**
- **The Group Facilitator's feedback**
- **The Participants' feedback**

[24] Decision Deck was developed by Peter Reimann via personal conversation.

SOS for Group Facilitators

As facilitator, your job is to help the group do its best thinking. You are not 'leading' the group with or to your ideas, but you are helping the group to develop ideas, advance knowledge, and get work done. The following steps will help you to do this effectively. It gives you tasks for before, during and after the meeting.

Before the Meeting

You will receive a copy of your task and a decision deck several days before the meeting. It is important to think and plan carefully in order to guarantee a successful meeting.

- Read the task carefully and make certain that you understand what is being asked. Look up any unfamiliar words and be ready to explain them to the group if you are asked.
- Fill out the following on the first page of the decision deck: topic, date and facilitator duration (you have 30 minutes).
- In the remarks section decide how you will introduce the topic to the others (give them the paper and have them read it themselves, read it to them or something else) Decide how long this will take.
- Ask your teacher to make copies of the task for your group.
- Decide how long you will allow for each activity in the decision deck. Write this in the duration box at the top of each page. Remember: You only have 30 minutes in total, so plan your time wisely. Write planned:_____ . Later, you can write down how much time you actually spent (Actual:_____)
- Read through the decision deck and make certain that you are clear as to what needs to happen during each phase of the meeting.
- Ask your teacher for any materials you might need (post-it notes, stickers, markers, highlighters) ahead of time.

During the Meeting

- Facilitate the meeting. Remember to keep track of the time actually used for each part of the meeting.
- Remember to keep legible running notes that you teacher will understand.
- Remember the following skills and tips:

Paraphrasing: in your own words, say what you think the speaker said.
Drawing people out: if the speaker has said a single sentence, repeat it back verbatim.
Mirroring: if the speaker has said a single sentence, repeat it back verbatim.

Encouraging: use a phrase that gets other than the speaker to contribute, such as "Who else has an idea?", "are there comments from anyone who hasn't spoken for a while?"

Balancing: get opinions which are different from the recent speaker's one. "Are there other was of looking at this issue?" for instance.

Validating: first, paraphrase; then assess whether the speaker needs additional support; third, offer the support (e.g. "I get why this matters to you").

Linking: first paraphrase; then ask the speaker to link the idea with the main topic; third, paraphrase and validate the speaker's explanation. Then encourage others to build on, or suggest to park the idea for the moment.

Five Step Plan for Summarizing

1. Restate the question that began the discussion
2. Indicate the number of key themes you heard
3. Name the first theme, and mention one or two key points related to that theme
4. Repeat (3) for each key theme
5. Make a statement that bridges to the next topic/activity.

Remember the following tips:

- When someone is **repetitious**, a facilitator can use **paraphrasing** to help that person summarize his or her thinking.
- When someone **speaks haltingly**, in awkward, broken sentences, a facilitator can help the speaker relax by **drawing him or her out** with open-ended, nondirective questions.
- When someone **exaggerates or distorts**, a facilitator can **validate** the central point without quarreling over its accuracy.
- When someone **goes off on a tangent**, a facilitator can treat the speaker with full respect by asking the person to help everyone **see how his or her point connects** with the broader context.
- When someone **expresses himself or herself with intense feeling**, a facilitator can first **acknowledge the emotion**, then **paraphrase** the content of the thought to ensure that the speaker's point does not get lost amid the group's gut reactions to the feelings.
- When **'group think' occurs,** try to get the group members to think 'outside of the box' by playing the devil's advocate.

After the meeting

- Make certain that all parts of the meeting are fully documented.
- Fill in your Facilitator's Guide (remember to fill in the section 'The group facilitator's feedback').
- Turn in your Facilitator's Guide to your teacher.

Decision deck

Topic:

Date:

Duration: **Planned:**_____ **Actual time used:**_____

Facilitator:

Remarks:

1. Initial voting

Duration:
Planned:
Time used:

This vote should be taken after each group member has read or been introduced to the topic,

but before any discussion: one person one vote.

Options/Alternatives	Votes
1.	
2.	
3.	

2. Discussion of initial voting

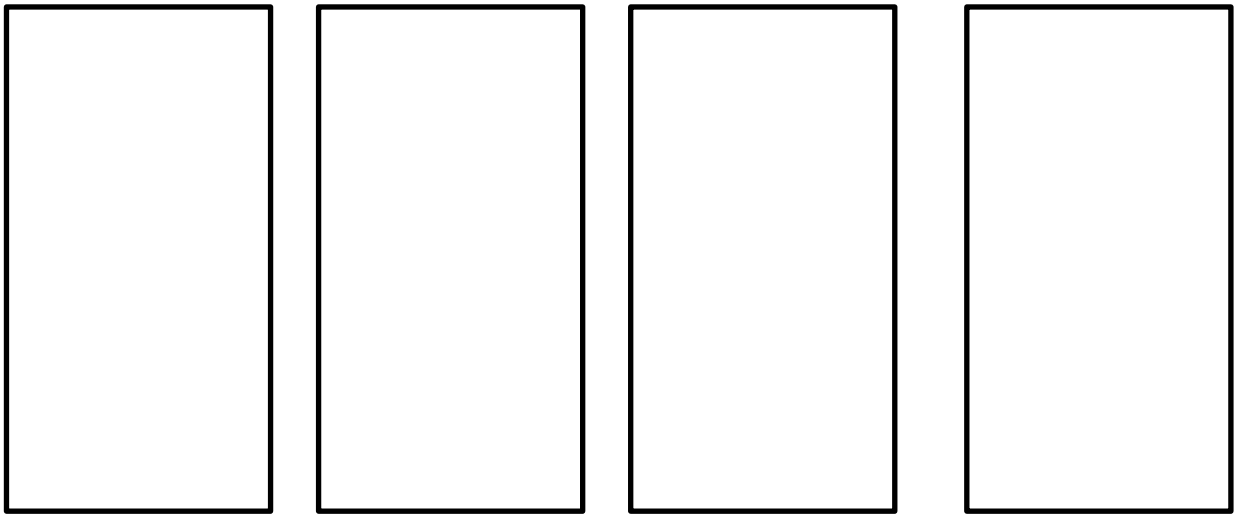
Duration:
Planned:
Time used:

Notes from the discussion: Each student states reasons for voting decision. This is to be filled in with notes from the facilitator of main discussion contribution of each team member.

3. Additional options?

Duration:
Planned:
Time used:

What would be additional options? Write individually on a sticky paper and then place in the box above each group members' name.



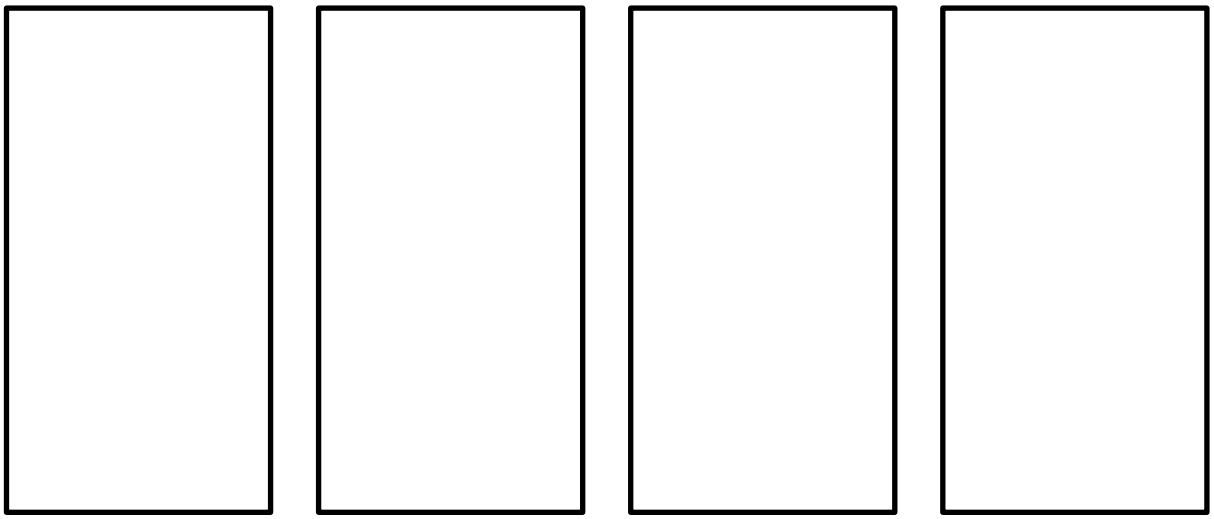
_____ _____ _____ _____

group member's name on each line

4. Criteria for comparing the options

Duration:
Planned:
Time used:

How will your group compare the different options? Write the name of group member under one of the boxes. Each group member should write the criteria that he thinks is important as a basis for making the decision on a sticky note and place in a box above his name. After this discuss the criteria.



_____ _____ _____ _____

group member's name on each line

5. Decide on criteria

Duration:
Planned:
Time used:

List all the possible criteria from step four that you think should be used to make your final decision.
(each criterion on a separate line). Each group member should be given three stickers to vote for the three options that he thinks are most important.

Criteria	Votes
1.	
2.	
3.	
4.	
5.	
6.	

6. Rank options on each criterion

Duration:
Planned:
Time used:

List all of the possible decisions that you discussed in the left hand column. Based on the criteria that you chose during the voting in step 5, each student should rank the possible decisions (1 is the best) discussed by applying the criterion if more than one had the most votes.

Criterion 1:					
Options	Rank (each student should write down his/her initials in the boxes below)				
					Totals:
1.					
2.					
3.					
4.					
5.					
6.					

6. Rank options on each criterion

Duration:
Planned:
Time used:

List all of the possible decisions that you discussed in the left hand column. Based on the criteria that you chose during the voting in step 5, each student should rank the possible decisions (1 is the best) discussed by applying the criterion if more than one had the most votes.

Criterion 2:					
Options	Rank (each student should write down his/her initials in the boxes below)				
					Totals:
1.					
2.					
3.					
4.					
5.					
6.					

6. Rank options on each criterion

Duration:
Planned:
Time used:

List all of the possible decisions that you discussed in the left hand column. Based on the criteria that you chose during the voting in step 5, each student should rank the possible decisions (1 is the best) discussed by applying the criterion if more than one had the most votes.

Criterion 3:					
Options	Rank (each student should write down his/her initials in the boxes below)				
					Totals:
1.					
2.					
3.					
4.					
5.					
6.					

7. Discuss group decision

Duration:
Planned:
Time used:

Group decision:

Notes from the discussion:

The Group Facilitator's Feedback:

Name	
Group	
Date	
Topic	

4. This is what I learned as group facilitator:

I learned this because:

5. This is what I think went well:

This is why I think it went well:

6. This is what I would do differently if I had a chance to do this again:

This is why I would do it differently:

1. **I liked /disliked being a group facilitator because:**

2. As group facilitator, I was able to use the following skills:
(Refer to SOS for Group Facilitators for definitions)

- Paraphrasing yes/no
- Drawing people out yes/no
- Mirroring yes/no
- Encouraging yes/no
- Balancing yes/no
- Validating yes/no
- Linking yes/no
- Summarizing yes/no

3. As group facilitator, I was able to do:

- Give each group member a chance to speak yes/no
- Get my group to speak English yes/no

The Participant's Feedback:

Name	
Group	
Date	
Topic	

1. I liked / disliked this task because:	
2. I was given the chance to express my thoughts and ideas.	**yes/no**
3. I could express my thoughts and ideas in English.	**yes/no**
4. This is what I learned about myself from this activity: I learned this because:	
5.This is what I learned about the other members of the group from this activity: I learned this because:	

Appendix 17: FLCAS Questionnaire

Questionnaire

Please answer the following questions as truthfully as possible.

Name:……

Class:……

1. I never feel quite sure of myself when I am speaking in my foreign language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

2. I don't worry about making mistakes in language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

3. I tremble when I know that I'm going to be called on in language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

4. It frightens me when I don't understand what the teacher is saying in the foreign language.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

5. It wouldn't bother me at all to take more foreign language classes.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

6. During language class, I find myself thinking about things that have nothing to do with the course.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

7. I keep thinking that the other students are better at languages than I am.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

8. I am usually at ease during tests in my language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

9. I start to panic when I have to speak without preparation in language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

10. I worry about the consequences of failing my foreign language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

11. I don't understand why some people get so upset over foreign language classes.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

12. In language class, I can get so nervous I forget things I know.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

13. It embarrasses me to volunteer answers in my language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

14. I would not be nervous speaking the foreign language with native speakers.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

15. I get upset when I don't understand what the teacher is correcting.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

16. Even if I am well prepared for language class, I feel anxious about it.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

17. I often feel like not going to my language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

18. I feel confident when I speak in foreign language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

19. I am afraid that my language teacher is ready to correct every mistake I make.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

20. I can feel my heart pounding when I'm going to be called on in language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

21. The more I study for a language test, the more confused I get.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

22. I don't feel pressure to prepare very well for language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

23. I always feel that the other students speak the foreign language better than I do.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

24. I feel very self-conscious about speaking the foreign language in front of other students.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

25. Language class moves so quickly I worry about getting left behind.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

26. I feel more tense and nervous in my language class than in my other classes.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

27. I get nervous and confused when I am speaking in my language class.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

28. When I'm on my way to language class, I feel very sure and relaxed.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

29. I get nervous when I don't understand every word the language teacher says.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

30. I feel overwhelmed by the number of rules you have to learn to speak a foreign language.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

31. I am afraid that the other students will laugh at me when I speak the foreign language.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

32. I would probably feel comfortable around native speakers of the foreign language.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

33. I get nervous when the language teacher asks questions which I haven't prepared in advance.

Strongly agree | Agree | Neither agree nor disagree | Disagree | Strongly disagree

Appendix 18: Participants' consent form

Toestemmingsverklaringsformulier

Verantwoordelijke onderzoeker: S. Roosjen // M. de Kleijn // C. Helder

In te vullen door de deelnemer

Ik verklaar op een voor mij duidelijke wijze te zijn ingelicht over de aard, de methode, doel en belasting van het onderzoek. Ik weet dat de gegevens en resultaten van het onderzoek alleen anoniem en vertrouwelijk aan derden bekendgemaakt zullen worden. Mijn vragen zijn naar tevredenheid beantwoord.

Ik begrijp dat het geluidsmateriaal uitsluitend voor analyse zal worden gebruikt.

Ik stem geheel vrijwillig in met deelname aan dit onderzoek. Ik behoud me daarbij het recht voor om op elk moment zonder opgaaf van redenen mijn deelname aan dit onderzoek te beëindigen.

Naam deelnemer:…….

Datum: …….. Handtekening deelnemer:……..

Appendix 19: Letters of consent

Bergen, 18 februari 2014

Beste ouder/verzorger,

De klas van uw zoon/dochter is gevraagd om mee te doen aan mijn scriptie-onderzoek, dat uitgevoerd wordt in het kader van de Master opleiding Engels. Het onderzoek heeft betrekking op het vinden van manieren om de Engelse spreekvaardigheid van leerlingen te verbeteren. Alle activiteiten zullen onderdeel zijn van de reguliere lessen Engels. Er wordt op twee momenten gegevens verzameld voor de analyse-fase van het onderzoek. Deze gegevens worden verzameld aan de hand van geluidsopnames die tijdens groepswerk worden gemaakt en door middel van twee vragenlijsten, die door de leerlingen worden ingevuld. Deze gegevens worden geanalyseerd en anoniem verwerkt in mijn Master scriptie.
Mocht u bezwaar hebben tegen het gebruik van de gegevens van uw zoon/dochter, wilt u dan contact met mij opnemen via onderstaand emailadres? Mocht dit het geval zijn, dan neemt uw zoon/dochter wel deel aan de bovenstaande activiteiten en worden er ook geluidsopnames gemaakt tijdens het groepswerk, maar de gegevens van uw zoon/dochter zullen niet gebruikt worden en dus ook niet geanalyseerd en beschreven worden in het eindrapport.
Graag verneem ik uw reactie vóór 4 maart. Mocht ik geen reactie ontvangen, dan ga ik ervanuit dat u akkoord gaat met het deelnemen van uw zoon/dochter aan dit onderzoek.

Met vriendelijke groet,

Sanne Roosjen
Docent Engels
Berger Scholengemeenschap
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Heerhugowaard, 25 februari 2014

Betreft: afstudeeronderzoek mw. Rothbauer H4i en H4h

Geachte «naam»,

De klas van uw zoon/dochter is gevraagd om deel te nemen aan het afstudeeronderzoek, dat door de docente Engels, mw. M. Rothbauer, uitgevoerd wordt in het kader van haar Mastersopleiding aan de Hogeschool van Amsterdam. Het onderzoek heeft betrekking op het vinden van manieren om de Engelse spreekvaardigheid van leerlingen te verbeteren. Alle activiteiten zullen onderdeel zijn van de reguliere lessen Engels.

De onderzoeksgegevens worden verzameld aan de hand van geluidsopnames, die tijdens groepswerk worden gemaakt en door middel van twee vragenlijsten, die door de leerlingen worden ingevuld. Deze gegevens worden geanalyseerd en anoniem verwerkt in het onderzoeksverslag.

Mocht u bezwaar hebben tegen het gebruik van de gegevens van uw zoon/dochter, wilt u dan middels onderstaand emailadres contact opnemen met mw. Rothbauer? Wanneer u bezwaar heeft zal uw zoon/dochter wel deelnemen aan het groepswerk in de reguliere lessen Engels, maar zullen de gegevens van uw zoon/dochter niet geanalyseerd en beschreven worden in het eindrapport.

Wanneer mw. Rothbauer vóór 18 maart a.s. geen bericht van u heeft ontvangen, gaan wij ervan uit u akkoord gaat met het deelnemen van uw zoon/dochter aan dit onderzoek.

Met vriendelijke groet,

Mw. drs. M.T.J. Knook, MME
Afdeling vwo/havo bovenbouw

10 February 2014

Dear Parents,

Your child's English L2 class will participate in a research project as a part of my MA studies. The research will be centred around finding ways to improve the teaching of speaking skills in English. All activities will be a part of your child's normal class work for the course, but I will collect data for analysis on two different occasions. This data is comprised of two questionnaires and two audio recordings of students participating in a group work activity. All results will be analysed and published anonymously.

If you do not want your child's data to be used in this study, please contact Mrs Cooper by e-mail. In this case, your child will still complete all of the activities and a recording will be made of his/her group, but his/her individual data will not be analysed or published in the results.

If we do not hear from you by the 19th of February, we will assume that you are in agreement with your child participating in the study.

Kind regards,

Connie Helder

Appendix 20: Table of estimated recording lengths per group

Table 4: Estimated recording lengths per group

		Pre-test		Post-test	
School	**Group**	**Length original complete recording in minutes**	**Estimated length of the recorded talk-on-task in minutes**	**Length original complete recording in minutes**	**Estimated length of the recorded talk-on-task in minutes**
A	**1**	15:20	11:00	19:00	15:00
	2	11:36	7:00	33:26	25:00
	3	21:10	19:00	25:04	18:00
B	**1**	16:59	10:00	14:41	13:00
	2	8:50	8:00	17:52	15:00
	3	11:56	10:00	16:39	14:00
C	**1**	9:59	7:08	38:40	28:00
	2	11:40	9:30	34:27	27:00
	3	8:40	6:10	40:00	32:00

Appendix 21: Transcription codebook

Codebook for Transcriptions

[Misc.]	Miscellaneous talk that is not task related (e.g. “Oh look, Mr. Smith is walking past.”)
[Dutch]	Entire sentences or side conversations in Dutch
[Name]	When the name of one of the research subjects is mentioned in the recording
[. . .]	Pause or gap within one speaker’s utterance
[X]	Unintelligible speech

When students spell a word, it will be written with hyphens between each letter.

If one speaker interrupts another, but the first speaker continues talking, the interruption will not be transcribed.

Single Dutch words spoken in the context of an English language sentence, will be italicized.

Words that are repeated in succession will be written down once. (e.g. ‘If, if, if we give the money to the charity . . .’ will be written as ‘If we give the money to the charity.’)

Only lexical words will be transcribed. ‘Grunts’ and ‘uhms’ will be ignored.

Pauses at the end of a conversational turn are not transcribed.

In the final word count, the following items are omitted: (*These items are not omitted from the transcriptions)*

[...]
[X]
[Misc.]
[Dutch]

[Name] is not omitted.

Appendix 22: Data codebook

- Select the groups:
  - School A: random selection (pick from hat)
  - School B: only 3 groups who were complete during pre- and post-test
  - School C: only 3 groups in total
- Transcriptions exported as lists of words
- Results FLCAS from all participants in Excel
- Lists of words and FLCAS imported in Excel
- Excel file created with code, test, type, name, group, school, FLCAS, total words, different words and keywords
- Deleting the absentees from the excel file (School B: 2 students, School C: 2 students)
- Changing the entries from words to numbers (see table below)
- Importing the excel file into SPSS for analysis

School	Group	Participant code	Participant SPSS code	Participant ELAN code	Test type
School A = 1	Group 1 Pre: 11 Post: 12	SA1F	10	F = 1	Pre-test = 1
		SA1P1	11	P1 = 2	Post-test = 2
		SA1P2	12	P2 = 3	
		SA1P3	13	P3 = 4	
	Group 2 Pre: 21 Post: 22	SA2F	20		
		SA2P1	21		
		SA2P2	22		
		SA2P3	23		
	Group 3 Pre: 31 Post: 32	SA3F	30		
		SA3P1	31		
		SA3P2	32		
		SA3P3	33		
School B = 2	Group 4 Pre: 41 Post: 42	SB1F	40		
		SB1P1	41		
		SB1P2	42		
		SB1P3	43		
	Group 5 Pre: 51 Post: 52	SB2F	50		
		SB2P1	51		
		SB2P2	52		
		SB2P3	53		
	Group 6 Pre: 61 Post: 62	SB3F	60		
		SB3P1	61		
		SB3P3	63		
School C = 3	Group 7 Pre: 71 Post: 72	SC1F	70		
		SC1P1	71		
		SC1P2	72		
		SC1P3	73		
	Group 8 Pre: 81 Post: 82	SC2F	80		
		SC2P1	81		
		SC2P2	82		
		SC2P3	83		
	Group 9 Pre: 91 Post: 92	SC3F	90		
		SC3P1	91		
		SC3P2	92		
		SC3P3	93		

Appendix 23: Samples of transcriptions

Sample of a pre-test transcription[25]

Facilitator	[Dutch]
P1	[Dutch]
Facilitator	Ok [Name] . Well I_think the girl who made that poster [...] discriminated those [...] muslim guys on our school , because I_think it is our school , and well I_think they should [...] take away the poster because [...] else she will [...] discriminate , is discriminate even a word ? Then you will discriminate other people and that's not allowed . I've found some tasks , documents about the rules in the Netherlands about discrimination and it's not allowed to discriminate people because of their religion or the way they do things so what she's doing is illegal
P1	But she has the right to speak , to speak up
Facilitator	That's true
P1	It's a free country so you can see what you want to say
Facilitator	But then it's very *hypocriet* because they say [...] you can say everything you want but you are not allowed to insult other people , so that's
P1	Yes
P2	But this isn't really insulting to other people , this is more like a certain amount of people in a country [X]
P1	But she gives her opinion , but not truly discriminate them , I_think
P2	Was it only more in that in that country
Facilitator	It's , it's in our school
P2	It's in total in middle eastern countries that , that doesn't mean that person specific
Facilitator	No but she's insulting a religion [...] and that's not allowed in the official rules
P1	They don't say that she's discriminating . But she describes the lack of human rights
Facilitator	No I_don't_think it will be very nice , the sentence about their [...] lack of human rights in the Middle East are good or bad and it's not a very nice sentence
P2	It's different from our , our human rights
Facilitator	Yeah but
P1	Yeah I understand you but I_think she can say what she wants to say because it's also a free country
Facilitator	No , but still she is insulting people [...] in this case so there are people who feel insulted , so
P1	But it's a country , it's many different cultures
Facilitator	Yeah that's true
P2	But you can't make everyone happy in this case
Facilitator	That's true , that's true , we have to make a decision . But, it's very difficult . It's very difficult you have to say everything in English , because yeah that's really hard
P1	Did you already had a *oplossing* , [Dutch]
Facilitator	Solution
P1	Yeah , solution

[25] A complete set of transcriptions is available upon request.

Sample of a post-test transcription

Facilitator	Alright . I'm [Name] , I'm the facilitator of today's task
P2	I'm [Name]
P3	I'm [Name]
P1	And I'm [Name]
Facilitator	Alright we all finished the first task . I thought there were three options given by the task so I wrote them down . Take the diamonds , return the diamonds to the President or report the gift by the human rights organization
P1	And then give it back
Facilitator	Yeah , then well you report it and they will take it from you for research , I guess . The task doesn't say anything about it , I_think
P2	I_think it would
P1	[Dutch]
Facilitator	I_think we all agree about the first one
P2	Yeah , I_think so
Facilitator	Have we decided like to report the gift , so
P1	Do you [...] have the time
Facilitator	Oh yeah of course , the time . This took about one minute and I will , thanks for saying
P1	I have a stopwatch
P3	I have one too
P2	I totally forgot it yesterday
Facilitator	Well I've filled them in so now I have got to record it . Thanks for saying . [...] stopwatch . Alright , now I'm going to ask you why you choose this option . So , [Name] , can I ask you first , why did you choose
P1	I_think that if_ you report it then you can't research if that are blood diamonds so their
Facilitator	So you can be sure
P1	Because your , you're [...] for human rights . And if you take the gift and give it to human rights , I_don't_think it is right because you
Facilitator	Yeah, so you can't take it [...] can't take it for human rights [...] And you have to report it so they can find out if the diamonds are
P1	Are good
Facilitator	Yeah , good or not good . How do you say that ?
P2	If they were mined under good circumstances
Facilitator	They are mined , that's also a word [...] And [Name] what do you think?
P2	Yeah , I also thought of course the [...] report them because if you accept them you also like committed the crime against human rights
Facilitator	I just write it down in really short words . Accept , hu-man rights , so if you take the gift you'll break the human rights and the rules . Alright , and [Name] ?
P3	Yeah they , they said really good things but [...] there's also reputation we have to [...] to
Facilitator	Yeah you have to hold your good reputation , yeah
P3	Yes , that's also important . So they can keep doing what they do

Appendix 24: Final dataset

Code	Codename	School	Group	PRE Keywords	PRE Words	PRE Variety of words	PRE FLCAS	POST Keywords	POST Words	POST Variety of words	POST FLCAS
SA1F	10	1	1	36	546	176	3,1	37	903	255	3,2
SA1P1	11	1	1	25	218	99	2,5	16	222	129	2,5
SA1P2	12	1	1	6	161	81	2,6	17	132	78	2,5
SA1P3	13	1	1	9	45	35	3,1	6	100	64	3,2
SA2F	20	1	2	46	693	204	3,6	63	1531	329	3,5
SA2P1	21	1	2	10	150	83	3,0	34	557	165	3,0
SA2P2	22	1	2	2	36	29	2,7	26	301	128	2,7
SA2P3	23	1	2	2	27	23	2,8	17	298	126	2,8
SA3F	30	1	3	130	1265	241	2,7	15	566	201	2,8
SA3P1	31	1	3	64	733	204	2,6	13	523	200	2,6
SA3P2	32	1	3	15	140	83	2,7	5	259	122	2,7
SA3P3	33	1	3	20	184	77	2,3	14	381	136	2,3
SB1F	40	2	1	46	572	210	3,5	45	504	147	3,0
SB1P1	41	2	1	15	217	103	3,2	30	488	137	2,7
SB1P2	42	2	1	24	281	123	2,2	28	385	143	2,3
SB1P3	43	2	1	7	94	67	2,7	1	50	37	3,1
SB2F	50	2	2	25	450	169	2,2	43	938	285	2,0
SB2P1	51	2	2	2	35	31	3,8	6	96	61	3,0
SB2P2	52	2	2	11	202	98	3,1	20	253	118	2,9
SB2P3	53	2	2	5	81	52	3,3	14	182	82	3,3
SB3F	60	2	3	36	1007	206	1,5	38	1283	288	1,4
SB3P1	61	2	3	13	140	79	2,4	10	126	70	2,3
SB3P3	62	2	3	20	210	104	2,3	24	223	108	2,4
SC1F	70	3	1	33	355	128	2,5	69	1241	289	1,8
SC1P1	71	3	1	10	216	102	2,2	93	1169	302	2,0
SC1P2	72	3	1	2	71	52	2,5	31	533	209	2,5
SC1P3	73	3	1	6	70	52	2,4	19	267	121	1,8
SC2F	80	3	2	39	399	167	1,6	59	1218	307	1,8
SC2P1	81	3	2	12	207	100	2,5	38	454	179	2,2
SC2P2	82	3	2	19	128	82	1,6	65	872	258	1,7
SC2P3	83	3	2	28	449	162	2,2	38	606	181	2,2
SC3F	90	3	3	15	294	100	2,6	90	1690	336	2,6
SC3P1	91	3	3	15	151	83	2,8	66	1235	271	2,5
SC3P2	92	3	3	16	189	102	2,0	65	872	258	2,0
SC3P3	93	3	3	5	110	64	1,5	19	620	180	1,3

Appendix 25: Sample of exported lists of words

	Fpre		Fpost		P1pre		P1post		P2pre		P2post		P3pre		P3post
But	4	About	1	But	8	Africa	1	But	2	And	4	But	1	As	1
East	1	Accept	1	Did	1	And	1	I	1	Are	1	I	2	Everyone	1
English	1	According	1	I	2	As	1	It's	2	Because	1	I_don't_think	1	I	6
How	1	Africa	2	I_think	5	Because	1	She's	1	But	1	Well	1	I'm	1
I	2	Alright	19	If	1	Break	1	That	1	Do	1	a	1	I_don't_think	1
I'm	1	Although	1	It's	1	English	1	The	1	I	1	about	1	I_think	1
I've	1	And	4	On	1	I	6	Was	1	I'm	2	and	1	It's	1
I_don't_think	1	Are	2	So	1	I'll	1	Why	1	I_don't_think	2	away	1	No	1
I_think	7	But	1	They	1	I'm	2	a	4	I_think	1	bad	1	Really	1
If_	1	Charity	2	We	1	I_agree	1	about	1	If	1	don't	2	Reputation	1
It's	2	Do	2	Yeah	3	I_think	2	all	1	Maybe	1	feels	1	So	1
Middle	1	Eight	1	Yes	2	If	1	amount	1	No	1	guy	1	Well	1
Netherlands	1	English	1	a	6	In	1	and	2	Oh	1	has	1	Yeah	5
No	6	Fantastic	1	about	5	It's	3	be	1	Ok	1	he	1	Yes	2
Ok	1	Good	1	already	1	Like	1	bit	1	Reputation	1	her	1	[Name]	2
She	2	Have	1	also	1	Lying	1	but	1	Yeah	2	him	1	a	1
So	2	He's	1	and	3	Maybe	1	can't	1	Yes	3	hurts	2	also	2
Solution	1	How	1	as	2	No	1	case	1	You	1	if	1	and	1
That's	3	Human	2	away	2	Oh	1	certain	1	You've	1	if_	2	as	1
Then	1	I	22	bad	1	Politician	1	change	2	[Name]	1	it	2	but	3
We	1	I'd	1	because	2	States	1	countries	4	a	3	it's	2	can	1
Well	3	I'll	1	best	1	T	1	country	2	additional	1	mean	1	do	1
Yeah	9	I'm	6	but	2	Then	1	dad	1	also	1	not	1	doing	1
[Name]	2	I've	1	can	3	United	1	different	1	an	1	opinion	1	don't	3
a	6	I_agree	1	country	4	We	1	discrimination	1	and	4	point	1	find	2
about	7	I_think	3	cultures	1	Well	1	doesn't	4	are	1	see	1	good	1
all	4	If	2	dads	1	Y	1	don't	1	back	1	she	3	hard	1
allowed	4	If_	1	describes	1	Yeah	4	east	1	because	1	show	1	has	1
and	8	Just	1	did	1	Yes	2	eastern	3	bit	1	take	1	hates	1
any	1	Let's	1	different	1	You	1	everyone	1	blood	1	the	1	have	2
are	4	Like	1	discriminate	1	[Name]	3	for	1	can	1	then	2	him	1
aren't	1	Luxembourg	1	discriminating	1	a	4	from	1	can't	1	to	1	how	1
article	1	Maybe	3	discuss	1	about	1	general	1	diamonds	1	why	3	important	2
as	3	Miss	1	doesn't	2	accept	1	happy	1	don't	2	yeah	1	it's	1
at	1	Next	2	don't	1	actually	1	has	1	for	1			keep	1
away	4	No	6	free	2	additional	1	human	2	gift	1			know	3
bad	2	Now	1	get	1	against	1	in	9	give	2			knowing	1
be	2	Oh	3	gives	1	also	3	insulting	1	go	1			long	1
because	6	One	1	go	1	and	2	is	1	good	1			lot	1
better	1	Or	1	had	1	are	1	islamitic	1	have	2			money	1
bit	1	President	1	has	2	army	1	isn't	1	human	2			more	1
but	10	So	11	have	1	backgarden	1	it	3	if	3			no	1

Appendix 26: Confounding factors

A pre-experimental research design can be highly susceptible to confounding factors, which can affect the results and the internal validity of the research (Baarda *et al.,* 2012). Therefore, in order to increase the probability of gathering representative, valid and reliable data, the effect the confounding factors might have had on the study were considered and are described in the following paragraphs.

Interim incident

When change between the pre- and post-measurement of anxiety and amount of participants' (exploratory) talk is not caused by the intervention but occurs as a result of an interim incident, validity can be influenced (Baarda *et al.,* 2012). However, this is hardly relevant as it is unlikely that a certain event, besides the in-class intervention, could have affected the participants' anxiety level and the amount of their (exploratory) talk to a great extent during the 8-week intervention. Moreover, the intervention and data collection were carried out in a controlled classroom atmosphere, decreasing the likability of an interim incident affecting the results.

Growth effect

If change between the pre- and post-test is not caused by the intervention but occurs as a result of the participants becoming more mature and experienced, validity can also be influenced (Baarda *et al.,* 2012). However, this was barely relevant as there was a short period of time during the pre- and post measurement, and the participants' anxiety levels and the amount of (exploratory) talk were unlikely to enhance or grow as a result of increased maturity.

Test effect

When making use of similar decision-making tasks twice during the pre- and post-test, it is very likely that the participants would have performed better the second time they carry out the task than they did the first time (Baarda *et al.,* 2012). Moreover, their views might have been influenced as a result of carrying out the first task. All the data collection instruments were used twice, once during the pre-test and once during the post-test. However, the chances of a test effect influencing the results were minor. As the participants did not actually know the first instrument measured the amount of (exploratory) talk and the variety of words used, they would not have been aware of what the researchers were specifically looking for. It is therefore not likely that they strived to enhance the results they

scored on the pre-test decision-making task whilst carrying out the post- test decision-making task, resulting in a test effect. Furthermore, the decision-making tasks they carried out during the pre- and post-test were different. Although they were similar in design, these tasks were different in content. Moreover, while the participants were asked to fill in the Horwitz anxiety scale, the second instrument, twice, there was a reasonable period of time between the pre- and post-test, which likely meant that the participants had forgotten its specific content, decreasing the chances of a test effect. Additionally, this last instrument measures anxiety rather than achievement or amount of (exploratory) talk. Whereas tests geared towards measuring the latter are more likely to be influenced by the test effect as participants might want to perform better during the second test, an instrument that investigates anxiety is less likely to be influenced.

Instrumentation effect

Instrumentation can affect validity when the data collection instruments used during the pre- and post-test are not similar to one another (Baarda *et al.,* 2012). Hence, identical instruments and tasks needed to be used during the pre- and post-test. As the data collection instruments were exactly the same during both measurements, this did not affect validity. However, the decision-making tasks which were used during the pre- and post-tests could not be exactly the same, as that would have led to the test effect. Therefore, it was ensured that both tasks were very similar in their design yet different in content and topic as discussed in chapter 4 of the report.

Ceiling effect

When participants score very well on the pre-test it is hard to test improvement on the post-test (Baarda *et al.,* 2012). However, since the participants carried out the first decision-making task during the pre-test it was likely that they would not use Mercer and Wegerif's connectors that indicate exploratory talk to a great extent, as they had not received any form of intervention yet. As it was not likely that they would score perfectly on the pre-test, it would perhaps be possible to measure improvement in their use of exploratory talk and the amount of English words spoken on the post-test. On the contrary, participants might have either scored high or low on the anxiety scale during the pre-test, as this depended on their initial level of anxiety. However, the aim of the study was to lower the students' anxiety levels. So, even if participants scored low on the anxiety scale during the pre-test, the aim was for these participants to score even lower on the anxiety scale

during the post-test. Given the fact that the individual scores from the FLCAS during the pre- and post-test were compared, it was possible to analyse whether the participants' anxiety levels had lowered as a result of the intervention.

Bottom effect

On the contrary, when a pre-test is very difficult the participants are likely to get a low score and an intervention will automatically lead to improvement and higher results on the post-test (Baarda *et al.,* 2012). This will then affect validity as one cannot measure the actual effect of the intervention (Baarda *et al.,* 2012). As the decision-making tasks were especially created for the students' level of English and even piloted to ensure they were adequate for this level of learners, these would not prove to be too difficult. Moreover, although it was likely that the participants would not make extensive use of the connectors that indicate exploratory talk, it was not unlikely that they would make some use of them whilst carrying out the decision-making task during the pre-test. Also, although it was hypothesized that the participants would increase their amount of English talk after the intervention, this did not imply that they would not or barely speak English before the intervention. Additionally, although some participants might have scored low on the anxiety scale during the pre-test, it was not likely that all participants would; some were rather confident about their speech and would therefore not get a very high score. And, as mentioned before, the individual scores from Horwitz' anxiety scale filled in by the participants during the pre- and post-test would be compared in order to see whether their anxiety levels had decreased as a result of the intervention. Hence, it was not likely that the decision-making task the participants carried out during the pre-test and the data collection instruments that were applied would lead to a bottom effect as the chances of these affecting the students' scores on the pre-test were not statistically significant.

Statistical regression to the mean

When participants are selected on the basis of their exceedingly high or low results on the pre-test, discarding the data of those who scored closer to the mean, this will affect their results on the post-test as a regression to the mean will likely occur (Baarda *et al.,* 2012). As a result, natural variation in repeated data can look like actual change, whereas this is not necessarily the case. However, since the data of the participants who scored close to the mean on their use of connectors, the amount of words they spoke or their score on the FLCAS was not discarded, this did not affect the research. All data was used, except

when participants missed the pre- or post-test or 30% of the group facilitation training and practice, as was discussed in chapter 5 of the report.

Selection

Selection can occur when the group of participants who carried out the pre-test differs from the group who carried out the post-test (Baarda *et al.,* 2012). This can for instance occur when the period of time between the pre- and post-test is very long, and some participants might not be available to participate in the post-test anymore. However, since the research was conducted over a period of eight weeks with stable groups of participants, this was not likely to affect the research.

Selective attrition

Selective attrition concerns the likelihood of some participants to be more likely to drop out of a study than others, for instance because they scored low on a pre-test (Baarda *et al.,* 2012). This tendency can therefore influence the validity of one's research, as the results of the post-test will not be representative of the initial research group (Baarda *et al.,* 2012). As this research became part of the participants' curriculum they could not simply choose to drop out. However, it was considered that some participants might be absent during some parts of the intervention. To prevent selective attrition, it was ensured that when a participant missed the pre- or post-test or 30% or more of the intervention, the data of that particular participant was discarded. If a participant missed less than 30%, the data could still be used for the research and be considered ecologically valid as this was considered to be representative of standard classroom practice.

Placebo effect

When change in independent variables is caused by the participant's belief in the intervention rather than the intervention itself, this change cannot be attributed to the properties of the intervention, and one can therefore not claim that the intervention worked (Baarda *et al.,* 2012). However, this was not applicable to this research, as the participants were not likely to regard the intervention as a solution to decrease anxiety or increase their use of (exploratory) talk.

Appendix 27: Statistical tables

On the following pages the statistical tables containing the output from the Paired t-tests and the nonparametric Wilcoxon signed-ranks tests are depicted.

Table 5: Paired samples statistics

	Test	N	Mean	Std. deviation
H1	Pre-test keywords	35	21.971	23.8642
	Post-test keywords	35	33.543	24.2261
H2	Pre-test words	35	289.31	281.297
	Post-test words	35	602.23	446.695
H3	Pre-test variety	35	107.74	58.094
	Post-test variety	35	180.00	85.855
H4	Pre-test FLCAS	35	2.584	.5605
	Post-test FLCAS	35	2.476	.5449
	Pre-test FLCAS	59	2.585	.5629
	Post-test FLCAS	59	2.500	.5311

Table 6: Paired samples T-Test

	Test	N	Mean	Std. deviation	*t*-value	*df*-value	*p*-value (1 tailed)	*p*-value (2 tailed)	*r-value*
H1	Pre-test keywords Post-test keywords	35	-11.5714	33.1097	-2.068	34	.023	.046	0,33
H2	Pre-test words Post-test words	35	-312.914	414.070	-4.471	34	.000	.000	0,61
H3	Pre-test variety Post-test variety	35	-72.257	73.739	-5.797	34	.000	.000	0,71
H4	Pre-test FLCAS Post-test FLCAS	35	.1082	.2580	2.482	34	.009	.018	0,39
		59	.0847	.2354	2.765	58	.004	.008	0,34

Table 7: Wilcoxon signed-ranks

			Ranks		
N			**N**	**Mean Rank**	**Sum of Ranks**
9	Keywords	Negative Ranks	2[a]	4.00	8.00
		Positive Ranks	7[b]	5.29	37.00
		Ties	0[c]		
	Words	Negative Ranks	1[d]	4.00	4.00
		Positive Ranks	8[e]	5.13	41.00
		Ties	0[f]		
	Variety	Negative Ranks	1[g]	1.00	1.00
		Positive Ranks	8[h]	5.50	44.00
		Ties	0[i]		
	FLCAS	Negative Ranks	7[j]	5.14	36.00
		Positive Ranks	2[k]	4.50	9.00
		Ties	1[l]		
35	Keywords	Negative Ranks	9[a]	13.61	122.50
		Positive Ranks	26[b]	19.52	507.50
		Ties	0[c]		
		Total	6[d]		
	Words	Negative Ranks	29[e]	10.83	65.00
		Positive Ranks	0[f]	19.48	565.00
		Ties	6[g]		
	Variety	Negative Ranks	29[h]	8.42	50.50
		Positive Ranks	0[i]	19.98	579.50
		Ties	12[j]		
	FLCAS	Negative Ranks	17[k]	18.50	314.50
		Positive Ranks	12[l]	10.04	120.50
		Ties	6[a]		

Legend	*a. Post-test keywords < Pre-test keywords*	*g. Post-test variety < Pre-test variety*
	b. Post-test keywords > Pre-test keywords	*h. Post-test variety > Pre-test variety*
	c. Post-test keywords = Pre-test keywords	*i. Post-test variety = Pre-test variety*
	d. Post-test words < Pre-test words	*j. Post-test FLCAS < Pre-test FLCAS*
	e. Post-test words > Pre-test words	*k. Post-test FLCAS > Pre-test FLCAS*
	f. Post-test words = Pre-test words	*l. Post-test FLCAS = Pre-test FLCAS*

Table 8: Wilcoxon signed-ranks test statistics

	Post-test keywords – Pre-test keywords	Post-test words – Pre-test words	Post-test variety – Pre-test variety	Post-test FLCAS – Pre-test FLCAS
N=9				
Z	-1.718[a]	-2.192[a]	-2.547[a]	-1.604[a]
Asymp. Sig. (1-tailed)	.043	.014	.006	.055
Asymp. Sig. (2-tailed)	.086	.028	.011	.109
R-value	-.40	-.52	-.60	-.38
N=35				
Z	-3.154[a]	-4.095[a]	-4.333[a]	-2.101[a]
Asymp. Sig. (1-tailed)	.001	.000	.000	.018
Asymp. Sig. (2-tailed)	.002	.000	.000	.036
R-value	-.38	-.49	-.52	-.25

a. Based on negative ranks.